

ENVIRONMENTAL GOVERNANCE FROM A GENDER PERSPECTIVE. THEORETICAL REFLECTIONS AND CASE STUDIES

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ENVIRONMENTAL GOVERNANCE FROM A GENDER PERSPECTIVE

Theoretical Reflections and Case Studies

Doctoral Thesis

Mercedes Agüera Cabo

2010



DOCTORAL THESIS

ENVIRONMENTAL GOVERNANCE FROM A GENDER PERSPECTIVE Theoretical Reflections and Case Studies

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DOCTORATE IN THE ENVIRONMENT. GEOGRAPHY FOR TERRITORIAL PLANNING AND THE ENVIRONMENT

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Doctoral thesis submitted in order to obtain the degree of Doctor of Philosophy of the University of Girona and the European mention.



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CERTIFICO:

Que aquest treball, titulat "Environmental Governance from a Gender Perspective: Theoretical Reflections and Case Studies", que presenta Mercedes Agüera Cabo per a l'obtenció del títol de doctora, ha estat realitzat sota la meva direcció i que compleix els requeriments per poder optar a Menció Europea.

Signatura,

Girona, 22 de juliol de 2010

For Bru and Leo, and their little brother or sister.

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- Agüera-Cabo, M. (2007). From equity to Difference. Contributions of gender perspectives to the governance of the environment. European Commission. EUR 22656
- Agüera-Cabo, M. (2006). Are environment-related governance practices gender neutral? Lessons from grassroots activism in Catalonia (Spain). *Proceedings of the International Conference EASST "Reviewing Humanness: Bodies, Technologies and Spaces"*, Lausanne, Switzerland, August 2006
- Agüera-Cabo, M. (2006). Learning From Women's Grassroots Activism: Gender Reflections On Environmental Policy Science and Participatory Processes. Proceedings of the PATH Conference "Participatory Approaches in Science and Technology", Edinburgh, England, June 2006
- Agüera-Cabo, M. (2006). Gender, Values and Power in Local Environmental Conflicts. The Case of Grassroots Organisations in North Catalonia». *Environmental Values*, 15.4, pp. 479-504.
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ABSTRACT

In the second half of the twentieth century we saw the environmental debate escalate into one of the most challenging and complex issues that authorities at international, national, regional and municipal levels have to deal with.

The inherent complexity of environmental problems, which brings out the interconnections between the economic, socio-cultural and ecological dimensions of the territory, is increased by the social, scientific and political focuses of the debate, and their interdependencies.

In the framework of governance, scientific and technical assessments are a relevant but not "unique" source for legitimating environmental policymaking. The discussion is opened towards the consideration of different existing perspectives on the environment.

Such a fundamental turn in the decision-making processes opened by governance makes it a challenging framework for the introduction of feminist and gender insights into environment related issues. And vice-versa: it is in the framework of governance that feminist and gender perspectives bring innovative theoretical reflections on the environment that did not fit the technical orientation of traditional environmental management. In addition, feminist and gender studies also offer a specific outlook to analyze and improve the inclusion of citizens in participation processes opened by political decision-making.

The main objective of the present study is to systematize and explore in-depth the perspectives brought by feminism and gender to environmental governance. What is the specificity of a feminist and gender outlook? In what sense does it bring new light to environmental governance processes?

Such questions are explored empirically and theoretically. The empirical part of the study consists of a bibliographical analysis, a gender analysis of Local Agenda 21 of Catalonia and a study of three cases of environmental grassroots organizations in the north of Catalonia.

All in all, the contents of the study are presented in three parts that can be summarized as: conceptual and theoretical assumptions ("Part I. Gender and environmental governance. Theory and practice: a state of the art"); empirical findings ("Part II: Exploring theory in the field: gender, environmental concerns, and women's activism"); and theoretical reflections ("Part III: From the field back to theory: feminist reflections on values, science and legitimacy").

Finally, the concluding chapter systematizes the empirical and theoretical findings of the research and brings a practical proposal to "gender mainstreaming" environmental governance.

RESUM

Durant la segona meitat del segle XX hem assistit a l'escalada del debat ambiental fins a convertir-se en un dels reptes més complexes amb els que han d'enfrontar-se les autoritats tant a nivell internacional, nacional, regional com municipal.

La complexitat intrínseca dels problemes ambientals, els quals presenten interconnexions entre les dimensions econòmica, sociocultural i ecològica del territori, s'incrementa encara més pels diferents enfocaments que participen en el debat: social, científic i polític, i les seves interdependències.

En el marc de la governança, l'assessorament científic i tècnic continua essent essencial, però deixa de ser la única font possible per a legitimar la presa de decisió política respecte a la gestió del medi ambient. La discussió s'obre a la consideració de les diferents perspectives (científiques, socials i polítiques) que existeixen respecte al nostre entorn.

Aquest gir fonamental que han viscut els processos de decisió de la mà de la governança són també un marc encoratjador per a la introducció de la perspectiva de gènere i feminista respecte al medi ambient. I vice-versa: en el marc de la governança, la perspectiva de gènere i feminista aporta reflexions teòriques innovadores respecte al medi ambient, que no trobaven un lloc en l'orientació tècnica amb la que tradicionalment s'havia tractat la gestió ambiental. A més, els estudis de gènere i feministes també aporten una mirada específica respecte a la inclusió de la ciutadania en els processos de participació que s'han generalitzat arran de l'aplicació dels principis de la governança.

El principal objectiu d'aquest estudi és explorar en profunditat i sistematitzar les perspectives que aporten els estudis de gènere i feministes a la governança del medi ambient. Quina és l'especificitat d'una mirada de gènere i feminista? En quin sentit aporten una nova llum als processos de la governança ambiental?

Aquestes qüestions són explorades empírica i teòricament. La part empírica de l'estudi inclou l'anàlisi bibliogràfica, l'estudi des de la perspectiva del gènere de l'Agenda 21 de Catalunya, i l'anàlisi de gènere de tres casos de mobilitzacions ambientals que van tenir lloc al nord de Catalunya.

Els continguts de la tesi es presenten en tres parts que es poden resumir en: punts de partida conceptuals i teòrics ("Part I. Gènere i governança ambiental. Teoria i pràctica: la situació actual"); recerca empírica ("Part II: Explorant la teoria sobre el terreny: gènere, preocupacions ambientals i activisme de les dones"); i reflexions teòriques ("Part III: del treball de camp cap a la teoria: reflexions feministes sobre els valors, la ciència i la legitimitat").

Finalment, el capítol de conclusions sistematitza les aportacions empíriques i teòriques de la recerca i desenvolupa una proposta pràctica per a la introducció transversal de la perspectiva de gènere a la governança del medi.

RESUMEN

Durante la segunda mitad del siglo XX hemos asistido a la escalada del debate ambiental hasta convertirse en uno de los retos más complejos que tienen que afrontar las autoridades tanto a nivel internacional, nacional, regional, como municipal.

La complejidad intrínseca de los problemas ambientales, los cuales presentan interconexiones entre las dimensiones económica, sociocultural y ecológica del territorio, se incrementa aún más a causa de los diferentes enfoques que participan en el debate: social, científico y político, y sus interdependencias.

En el marco de la gobernanza, el asesoramiento científico y técnico continua siendo esencial, pero dejan de ser la única fuente posible para legitimar la toma de decisión política respecto a la gestión del medio. La discusión se abre a la consideración de las distintas perspectivas (científicas, sociales y políticas) que coexisten en relación a nuestro entorno.

Este giro fundamental que han vivido los procesos de decisión de la mano de la gobernanza, son también un marco esperanzador para la introducción de la perspectiva de género y feminista en lo que se refiere al medio ambiente. Y viceversa: en el marco de la gobernanza la perspectiva de género y feminista aportan reflexiones teóricas innovadoras respecto al medio ambiente, que no tenían posibilidad de intervención en la orientación técnica con la que tradicionalmente se había tratado la gestión ambiental. Además, los estudios de género y feministas también aportan una mirada específica en relación a la inclusión de la ciudadanía en los procesos de participación que se han generalizado a raíz de la aplicación de los principios de la gobernanza.

El principal objetivo de este estudio es explorar en profundidad y sistematizar las perspectivas que aportan los estudios de género y feministas a la gobernanza del medio ambiente. Cual es la especificidad de una mirada de género y feminista? En qué sentido aportan una nueva luz a los procesos de la gobernanza ambiental?

Estas cuestiones son exploradas empírica y teóricamente. La parte empírica del estudio incluye el análisis bibliográfico, el estudio desde la perspectiva de género de la Agenda 21 de Cataluña, y el análisis de género de tres casos de movilizaciones ambientales ocurridas en el norte de Cataluña.

Los contenidos de la tesis se presentan en tres partes que se pueden resumir en: puntos de partida conceptuales y teóricos ("Parte I. Género y gobernanza ambiental. Teoría y práctica: la situación actual); investigación empírica ("Parte II: Explorando la teoría sobre el terreno: género, preocupaciones ambientales, y activismo de las mujeres"); y reflexiones teóricas ("Parte III: del trabajo de campo a la teoría: reflexiones feministas sobre los valores, la ciencia y la legitimidad").

Finalmente, el capítulo de conclusiones sistematiza las aportaciones empíricas y teóricas de la investigación y desarrolla una propuesta práctica para introducir transversalmente la perspectiva de género en la gobernanza del medio ambiente.

Pensar en femenino, y antes que ello, pensar lo femenino es diseñar toda una estrategia de aproximación, es, primeramente, intentar elegir como ver el problema, un método o métodos por medio de los cuales la falsación sea menor. Pues una vez adoptada determinada perspectiva, ésta pone en marcha un entramado de resortes que te trasladan inexorablemente a uno de los caminos más transitados, desde donde rara vez se retoma el punto del que se partió. (Rodríguez-Magda, 1994)

Preface

The present thesis began life in 2003 thanks to a three-year grant from the European Commission to work with the Knowledge Assessment Methodologies (KAM) group of the Joint Research Centre, located in Ispra, Italy. KAM has produced and inspired a large part of the literature on post-normal science, a robust theory that reflects on the challenges and solving strategies of the management of complex environmental problems in situations of high scientific uncertainty and conflicting values.

The starting point of the thesis was a research project entitled "Women, science and nature. Readings of the ethno-androcentric bias in scientific and ideological thought developed on the society/nature relationship". This project had been presented to obtain the Certificate of Advanced Studies of the Doctorate in Environment, awarded by the University of Girona in 2002. However, in contrast to the situation that had inspired that initial investigation, the thesis I started at the KAM group met two big challenges that decisively influenced the direction it would take in the future.

First of all, it started to be elaborated in a research group that had not previously dealt with gender issues, and which, although open to the arrival of new topics and approaches, did not explicitly consider gender as a relevant aspect of their research on environmental governance and participatory decision-making.

The experience was itself a source of epistemological reflection because of the absence of the scientific and ideological research environment found when working in one's own disciplinary community. As the feminist epistemologist Evelyn Fox Keller points out by referring to scientific communities as language communities, members of a consolidated research group do not only share theories and methodologies, they also share words, assumptions, and a specific outlook on the world:

Sharing a language means sharing a conceptual universe. It means more than knowing the "right" names by which to call things; it means knowing the "right" syntax in which to pose claims and questions, and even more critically it means sharing a more or less agreed-upon understanding of what questions are legitimated to ask, and what can be accepted as meaningful answers. [...] To know what kind of explanations will "make sense", what can be expected to account as "accounting for", is already to be a member of a particular language community. (1992: 27-28)

To investigate for and in a well-defined scientific (and ideological) community is also common in the case of gender studies, the theoretical tradition from which the present research comes. Gender studies used to be elaborated inside the women, gender or feminist studies' group of a university department or research institution. The same community informs, supports and assesses the development and content of the research activity, which obviously deals with the conceptual assumptions, specific language and theoretical references that are completely taken for granted by the community members.

In contrast, outside a gender studies research community the conceptual universe that would be naturally assumed was not in place. Therefore, even the theoretical references of the research were themselves a potential issue of debate.

Such a special situation showed me the importance, and also the difficulties, of communicating gender studies to a wider scientific audience. Yet I would venture to say that this situation strongly influenced the research questions that finally guided the empirical part of the thesis, as set out in part II. Moreover, I also think it profoundly influenced an intention that existed from the beginning of the research but that took a specific form in this context: the research was not developed thinking exclusively of gender scholars as potential readers, but also having in mind a diversity of scientists and professionals dealing with environmental governance who are not necessarily aware of gender issues. For this reason part I

includes two introductory chapters that establish basic conceptual aspects of the study. The theoretical foundations of feminism, ecofeminism and gender, and their readings and interpretations related to nature and the environment (which are well-known to a gender/feminist scholar but not generally to scientists) are set out in chapter 1. Conceptual aspects of governance, sustainable development and international politics of the environment (which are basic for scholars dealing with environmental politics, but not necessarily familiar to a feminist/gender reader) are introduced in chapter 2.

The second challenge I faced was that the KAM research group, in which I developed the most important part of the thesis, and the institution it belongs to, the Joint Research Centre of the European Commission, are strongly oriented towards the production of scientific knowledge that is useful for policy-making. Again, this has not usually been a strong priority for gender studies that, at least until recently, have neither reached nor received much interest from political spheres. Therefore, another key challenge underlying the research process was to systematize and give a practical sense to the powerful theoretical contributions of gender studies that could be applied to environmental management and decision-making, particularly under the new participatory paradigm opened up by governance.

In this sense, a short time after starting the thesis, Matthieu Craye, one of my colleagues at the KAM group, compared his work on scientific uncertainty and policy making with gender studies and offered me a reflection that I now think carefully summarizes—using the community language and the worldview of postnormal scientists—the type of contributions I would like the present research about gender approach to environmental governance to bring to policy-making:

I see the things I do on uncertainty and on discussion schemes for pedigree of knowledge mainly as an opening to institutional change. From our conception of the science-policy interface, we try to conceive another role for scientists in policy-making. However, traditional interactions between science and policy are so well institutionalised that it is difficult to create the conditions for change. Then proposing a discussion scheme focusing on uncertainty instead of on "facts" and "results" can be an initiator of change, because you put the science "at risk", you challenge vested beliefs about roles and rules. It is a bit like making a crack in something so that "the light gets in" (and people become more reflexive and self-

critical). So gender studies could perhaps develop "tools" to support women making a difference, by first creating "doubt" about current beliefs and practices¹.

In contrast to his argument, I do not think gender studies only helps to empower women's contributions, although this is obviously a fundamental task. But I certainly think the ability to make a "crack" that allows "light to get in" and to promote "people" (women and men) to be "more reflexive and self-critical" is the most powerful quality of feminist and gender studies. Adapting again Craye's words, I would venture to say that gender studies puts our "vested beliefs" "at risk" by demonstrating the unequal power relations at the basis not only of society and politics, but also of our scientific tradition and applied investigations. In the case of environmental governance, they open fundamental questions regarding the gender bias implicit in the management of the environment, as well as unequal power relations in participatory democracy opened by governance processes.

In order to reflect on such questions and all the meanings and new interpretations they suggest we will evolve from empirical evidence (part II) to explore feminist and gender studies in all their complexity (part III). Throughout the theoretical reflections of part III, I propose the reader follow some of the paths of reflection opened by such theoretical traditions, taking in their community language and worldviews, and to afterwards apply these contributions to environmental management without losing their essence.

I hope that by the end of this empirical and theoretical adventure I have created a "crack" for an alternative and risky perspective on environmental governance, empowered by a gender outlook. If that happens, this research will have achieved its most challenging and ambitious goals, and the words at the heading of this preface, borrowed from the feminist philosopher Rosa M. Rodriguez-Magda, will return to the mind of the reader full of meaning and bright clarity.

¹ Transcription of e-mail from M. Craye, 2004.

Introduction

In the second half of the twentieth century we saw the environmental debate escalate into one of the most challenging and complex issues that authorities at international, national, regional and municipal levels have to deal with.

The inherent complexity of environmental problems, which brings out the interconnections between the economic, socio-cultural and ecological dimensions of the territory, is increased by the social, scientific and political focuses of the debate, and their interdependencies.

At a social level, we must acknowledge that political recognition of environmental degradation was preceded by—and to a large extent is a response to—civil society mobilizations, in which the task of ecology groups should be acknowledged. NGOs and different forms of organized civil society had a fundamental role in lobbying the international debate on the environment at the Earth Summit in Rio in 1992, through the Global Forum. At a local level, groups of organized citizens have also been an important feature of protests concerning environmental conflicts. It is reasonable to argue that the increasing number of citizens that have organized themselves at a local level to challenge political and economic decisions are in many cases motivated by local environmental conflicts. Such a multilevel situation of social activity has provoked a slow and unequal process of political recognition of the existence of multiple and conflicting environmental values.

At a scientific level, in the last two decades a discussion has opened up and been consolidated on the failure of "science" to offer a trustworthy degree of certainty when explaining the nature, extent and foreseeable consequences of complex environmental problems. Such uncertainty is one of the causes that has fuelled the legitimacy crisis of political authorities in preventing and solving environmental degradation and its negative consequences. A fundamental aspect of the discussion is the role played by science in policy-making, because in the case of environment-related problems the traditional strict delimitation between scientific evidence and social values is weakened. For instance, Irwin and Wynne point to conflicts related to quality of life, pollution and hazards or global environmental change as situations in which "as well as technical judgements having to be made, the 'facts' cannot stand apart from wider social, economic, and moral questions." And, because of that they point out that "the relationship between science and the public may not be so straightforward as suggested in the conventional treatment which assumes a clear boundary between 'facts' and 'values'" (1996: 3).

Finally, at a political level, as a result of the above-mentioned effects, the concept of "governance" is gaining increasing prominence in local, European and global political contexts, as a promising strategy to address the legitimacy crisis of governments by proposing plural and transparent decision-making processes involving politicians, scientists, stakeholders and citizens.

In the framework of governance, scientific and technical assessments are a relevant but not "unique" source for legitimating environmental policymaking. The discussion is opened towards the consideration of different existing perspectives on the environment. That means there is the potential to involve the different interests, values and ideologies of a diverse range of social actors, and consider issues related to perceptions, the equity of different conceptions, and ethical aspects. Consequently, it also allows a more suitable context for the introduction of an analysis of environmental problems from social disciplines.

Such a fundamental turn in the decision-making processes opened by governance makes it a challenging framework for the introduction of feminist and gender insights into environment related issues. And vice-versa: it is in the framework of governance that feminist and gender perspectives bring innovative theoretical reflections on the environment that did not fit the technical orientation of traditional environmental management. In addition, feminist and gender studies also offer a specific outlook to analyze and improve the inclusion of citizens in participation processes opened by political decision-making.

What is the specificity of a feminist and gender outlook? In what sense does it bring new light to environmental governance processes?

The main objective of the present study is to systematize and explore in-depth the perspectives brought by feminism and gender to environmental governance.

To answer these questions the thematic branch of feminism known as ecofeminism offers two promising leads:

- (1) A powerful theoretical framework to analyze historically and anthropologically the domination, exploitation and commodification of nature in symbolic and physical terms, by linking it to the cultural order that has traditionally legitimated women's oppression, and;
- (2) The suggestion that women show specific perspectives on, values for and interests in the environment.

In relation to the second proposal, which I expound in more detail later, the radical and essentialist branch known as cultural ecofeminism argues that there is a

specific link between women and nature, related to the experience of female biological processes such as pregnancy, giving birth and nurturing a child. In this case, most women from industrialized countries would be alienated by androcentric Western lifestyles and consumption patterns, blinding them to recognize their "natural" engagement with nature (Mies and Shiva, 1997).

In contrast, the branch of ecofeminism that (taking the terminology proposed by Puleo, 2006) I will refer to as constructivist develops a social and political interpretation of the links between women and the environment, and rejects biological readings. Theorists state we may focus on gender—the historical, cultural, social and ideological construction of femininity—to explain the specificity of women's concerns for the environment (Rocheleau et al., 1996).

Unlike other feminist analysis, ecofeminism has put theory into practice. This communication between real-life and intellectual elaboration, concerned with demonstrating the role of women in environmental protection, has been very much focused on developing countries. However, some cases do exist for Northern countries, which are the interest of the present study.

Unfortunately, empirical work elaborated with a theoretical connection with the constructivist branch of ecofeminism is scarce and rather scattered. Some empirical contributions developed for Northern countries, including Spain, focus on the case of women's activism in toxic waste mobilization, and they are a fundamental reference and inspiration for the empirical work of the present study. But there is not really a systematic and in-depth exploration of how gender biases citizens' concerns, values and interests in the environment, and why. In this sense, the present thesis takes on the goal of contributing to clarifying the relevance of gender in the analysis of citizens' concerns for the environment, focusing particularly on systematizing the specificity of women's perspectives and interests.

In addition, the ideological antagonism underlying the cultural and the constructivist branches of ecofeminism has largely prevented the latter from engaging in a serious consideration of arguments related to the experience of motherhood, more directly connected to biological aspects of female reproduction, and widely used by cultural ecofeminism. Certainly this is an argument that easily leads to essentialist interpretations, but it can also be a source of reflection for social and political perspectives, as it is going to be treated in the present research.

Finally, none of the branches of ecofeminism has a clear orientation towards influencing environmental management and decision-making. As previously mentioned, this absence is a basic challenge for the present thesis.

All in all, the contents of the study are presented in three parts that can be summarized as: conceptual and theoretical assumptions ("Part I. Gender and environmental governance. Theory and practice: a state of the art"); empirical findings ("Part II: Exploring theory in the field: gender, environmental concerns, and women's activism"); and theoretical reflections ("Part III: From the field back to theory: feminist reflections on values, science and legitimacy").

Part I includes two introductory chapters that establish the conceptual and theoretical assumptions that guide the empirical analysis and the discussion in the subsequent parts.

Chapter 1 describes the theoretical assumptions about feminism and gender studies that underlie the development of the study. Ecofeminist perspectives and the basic elements of the discussion regarding the links between women and the environment are also described. Finally, it summarizes the most relevant thematic approaches of gender studies to the analysis of the environment: sustainable urban planning and mobility, consumption and health, pollution and security, environment-related grassroots movements, climate change and energy, landscape analysis, sustainable development and global environmental governance.

Chapter 2 discusses the multiple interpretations that coexist concerning governance and briefly reconstructs the history of the concept at an international governmental level. In this chapter I also write about the emergence of the concept of sustainable development in international forums, and the strategic alliances it establishes with governance. Next, I deal with the work of women's groups lobbying international politics on the environment. Finally, the chapter focuses on participation processes as a fundamental aspect in the application of environmental governance at local level.

In this study, environmental governance practices are conceived as complex processes that are sometimes guided by institutions, sometimes the result of conflict situations with citizens.

On the one hand, an important number of institutions are implementing tools for promoting participatory decision-making. For instance, Local Agenda 21 is an important mechanism to promote the involvement of scientists, stakeholders and citizens in discussions about the social and economic challenges of sustainable development at local and regional levels. However, as I will show in more detail later, the assessment of Local Agenda 21 initiatives often reveals a failure to involve

a plurality of perspectives, and a low political commitment to dealing with controversial issues and applying the results of the participatory process.

On the other hand, grassroots organizations emerging as a result of environmental problems develop other forms of participation that are an alternative to the institutional vertical approach. Indeed, they may oppose political authorities, and their influence in the decision-making process is based on lobbying them. Most of the time grassroots groups do not influence political decision-making as much as they would like, and dissatisfaction with and distrust of politics and politicians increases among their members. Nevertheless, an extended diversity of social and economic agents take part in the public discussion on the environment and by consensus, negotiation or conflict, they influence the decision-making process in some way.

In this sense, both institutionally guided participatory process and grassroots organizations may be considered a kind of laboratory for reflecting on the introduction of a gender perspective. In chapter 2 a case of institutional participation process, Local Agenda 21 of Catalonia, will be analyzed in terms of gender balance in the organization of the participation activities and the consideration of gender in the knowledge informing the discussion. The case will help to illustrate the consequences of gender-blindness in the design and development of institutional participation processes.

After that, the discussion will evolve from pointing to the problems of ignoring gender in terms of representation, to exploring how gender is relevant to interpreting concerns, interests and values for the environment and how gender inequalities bias power relations in participatory processes. That analysis will be developed for the case of grassroots organizations in the later chapters of Part II.

Part II focuses on the empirical analysis of the research, presented in chapters 3 to 6.

As mentioned above, a fundamental contribution of the constructivist branch of ecofeminism is to point out how gender shapes citizens' values, interests and perspectives on the environment, though this hypothesis has not been thoroughly tested. In chapter 3 I present findings from sociological studies that, independently from ecofeminist theories, have found statistical significance of gender tendencies in environmental concerns and risk perception. The main results, as well as the arguments that have been analyzed to explain such tendencies, are presented and reflected upon in detail.

Most contributions are from American academia, and few studies focus on Europe. In order to have a better picture of the influence of gender in the views on the environment of European and Spanish citizens, statistical results from surveys published by the Eurobarometer and the Spanish Foundation for Science and Technology (FECYT) will be analyzed in the second part of chapter 3. Results will help to explore issues related to gender tendencies in citizens' interests in scientific information, perception and confidence in science and technology, opinions about the ethical and social responsibility of science, and about political decision-making. A hypothesis about the gender tendencies observed will also be expounded.

Whereas data explored in chapter 3 allows a broad and statistically significant perspective of the influence of gender in citizen's concerns, values and interests on the environment, a more fine-grained analysis is not possible. On the other hand, qualitative analysis enables the exploration of other types of questions, as will be seen in the next chapter.

In chapter 4 gender biases in the concerns, values and interests regarding the environment are further explored using a qualitative approach. In this case not the general population but citizens engaged in specific environmental conflicts are surveyed. The difference is significant, not only because the sample corresponds to a segment of the population publicly defending environmental concerns, but also because we can focus on specific environmental problems affecting people and not on hypothetical problems used in statistical studies. The results presented are from a study elaborated by the author of three cases of environmental grassroots organizations in the north of Catalonia.

As introduced above, grassroots groups are a specific form of participation in the decision-making process for which some different aspects related to gender can be analyzed. A fundamental objective of governance is to combat the loss of confidence in traditional forms of decision-making. The case studies offer an interesting opportunity to assess the effects of the conflicts on the confidence of the grassroots members in relation to scientific and technical experts, politicians and local inhabitants. In addition, gender biases in the results obtained are suggested. This issue is developed in chapter 5.

Finally, grassroots groups also allow us to explore questions related to gender biases in the organization and in the deliberation forums of participatory processes. Does structural gender inequality in society bias the organization of the group? Does the dominant androcentric model prevailing in public life in any way

influence the participation process of grassroots organizations? These questions will be tackled in chapter 6.

Part III reflects on the empirical findings of part II by referring, on the one hand, to the consideration of issues related to perceptions, the equity of different conceptions, and ethical aspects, and on the other to links between and contributions of gender studies to environmental social theory and post-normal science.

The discussion starts in chapter 7 by reflecting on the empirically-supported hypothesis that women's concerns for the environment are strongly biased by their role as carers. The finding suggests the relevance of analyzing the influence of motherhood on the construction of women's identities and their life experiences, and to reflect on the alternative readings brought by feminism and ecofeminism. First of all, the patriarchal ideological projections of the role of the mother and their influence on the construction of femininity will be discussed from a historical perspective. In contrast, feminist readings of motherhood will also be presented, discussing the benefits and handicaps of alternatives shown by the main theoretical branches. Finally, the discussion will focus on the specific relation between motherhood, women and nature recognized by ecofeminist theory.

A fundamental objective of chapter 7 is to reflect on the assumptions that will allow us to refer to the "carer stand" as a specific way of seeing the environment. It is a way of seeing that is particularly relevant, but not exclusive to women. Therefore it is necessary to avoid essentialist interpretations of women as "natural" carers of the environment. These assumptions are necessary to fully interpret the theoretical elaborations presented in the following chapters.

In chapters 8 and 9 I will deal with the issue of legitimacy from different points of view. The central argument is that a fundamental gender bias in the participatory process is the different weight of legitimacy implicitly associated with the values, reasoning, rhetoric and discursive styles associated with masculinity and femininity. In particular, masculinity (not necessarily meaning males) is implicitly considered the neutral norm in decision-making forums. This means that arguments elaborated according to the interests and values of a "carer stand" or defended with such a discursive style (implicitly associated with femininity, but not necessarily defended exclusively by women) are powerless.

Chapter 8 focuses the discussion on feminist theory and is divided into two parts. First, I reflect on the concept of a carer stand by referring to feminist approaches to moral theory and ethics. In particular, the work of Carol Gilligan on the

significance of gender in moral development will help to explore in depth the characteristics of the specific view of a carer. The discussion on morality will finally introduce feminist approaches to ethics, particularly ecofeminist ethics.

The second part of chapter 8 presents feminist epistemological reflections on science. The critical path walked by science feminists to deconstruct modern science is relevant as they propose a radically different reading of the legitimacy of a cognitive subject. Such theorists oppose the modern ideal that knowledge is the result of an impersonal and objective research process. On the contrary, they argue it is the result of a social and political position. From this perspective, I explore the argument developed by science feminists who affirm that a feminist/female standpoint is an "insurrectional" perspective for the construction of knowledge.

Finally, chapter 9 directs the discussion of legitimacy towards reflections specifically related to the practice of governance processes. The discussion starts by pointing to the benefits and critical aspects of discursive democracy for a feminist insight. In this context, post-normal science is explored from a gender perspective, as it proposes a particular application of Habermas' ideal of discursive democracy to the management of complex environmental problems.

For post-normal science scholars, governance is a high democratic model of political decision-making that involves in-depth modifications of traditional ways of addressing environment-related issues. Scientific knowledge is itself under scrutiny and is considered as a means (and not an end) in the decision-making process, which may inform such a diversity of perspectives.

Both complexity and scientific uncertainty are fundamental aspects of that new model of environmental decision-making. They lead to a potential change of power relations and legitimacy balances, as some case studies of the application of postnormal science will show. The increased legitimacy played by values offers a challenging path for the introduction of a gender perspective.

However, I will argue that perspectives on the environment that have been traditionally underrepresented may continue to be ignored or powerless if a gender strategy is not considered. The discussion will be presented by the case of encounters between technical and cultural rationalities. As an alternative, I will present specific strategies for the consideration of gender in environmental participatory decision-making.

Finally, the concluding chapter systematizes the empirical and theoretical findings of the research and brings a practical proposal to "gender mainstreaming" environmental governance.

Methodology

The research process evolved from continuous feedback between theoretical building and field research findings. Thus the methodological approach has been very flexible, adapting it to advances in the research.

The research activity has included empirical and theoretical work. The empirical content has been elaborated by:

- 1. A comparative analysis of bibliographical resources of sociological studies on gender differences on environmental concerns and risk perception.
- 2. Interpretation of statistical data from European and Spanish polls of social perception of science and technology.
- 3. Qualitative analysis of four case studies: three grassroots organizations for environmental conflicts and a Local Agenda 21 process (all case studies are located in Catalonia, Spain).

The theoretical work consisted in consulting bibliographical resources from richly diverse fields: gender studies, feminism, environmental social theory, post-normal science, environmental ethics and political theory.

The following table shows in detail the methodological strategy and the tasks implemented.

Table I.1. Methodological strategy and tasks

Research topic Objective		Activities	
Gender differences on environmental concerns, risk perception, and opinions on science and technology (statistically relevant studies).	Systematize and analyze the main findings on gender differences in environmental concerns and risk perception in the bibliography from sociological studies with statistical significance.	• Systematic enquiry at the British Library and through published articles available on the Internet. Collection of sociological studies on gender differences on environmental concerns and risk perceptions. In total, 19 studies published between 1983 and 2004, of which 13 analyze the US population, 2 are located in Europe (Germany and The Netherlands), and 4 are cross-national.	
		• Systematization of the main findings from each study.	
		 Comparative analysis between studies and establishment of conclusions. 	
	Analyze the main findings on the perceptions of science and technology of European and Spanish citizens published following large-scale polling, and systematize results related to environmental management and decision-making.	Collection of reports (digital and paper format) published by the Eurobarometer (European Commission) and by the FECYT (Spanish Foundation of Science and Technology). In total, 2 reports from the Eurobarometer published in 2006, and 3 reports from the FECYT, published in 2002, 2004, and 2006.	
		• For each study: (1) systematization of data related to gender, (2) analysis and interpretation of results.	
		 Comparison of results obtained from different reports. 	
Gender analysis of	Explore the relevance of gender in the opinions of	Collection and study of documentation produced by and about	

environmental concerns and power-relations in grassroots organizations for environmental conflicts (qualitative study). activists from three grassroots groups involved in environmental conflicts from the north of Catalonia. Main interests:

- Interests and values involved in claims;
- Awareness and threats in the conflict;
- Formal and informal knowledge produced around the conflict;
- Attitudes and roles in the participation process;
- Political empowerment;
- Perception of scientific uncertainty and political legitimacy;
- General interests and values in environmental issues;
- Everyday responsibilities that affect the environment:
- Commitment and personal involvement in sustainable development.

organizations and environmental conflicts: websites, information leaflets produced by the groups, and articles in local newspapers.

- Interviews with the leaders of the organizations (July 2003).
- Observation of one of the general meetings of a grassroots group (July 2003).
- Questionnaires to the most active members of the organizations (108 enquiries returned) (September 2003-March 2004).
- Processing of data and interpretation of results from the questionnaires.
- In-depth interviews of activists (19 activists interviewed) (December 2004).
- Processing, analysis and interpretation of the interviews.

Gender assessment of a Local Agenda 21 process.	Gender assessment of expert knowledge and informative inputs to the participatory process of Local Agenda 21 of Catalonia (A21CAT).	■ Search for information about Local Agenda 21 initiatives in Europe on the ICLEI website (www.iclei.org). ■ Search for information on the A21CAT website (www.gencat.cat/): structure of the participation process, participants involved in each of the phases (from consultation to meetings), documentation produced by the technical office for informing participants in thematic and territorial participation meetings. ■ Meeting with the A21CAT director (July 2003): presentation of the research, short interview and collection of paper documentation. ■ Analysis of information: (1) assessment of gender-balance according to groups of participants, diverse phases of the participation process and issue-based discussion groups; (2) consideration of gender through information offered to the participatory process.
Epistemological and theoretical background and reflection.	Establishment of theoretical foundations of the study, and reflection on empirical results obtained.	Search for, analysis of and reflection on bibliography dealing mainly with the following issue-based areas: Gender and feminist theoretical approaches and empirical studies on the environment. Feminist approaches to moral theory and ethics. Feminist scientific epistemology. Theoretical approaches to governance and participatory democracy. Post-normal science.

Case studies

As introduced above, four case studies have been considered. The first three consist of grassroots organizations involved in environmental conflicts taking place in the north of Catalonia, Spain. The fourth case deals with a Local Agenda 21 process in the region of Catalonia.

The four cases are described in detail below.

Grassroots organizations in the North of Catalonia

The qualitative analysis comes from three cases of environmental grassroots organizations in the north of Catalonia.

Catalonia is situated in the north-east of Spain, covering approximately 32,000 km² and with a population of about seven million. With its own language—Catalan—and a strong historical cultural identity, Catalonia has had an autonomous government since the Spanish constitution of 1978. The Generalitat de Catalunya's political jurisdiction includes territorial planning and development.



Figure I.1. Location of the case studies

Source: author's elaboration

The three grassroots groups analyzed were campaigning to stop the development of large tourist and infrastructure projects that they considered would result in a high environmental impact (see table I.2). They principally opposed the Catalan government and, in many cases, other economic stakeholders involved in the conflicts.

Table I.2. Characteristics of the conflicts according to the grassroots organizations

Case 1. Coordinadora Antilínia de les Gavarres	Case 2. Salvem l'Empordà	Case 3. Salvem les Valls	
Description	Description	Description	
The grassroots movement	The grassroots movement	The grassroots	
opposes the construction of a	opposes projects to develop golf	movement opposes a	
high tension power line to	resorts, residential and tourist	project to build a road	
provide the Costa Brava with	developments, pig feeding	and a tunnel that crosses	
more energy. A number of	farms, ports, aerodromes, wind	a Pre-Pyrenean natural	
precoastal villages are heavily	power parks and new industrial	area and an emblematic	
affected by this power line.	areas in the Empordà region. landscape.		

Alleged Social and Economic Impact

- Health risks. There is important scientific uncertainty about health risks associated with magnetic fields. The grassroots movement is concerned with the possible development of cancers in people living close to the high tension power line. In particular, people who already have cancer or heart problems run even higher risks due to the proximity of magnetic fields.
- Decrease of quality of life. Noise produced by the infrastructure / degradation of vegetable gardens in the vicinity of the high tension power line / anxiety as a result of uncertainties about the health consequences of the infrastructure / breaking up of the landscape.

Alleged Social and Economic Impact

- Decrease in the quality of life. Soil water contamination (nitrates) from pig macro-farms and overexploitation from golf courses reduce availability of drinking water / noise produced by aerodromes / breaking up of the landscape, etc.
- Negative effects on local identity. Degradation of the Empordà rural and natural landscape / degradation of social cohesion in the region.

Alleged Social and Economic Impact

- Decrease in quality of life. Noise / air contamination / destruction of the landscape.
- Economic impacts. Negative effects on the development of emerging nature tourism / negative effects on agriculture due to the potential changes in land use. Negative effects on local identity. Degradation of the local identity in the Garrotxa, strongly symbolized by the natural landscape.

Alleged Ecological Impacts

• Impact on the landscape and the natural area of the Gavarres; increased fire risk.

Alleged Ecological Impacts

- Soil-water contamination and decreased water supply due to golf resorts and pig macrofarms.
- Urban and industrial projects have an impact on the connection between natural parks and cause significant fragmentation of the coastline.
- Wind power parks change bird migration.

Alleged Ecological Impact

- Negative consequences of a new road construction on local fauna and flora.
- Potential changes in land use.
- Potential air pollution and its consequences.

Source: Author's processing of information provided by organizations' representatives and from grassroots organizations' websites, 2005.

Case 1: "Coordinadora Antilínia de les Gavarres": electromagnetic fields and health risks

The first grassroots organization studied, the citizens' movement *Coordinadora Antilínia de les Gavarres*, or "Les Gavarres Civil Platform Against the High Tension Power Line" (case 1), mobilized in 1997-98 against the construction of a high tension power line in a populated area of the province of Girona.

The plan for this infrastructure was designed by the electricity board FECSA-ENHER and was supported by the autonomous government, the Generalitat de Catalunya. Both bodies saw a need for a greater energy supply for the tourist services of the Costa Brava during the high season, prompting them to initiate this project.

However, unclear scientific evidence, in other words a high level of uncertainty, about the effects of the high tension power line on health prevailed among citizens. Citizens were concerned about the dangers of the installation to their well-being. The perceived potential health risks of the high tension power line led to the mobilization of the inhabitants of the villages that would be affected by the planned infrastructure.

Not only did people consider health risks for the average healthy person. Magnetic fields were thought to have an even greater negative impact on those who, before the construction of the line, already suffered serious health problems, such as cancer or heart disease.

Other negative consequences of the infrastructure played a role in the mobilization of citizens: a potential decrease in quality of life and negative effects on the landscape surrounding the village and in the natural area of the Gavarres.

While the fieldwork was undertaken (July 2003 – December 2004), the high tension power line had already been constructed. As a result, the interviewed members of the grassroots organization also reported the negative consequences of the building and functioning of the infrastructure for the local inhabitants.

Case 2: Salvem l'Empordà: against overexploitation of the territory in tourism, industry and agriculture

Our second case study involves *Salvem l'Empordà* (case 2), Catalan for "Save the Empordà"; it was founded in 2002 as a citizens' organization to "save" the Empordà region from several projects they considered would have a high environmental

impact. The organization opposes urban, industrial, agricultural and tourist overexploitation of the region. As such, this group is involved in a rich mix of conflicts. It defies the interests of private enterprise, and on several occasions also confronts the Catalan government (the Generalitat de Catalanya) and local village councils.

Current overuse of the territory already has a strong impact on the life of its inhabitants. Problems include the lack of drinking water and contamination of water coming from golf resorts and industrial pork farming. Strong pressure from the tourist industry in the area has changed the landscape of the region considerably in the past fifteen years. All of these bring pressing ecological problems in *Salvem l'Empordà*'s opinion. Since its beginning, the organization has denounced the unsustainable character of the Empordà development model and demands the Catalan government come forward with an overall plan for the region.

Case 3. Salvem les Valls: biodiversity and landscape conservation

The third and last organization considered in this study, *Salvem les Valls* (case 3), translates as "Save the Valleys", and started its activity in 1994-95. The organization mobilized against the construction of a main road and a tunnel because it would lead to ecological problems in a valuable natural area in the Garrotxa region (pre-Pyrenees).

The Catalan government promoted the development of the road infrastructure, arguing the need to improve access to Garrotxa, a mountainous, interior area of Catalonia. This area was seen as being too isolated from the rest of the region, entailing problems for its economic development.

Faced with a number of adverse effects on the natural area if the project were to go ahead, the grassroots organization took a conservationist position emphasizing the ecological importance of the valleys. Even though the main reason for the organization's opposition to the planned project was an ecological one, it also pointed to potentially detrimental social and economic effects, such as a decrease in the quality of life, and a dilution of the strong local identity. All in all, the building of the road has been described as a problem for the sustainable development of the area, and therefore its necessity has been questioned by members of the organization.

Fieldwork

The fieldwork was organized in three phases. In July 2003 representatives of the organizations were interviewed. Questionnaires were distributed to the members of the organizations and collected from November 2003 to March 2004. The third phase took place in December 2004 and consisted of in-depth interviews.

Table I.3. Questionnaires and interviews of activists in the grassroots organizations

Field- work	Period	Number of activists surveyed / interviewed
Phase 1	July 2003	3 Interviews of the representative of the grassroots groups
Phase 2	November 2003 - March 2004	108 questionnaires collected: Case 1, Coordinadora Antilínia de les Gavarres: 33 (15 women / 18 men) Case 2, Salvem l'Empordà: 43 (20 women / 23 men) Case 3, Salvem les Valls: 32 (13 women / 19 men)
Phase 3	December 2004	19 in-depth interviews: Case 1, Coordinadora Antilínia de les Gavarres: 8 (5 women / 3 men) Case 2, Salvem l'Empordà: 11 women

During the first phase, I contacted each grassroots organization and held an indepth interview with its representatives (see annex 1). Before the interview started I briefly introduced my research to the representatives. That helped to build links with the organization and to make them fully aware of the interests of the study. The interview focused on getting a general picture of the origin and development of their activities, the diverse reasons for mobilization, the sociological profile of the members and the internal working of the group. Representatives were also confronted with some questions related to gender issues. Their answers helped me to get some gender-related information about the group, as well as to build a first impression of their perception of the topic.

During the second phase I concentrated on questioning the members of the organizations. I had gathered information from newspapers and the Internet in phase 1, and together with the information provided by the representatives I developed a comprehensive questionnaire for both female and male members (see annex 2). It included a wide range of questions, from opinions about their organizational conflicts to inquiries about general concerns for the environment, environmental lifestyles or general perspectives on environmental policy-making. Because the questionnaires were elaborated after collecting information about the organizations, and after the interviews with the representatives, the questionnaires were written bearing in mind the characteristics of the organizations and their objectives, with some questions varying from one organization to the other. Diverse techniques were used for enquiring, such as structured (closed), semistructured (open) and Likert-type scale questions.

Questionnaires were distributed among members of the organizations with the cooperation of the group's representatives. In cases 2 and 3 some questionnaires were also distributed via e-mail. In total, 108 completed questionnaires were returned, 33 from case 1, 43 from case 2, and 32 from case 3.

When distributing the questionnaires my aim was not to get a representative sample, or a chance one. Instead my strategy was to get the views of the most active participants of each organization.² I believed that their opinions of the overall situation would be the most reliable and significant. In addition, efforts were made to collect a similar number of questionnaires from the different organizations for reasons of comparability. This strategy had the consequence of limiting the number of questionnaires collected. Nevertheless, the approach of the study was qualitative and there was no intention of providing robust statistical data.

Finally, the third phase consisted of personal interviews that were planned after the questionnaire results had been analysed (see annex 3). The main objective was to capture the testimony of female activists in what I have called experience-based organizations. Some male members with key roles in the conflict of case 1 were also interviewed. In total, eight members from case 1 (5 women and 3 men) and 11

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² It has to be acknowledged that the form of participation was rather different in each group. In cases 1 and 3 the board of directors had a strong predominance and the rest of the activists took, in many cases, a supportive role, while in case 2 most activists were directly engaged in decision-making through weekly general meetings and thematic working groups. However, I did not consider as activists people who only paid a quota to the organization or participated sporadically in demonstrations. All those surveyed had been, to some degree, engaged in aspects related to the workings of the organization.

female members from case 2 were interviewed. Interviews were of variable length, lasting from 45 minutes to over an hour and a half. The interview was held following a pre-conceived outline that was not shown to the interviewee. The structure of the outline was similar for the members of the two grassroots organizations, but some variations existed (also from person to person) as I had information from the questionnaires that prompted me to go into greater depth on specific issues. Although I tried (and normally succeeded) in getting answers to all the questions included in my outline, the dynamic of the interview was extremely free: the order of questions was adapted to the natural course of the conversation, and some new questions emerged spontaneously, according to the interests arising during the talk.

Local Agenda 21 of Catalonia (A21CAT)

In the context of international and European political commitments for the implementation of Local Agenda 21, the Generalitat de Catalunya started a regional Agenda 21 process in 1998, called A21CAT.

A21CAT, designed and implemented by a technical office of the Generalitat de Catalunya, was a project for public participation that met governmental departments, economic stakeholders, organized civil society and individual

citizens. The aim was to guide Catalonia towards sustainable development and establish the main challenges. The result of the participatory process should also determine strategic lines for meeting those challenges. The A21CAT started in 1998 with the creation of the Consultative Forum (Forum Consultiu). That was the first form of participation of A21CAT. The results obtained from the consultation elaborated in that Forum, together with the recommendations from the Sustainable Development Advisory Council (Consell Assessor per al Desenvolupament Sostenible, CADS)—a governmental consultative body specialized in sustainability—, were the basis of the first document of A21CAT. That phase ended in 2000.

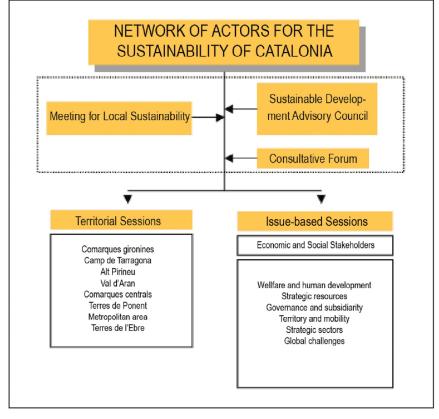


Figure I.2. Catalan Local Agenda 21 participatory process

Source: Translated from the official webpage of the Generalitat de Catalunya (http://www6.gencat.net/a21cat/).

In 2001 the second phase of the process started, consisting of conferences led by experts. In the second quarter of the same year, representatives from the different departments of the Generalitat discussed the diagnosis, challenges and strategies for action. It is worth noting that the Institut Català de les Dona³ was among the governmental agencies involved in the A21CAT process. The ICD is responsible

³ Currently called the Institut Català de les Dones (Catalan Women's Institute).

for assessment and implementation of gender equality policies of the Generalitat de Catalunya.

As a result of the first and second phases, the technical team of A21CAT elaborated the "Preliminary Consultative Document of Agenda 21 of Catalonia".

Finally, the third phase of the process took place in 2002. It consisted of the organization of participatory processes with stakeholders (from economic, social, professional, social and university sectors in Catalonia) and individual citizens. The "Preliminary Consultative Document of Agenda 21 of Catalonia" served as a guide for the discussion.

The participatory process with stakeholders and citizens was organized in two types of sessions: territorial and issue-based. In total, 6 issue-based and 9 territorial participatory sessions took place. The following table summarizes the discussion groups for each participatory session.

Table I.4. Discussion groups in issue-based and territorial participatory sessions of A21CAT

Thematic participatory sessions	Discussion groups	
Welfare and human	Education and training	
development	Health	
	Work	
	Social inclusion	
	Socio-cultural diversity and immigration	
Strategic resources	Energy	
	Water	
	Soil Basic goods and waste	
Governance and subsidiarity	Integration of sustainability culture in decision-making	
	Coordination among European, Spanish, regional and	

	local authorities	
	Information society / public participation mechanisms and co-responsibility	
Territory and mobility	Territorial politics	
	City	
	Rural areas and mountains	
Strategic sectors	Economic development and competitiveness	
	Business and industry	
	Trade	
	Agrarian sector	
	Tourism	
	Construction	
Global challenges	Mediterranean / Cooperation and solidarity with developing countries	
	Biodiversity	
	Climate Change	
Territorial participatory sessions	Discussion groups	
Comarques gironines	Welfare and human development	
	Strategic resources Territory and strategic sectors	
Camp de Tarragona	Territory, sectors and resources	
Oump at Turragona	Territory, governance and welfare	
Alt Pirineu	Territory, sectors and resources	
Val d'Aran	Diverse topics	
Comarques centrals	Welfare and human development	
	Governance and subsidiarity / Territory and mobility	

	Strategic resources / strategic sectors	
Terres de Ponent	Welfare and human development Governance and subsidiarity / Territory and mobility Strategic resources / strategic sectors	
Metropolitan area	Governance and subsidiarity / Welfare and human development Territory and mobility Resources and strategic sectors	
Terres de l'Ebre	Governance and subsidiarity / Territory and mobility / Strategic sectors Sectors and strategic resources / Global challenges	

Source: Author's processing of information available at http://www6.gencat.net/a21cat/

Fieldwork

The fieldwork was planned to develop a gender assessment of the development of the A21CAT process, by analyzing materials elaborated and interviewing people engaged in the participatory process. In this sense, the first action was to collect information about A21CAT and to interview the director of the project (July 2003). The interview was planned to present the objectives of the thesis and the interest in A21CAT, to acquire information about the A21CAT process, and to establish contacts for interviewing politicians, experts, stakeholders and citizens involved in the process.

However, the A21CAT process was interrupted when, after the autonomic elections of March 2004, the political party that had initiated it left the government. Thereafter, the structure that had initially been conceived was never continued. This situation meant it was impossible to fully analyze this case study, and I decided to focus on the printed material that had been published previously. As a consequence, it has been given secondary importance in the final version of the thesis.

Finally, two fundamental tasks have been implemented in the analysis of printed material and web information of A21CAT:

- 1. Analyse gender balance throughout the participation process:
 - a. Consultative forum.
 - b. Informative sessions.
 - c. Thematic and territorial participatory sessions.
- 2. Gender assessment of information provided by the Preliminary Consultative Document of Agenda 21 of Catalonia, which, as indicated above, had been elaborated in consultation with the CADS and the Consultative Forum, and after participation activities with the technical departments of the Generalitat de Catalunya, and which served as a document guiding issue-based and territorial participatory sessions.

Until now I have set out the main parts of the text and the methodological details of the research process. Next, we start the development of the chapters, beginning with the theoretical and conceptual roots of the study.

PART I. GENDER AND ENVIRONMENTAL GOVERNANCE. THEORY AND PRACTICE: A STATE OF THE ART

Introduction

What is the relationship between gender and environmental governance?

This concrete question has diverse and complex answers, and the objective of the first part of this study is to set them out. In doing so, I shall provide the theoretical background on which the research into a gender perspective on environmental governance is based.

In order to deal with gender and environmental governance, we first have to consider gender perspectives on the environment in conceptual and practical terms, to afterwards focus our attention on governance.

From a conceptual point of view, ecofeminist scholars have addressed the issue of gender and the environment by starting out from a reflection on the powerful link that has associated women with nature through the entire history of Western culture.

The concept of "woman" is not equivalent to gender, as much as "nature" is not synonymous with the environment. However, the meanings that are attached to these two concepts—women and nature—at the root of modern Western thought are fundamental to establishing our understanding of gender relations, and how society interacts with the environment. On the one hand, the justification for the deprived social position of women has been based on a discourse about a female pattern warranted by women's inherent nature, and their supposedly closer relationship with nature due to traditional female social roles. On the other hand, nature, considered as an object of exploitation, has been assigned stereotypically female characteristics.

Regarding the first argument, the delimitation of what is a "woman" is constructed in radical opposition to a male pattern. Such a separation is sanctioned by a deterministic rhetoric based on natural differences between the sexes. This approach considers women to be more determined by nature than men. In contrast to references to masculine stereotypes (reason and control, for example), what is considered typically feminine (such as emotion and empathy) is justified by referring to supposedly genuine characteristics of a female nature, the body and its functions, mainly related to reproduction. Using this same argument, the sexual division of labour that assigns women the activities of the private sphere is legitimized. These activities are again related to the "natural" aspect of humanity: tasks related to producing and maintaining "life", such as nurturing and caring.

Finally, the social roles that are associated with the characteristics of our species and are deterministically assigned to women receive a low social value in terms of power positions, which mark gender relations in our society.

The second argument is very much linked to the previous one. Nature has been traditionally symbolized as a female entity, and hence the features associated with femininity have also been attributed to nature. For instance, as I will explain in more detail later, in pre-modern times the Earth was conceived as a nurturing mother responsible of maintaining life. However, as Carolyn Merchant (1983) points out, Western society, particularly since the Scientific Revolution, has engaged in the project of overcoming the idea of a deterministic fate that is negatively affected by natural constraints. A fundamental image in such a project was the opposition and hierarchical relationship between reason and nature. This saw the natural world (the environment) appropriated, explored, controlled and exploited by reason—embodied in modern science and technology. Feminists that have studied the historical construction of the modern scientific project (e.g. Merchant, Fox Keller) refer to the images of women and gender oppression that were projected in the arguments that justified the control and exploitation of nature, and also to how the image of a nurturing mother was displaced by the metaphor of a mechanistic order.

It is in this sense that ecofeminist authors interpret a connection between the exploitation of nature and the oppression of women in Western culture. According to them, the subordination of both women and nature takes place in a shared system of power relations; such oppression derives from the inferior status that the values they come to represent are given. Therefore, the gender perspective explains with a specific outlook on gendered power relations the link between society and nature, which suggests a positive alternative to reflect on the cultural values underlying the ecological crisis.

Obviously, women's historical and philosophical link with nature has been the focus of a large part of the feminist literature, in the two senses mentioned above. That is the object of the first part of chapter 1. After discussing the consideration of women's nature throughout the history of Western thought, I will focus on the discussion about women's nature according to feminist theory, departing from classical gender theory and moving on to feminism of sexual difference, and concluding with postmodern approaches.

Afterwards, I will deal with the women's link with nature according to ecofeminism. Although in this section I will present the basic elements and the two main approaches of that thematic branch of feminism, specific discussions of their

proposals will be reserved for future parts of the study, in which they can be studied in more depth.

Finally, the last part of chapter 1 will focus on the question of the relationship between gender and the environment in practical terms.

Taking the perspective that gender organizes our society in terms of socialization, public and private work, everyday activities and space, it is hypothesized that the environment is affected by that gender bias, in terms of use of resources, behaviour and lifestyles, as well as interests, values and concerns about environmental degradation. That approach has inspired a group of feminist scholars as well as women's groups, and as a result a number of topics already offer some interesting insights from a gender perspective. These include sustainable urban planning and mobility, consumption and health, contamination and security, environmental-related grassroots movements, climate change and energy, landscape, sustainable development and global environmental governance. Such approaches will be set out in section 1.4.

Ascertaining that gender is relevant for the environment leads to a question that is fundamental to the background of this study: if gender is relevant for the environment, how is it actually addressed by environmental governance practices?

Chapter 2 focuses on presenting the main elements of governance politics and its application to sustainable development, and identifies the ways a gender approach to the environment has penetrated into environmental governance practices at a global and local scale.

In concrete, section 2.1 deals with the political conditions that fostered the emergence of the concept of governance and the analytical and critical views of political science scholars. In section 2.2, I present how environmental politics have faced up to the environmental crisis at an international scale, linking the theory of governance with its application in global environmental politics.

The strong alliance established between governance and politics on the environment at a global scale is discussed critically in section 2.3. In concrete, I claim that the concept of sustainable development has been instrumental in reviving the old idea of progress that was being undermined as a consequence of the ecological crisis. The political strategy of governance has played its part in that process. Paradoxically, regardless of the profound divergences between the ideological, economic and social positions of the multiple and diverse stakeholders engaged in the environmental debate, sustainable development and governance

have tended to be presented as technical solutions that could satisfy all types of interests.

Therefore, governance is actually appropriated by very different political actors. In section 2.3, I will describe how women's groups willing to lobby international politics on the environment also use governance mechanisms for actually influencing official politics. In this section I will present their most important successes and pitfalls, and the results of their fight in terms of the introduction of a gender perspective in a major document for the spreading of sustainable politics worldwide, Agenda 21. Finally, section 2.4 goes on to discuss the consideration of gender in the practice of local governance through the case of Local Agenda 21 (LA21) in Catalonia, Spain.

By the end of this chapter, we will have enough elements to systematize the great opportunities and challenges of a gender approach to environmental governance that will be discussed in the concluding section, and which opens the reflections that guide the empirical research presented in Part II.

Chapter 1. Women, nature and feminisms

1.1. Women's nature in modern Western thinking

The Enlightenment is widely recognized as a period of revolutionary social, political and philosophical activity taking place in Europe, leading to the articulation of the modern basis of Western culture.

One fundamental argument for the construction of modern society was to establish the characteristics that distinguished humans from the rest of the natural world, that is what made humans cultural beings, in contrast to animals. The answer was found in "reason". The capacity for reason was considered the element that made humans different from animals. Moreover, it allowed civilization to transcend natural constrains and articulate, using science and technology, the highest expression of reason. Obviously, a direct effect of such differentiation concerned the establishment of a hierarchical order between humans and nature.

Paradoxically, philosophical discourses concerned with demonstrating the characteristics of humanity found legitimate arguments in nature itself. Nature was the source of justification because, outside human influence, it could provide the truth.

Together with the question of what characterized humans, Enlightenment thinkers also became concerned with determining what was specific to women. Feminist historians and philosophers have spoken about the relevant debates on women's nature and the place of women in the new social order that emerged in Enlightenment intellectual circles, and that also influenced the protests taking place during the French revolution.

Yet when Enlightenment intellectuals asked about women's specificity, they were extremely influenced by previous thinking. They had inherited the ideas on women's nature that had been forged since ancient Greece. In the following section, I am going to give a brief introduction to some basic elements of this heritage.

1.1.1. Antecedents: discourses on women's nature in ancient Greece and the Middle Ages

According to Vilanova (1994), ancient Greek society was clearly misogynistic: women did not have any rights and were under the guardianship of males in

extremely patriarchal family units. The distinction between *logos* (reason) and *alogos* (irrational) was fundamental for organizing the "nature" of men and their relation with women and sexuality. Lucid reason was conceived as the highest expression of humanity, but it was thought to be degraded by the sexual experience, which represented a loss of control. In consequence, sexual relations—particularly with women, which were considered as inferior beings—were seen as a degradation of humanity. Platonism and Aristotelism were developed according to this separation, which profoundly influenced the notion of women's specificity that emerged in the Middle Ages.

Christianity adopted the Greek image of sexuality and integrated it into the religious order. The philosophy of Saint Augustine (fourth century) and Saint Thomas Aquinas (thirteenth century) both had important influences on the establishment of Christian thought in different periods.

Saint Augustine was very much influenced by Platonism. He thought man and woman had a spiritual part (logos) and a corporeal one (alogos). Man and woman were seen as having a different body, but their soul was the same in God's eyes. Women, therefore, were considered inferior to men in relation to the body, while being equal in spirit.

Saint Thomas Aquinas, however, did not leave any possibility of salvation to the female soul, not even through assimilation to the male model. In Saint Thomas' thought the soul/body duality did not exist: the body defined the rational soul. Because women were considered to have an inferior body, their supposed inferiority was ontological: "a woman is inferior and less perfect, a frustrated male, *mas occasionatus*, a man whose evolution has been arrested." (Translated from Vilanova, 1994: 70).

In this way, the fathers of modern thought inherited the idea that men and women had a different social status, which was legitimated by their different bodies.

woman = body = nature = irrationality = subordination man = spirituality = culture = rationality = domination

As is did after the Enlightenment, reason came to represent the maximum expression of humanity, and access to it was fundamental to achieving a power status in society. Only in that way could we understand the fundamental consequences of a dominant discourse that linked women to irrationality because of the specific nature of the female body. Although Enlightenment thinking

conceived the idea that all humans were born equal and should continue as such in society, women were given an inferior status legitimized by their lower rationality and their sexual difference.

1.1.2. Equality and difference in Enlightenment thinking and the legacy of the biological determinism of the nineteenth century

European Enlightenment philosophers established the egalitarian arguments that fostered the development of modern society. The Kantian idea of a universal subject aimed at eliminating social privileges based on ontological differences among humans. Rousseau also worked on the universal subject to establish the basis of modern democracy: all humans were equal in nature, and they should remain equal under the social contract. Since then, modern society has evolved based on the idea of an abstract universal and free subject that applies to all humans.

The Enlightenment claim for equality also made possible the public demand for women's rights in the eighteenth century. Although we find thinkers like the Cartesian philosopher Poulain de la Barre, who already in the seventeenth century argued that women should be considered equal to men (Carbonell, 2003), only the philosophical, political and social conditions of the Enlightenment made that argument thinkable at a public level.

Women participating in the French revolution acquired a sense of being a group sharing oppression, and they formed alliances to improve their situation in the construction of the new form of society. Such a consciousness is illustrated by the diverse texts asking for the political representation and voting rights of women that appeared in that period.

In the emblematic text *Petition des femmes du Tiers-États au Roi, 1er janvier 1789*, women denounced female economic inequalities, disadvantages in marriage and poor education, although they still accepted their secondary roles in society (Puleo, 1993).

However, other documents illustrate women's ambition to attain the privileged male status. The reassertion of the prohibition of female political representation by the National Assembly was the reason for the *Requête des Dames à l'Assemblée Nationale*, in which women asked to have the same economic, political and labour rights as men. In the *Déclaration des Droits de la femme et de la citoyenne*, the female revolutionary Olympia de Gouges claimed women should be considered equal in all aspects of life to men (Puleo, 1993).

Paradoxically, the philosophical discourse of equality, which made possible to publicly claim women's rights, also contributed to oppress female claims.

Kant's philosophy did not pay specific attention to women's nature, unlike the work of other Enlightenment philosophers. However, some feminist authors have pointed to the limits he implicitly imposed to women by excluding critical reason from private life.

Kant's universal subject was based on the idea that reason would make humans equal and free. In a brief article entitled "What is Illustration?" published in a German newspaper in 1784, the philosopher described the historical period he lived through as a process of maturing in which humans would become free by renouncing any external guidance—whether authority or God—and become responsible for their own acts. That work represents his fundamental idea that humanity is found in critical reason.

However, Kant established a limit to human responsibility and a supreme capacity to decide. In that same work he distinguished between the application of reason in the public and private spheres: reason should dominate in public life, but in private obedience should rule. Only in that way society could evolve by avoiding revolution. He illustrated his argument through some examples. Taxes, for instance, can be questioned through public means, but in our private life we should pay them without question.

This argument of Kant's thinking has been considered as expressing both the limits and possibility of the Kantian discourse. However, regarding a gender perspective, the interest is that the author implicitly sanctions a gendered use of critical reason, limiting it to the (male dominated) public sphere, while establishing obedience to the (female) private one (Carbonell, 2003).

Nevertheless, Kant also dedicated some thought to female specificity in his late work *Anthropology from a pragmatic point of view* (1798). In this book the modern philosopher describes the passage from the individual to the universal subject. He examines female specificity, pointing out that difference is needed to complement the male subject: "equality does not cause love but discord". In the same text, Kant situates women in the domestic arena, submitted to men. The universal subject will embody the male patron, while difference will be constructed according to femininity.

Some years before Kant's *Anthropologie* was published, women's "specificity" and social roles had been used to condemn them to be excluded from the privileges of the universal subject in a text written by a little known philosopher of the time,

Thomas, in his Essai sur le caractère, les moeurs et l'esprit des femmes dans différents sciècles (1772). The author asserted that women had religious, domestic and social virtues, but they were not able to feel love for the fatherland or humanity. Saying that, he argued women's feelings were particular and could not reach universality. Thomas' essay was strongly contested at the time (Puleo, 1993).

Diderot wrote the essay *Sur les femmes* in which he condemned the oppression and degradation of women. However, for the philosopher, women's disadvantages were not only social, but also physical:

Dans presque toutes les contrées la cruauté des lois civiles s'est réunie contre les femmes à la cruaute de la natue; elles ont éte traitées comme des enfants imbéciles. Noulle sorte de vexations que chez les peuples policés l'homme ne puisse exercer impunément contre la femme; la seule représaille qui dépende d'elle, est suivie du trouble domestique et punie d'un mépris plua ou moins marqué, selon que la nation a plus ou moins de moeurs. [...] la femme malheureuse dans les villes, est plus malheureuse encore au fond des forêts. (Diderot, 1798¹)

Diderot's contribution focused on determining what was a "woman" (Carbonell, 2003), and his answer was that she was a passionate subject dominated by the female reproductive organs. Hence Diderot excluded women from reason, and a gave a biological determinist argument to state this:

C'est surtout dans la passion de l'amour, les accès de la jalousie, les transports de la tendresse maternelle, les instants de la superstition, la manière don't elles partagent les émotions épidémiques et populaires que les femmes étonnent; belles comme les séraphines de Klopstock, terribles comme les diables de Milton. J'ai vu l'amour, la jelousie, la superstition portés dans les femmes à un point que l'homme n'éprouva jammes. [...] La soumission à un maître qui lui déplaît, est pour elle un supplice. J'ai vu une femme honnête frisioner d'horreur à l'approche de son époux; je l'ai vue se plonger dans le bain, et ne se croire jamais assez lavée de la souillure du devoir. Cette sorte de répugnance nou est presque inconnue: notre organe est plus indulgent. (Diderot, 1798²)

¹ Diderot (1798) published in A.L. Thomas, Diderot, Madame d'Epinay (1989): Qu'est-ce qu'une femme? Paris: P.O.L., pp. 174.

² Op. Cit. (1), pp. 166-167.

In the seventeenth century, the Cartesian philosopher Poulain de la Barre had stated that because the body and the mind were separate, women and men were different physically, but that the "intellect has no sex". However, in the eighteenth century the influence of medical philosophers established that mind and body were connected, for which the sexual determination of the body was also thought to affect the mind and intellectual capacities of women (Rodriguez-Magda, 2004).

Such an idea is well illustrated in the words of Diderot, who described women's "inability" to control their feelings and passions due to the influence of the reproductive organ. In this way, the essence of woman came to be found in the womb:

La femme porte au-dedans d'elle-même un organ susceptibles de spasmes terribles, disposant d'elle et suscitant dans son imagination des fantômes de toute espèce. C'est dans le délire hystérique qu'elle revient sur le passé, qu'elle s'élane sur l'avenir, que tous les temps lui son présents. C'est de l'organ prope à son sexe que parten toutes ses idées extraordinaires. [...] Sa tête pare ancore le langage de ses sens, lorsqu'ils sont muets. Rien de plus contigu que l'extase, la vision, la prophétie, la révélation, la poésie fouguese et l'hystérisme. [...] La femme dans l'hystérisme éprouve je ne sais quoi d'infernal ou de céleste. (Diderot, 1798³)

Rousseau also advocated that women should contribute to the social contract with their work from the private sphere and not by participating in public life, which should be reserved for men. His writings were fundamental in establishing the moral ideals of wives and mothers that would dominate the nineteenth century's bourgeoisie (Carbonell, 2003).

According to Carbonell, the issue of "sex differences" was a fundamental discussion during the Enlightenment. Writings from Rousseau and Thomas were strongly contested. Madame d'Epinay fought Rousseau's ideas about women through her noble *Historie de Madame de Montbrillant*, in which she contested the conception of motherhood and marriage as ideals of women's identity. The mathematician and philosopher Marquis de Condorcet also opposed Rousseaunian ideas about femininity, arguing that if all humans have the same rights, they should be recognized regardless of their differences. He was author of

³ Op. Cit. (1), pp. 170-171.

another of the most influential texts of the period in favour of women's rights entitled *Sur l'Admission des femmes au droit de cite* (Carbonell, 2003).

The ideal of equality among all humans was fundamental to the social and political construction of modern citizenship. Yet the supposed neutrality of the universal subject was unattainable—perhaps neutrality was itself impossible. The stereotype of the male white citizen implicitly shaped the ideal of the universal subject: the ideal of a rational being capable of acting using free will excluded women because their capacity to be rational was considered doubtful. Carbonell sees that paradox as a basic weakness of the Enlightenment egalitarian project, which aimed at assimilating all humans to a single universal. Because women were biologically different to men, they became "the content of the residue that the—modern—Enlightenment project of a universal subject could not assimilate" (Translated from Carbonell, 2003: xx).

That paradox is also fundamental to understanding the discussion on femininity, which is still alive in contemporary societies, and which is also fundamental to the feminist movement. The new social order structured privileges according to the assimilation of the universal subject. Thus the similarities and differences of women based on the ideal subject (egalitarian feminism), or on the contrary, the search for a female identity independent of patriarchal constructions (feminism of sexual difference), have focused the debates about the nature and the social status of women.

We have already seen that at the roots of modern society's discourses on the biological specificity of women have been fundamental in maintaining women's inequalities at a political and social level. Yet such arguments would gain fundamental weight as a consequence of the tremendous advances of science from the nineteenth century onwards, particularly in the field of biology.

In 1858 Charles Darwin presented his work at the Linnean Society of London, and one year later it was published as *The Origin of Species* (1859). His theory about evolution represents the fulfilment of a scientific and philosophical debate started by transformists, with the crucial legacy of Jean-Baptiste Lamarck.

Interestingly, Darwin was inspired by Thomas Malthus' *Essay on the Principle of Population*, which had been published in 1798. Malthus argued that population growth should be controlled because while resources grow arithmetically, population grows geometrically. For the economist, if government did not control population, "nature" would do it through famine and disease. Darwin adopted the hypothesis of resource scarcity to explain natural selection. According to his initial

theory, creatures compete among themselves for food, but since resources are scarce only those best adapted to the environment survive. In this way, the characteristics of the most outstanding are transmitted to their offspring. Such an idea was supported by his observations of genetic characteristics of domestic species, variations that had been created by humans. However, in the case of natural species such variations appeared by chance, and were selected by the game of survival.

Hence Darwin's hypothesis opposed the idea of a pre-established scheme of the natural world. Actual species were not a special creation, but the result of competition. The success of the theory of evolution would have radical effects on the conception of human nature, which until that time had been strongly influenced by theological interpretations. Indeed, if competition had explained the evolution of species, humans could have followed the same path. Darwin would apply evolutionary theory to human evolution in a later and very polemic work entitled *The Descent of Man, and Selection in Relation to Sex* (1871).

Darwin's influence and contribution to scientific spheres led to biology becoming a reference point for all branches of science, as well as human and social sciences, during the second half of the nineteenth century. As a consequence, for several decades, the idea that all beings are determined by their biology dominated conceptions of humanity, misconceiving social and cultural influences. Such influence in human and social sciences is nowadays known as biological determinism.

However, the deterministic influence brought about by advances in biology had decreased considerably by the end of the nineteenth century. At that time other philosophical interpretations (such as possibilism and historicity) inspired the human and social sciences. Yet into the twentieth and twenty-first centuries, sociobiologists (a synthesis of scientific disciplines considered a branch of biology and sociology) strongly align themselves to the thesis that genes, and not social and cultural environments, play an overwhelming role in human behaviour (see, for instance, Macfarlane, 1960).

At the same time we must consider the strong cultural legacy lead of biological determinism on the consideration of the influence of sex differences for explaining female and male characteristics as innate, and hence inalterable.

Throughout the nineteenth century neurologists insistently explored the characteristics of the female and male brain, assuming women had different behaviour, intelligence and specific abilities. Such arguments would explain (and

determine) biologically women's roles in the family and society. Still today brain differences between males and females is an issue of discussion in scientific spheres, a poisoned debate whose ideological implications are well illustrated by its prominence in the popular literature (see, for instance, Hinnes, 2003). Yet neurological scientists do not agree on the existence of female and male brain characteristics, or on the influence of such supposed characteristics on particular abilities and behaviour (Vidal, 2006).

As we are going to see in chapter 7, biological determinism has been also a recurrent argument to explain maternity as a natural legacy that dangerously obscures social and cultural dimensions. As a consequence, demonstrating the fallacy of arguing that women are marked by a biological fate has inspired the emergence of the most important works of egalitarian feminists of the twentieth century.

1.2. Feminist perspectives on femininity

The discussion among Enlightenment writers and the legacy of biological determinism shows that sex differences was a fundamental argument to legitimate women's domination. During the nineteenth and twentieth centuries, egalitarian feminism focused on fighting for the recognition of women's rights in politics and the labour market. At the same time, at a philosophical level the discussion about women's "nature" continued and structured the internal divergences in the evolution of feminist theory until the present day.

In the following sections, I will focus on the issue of the female "nature" as it has been dealt with by feminism. Because much contemporary feminist theory was developed after the second half of the twentieth century, I will deal only with authors of that period. The theoretical foundations of gender theory, sexual difference and postmodern feminism will be set out by means of a discussion about their diverse conceptions of the female identity.

1.2.1. Sex versus gender

The distinction between sex and gender has been fundamental to the advance and social recognition of feminist theory, regardless of their diverse orientations and internal criticisms within it. It helped to build a theoretical framework to robustly demonstrate the mechanisms of domination used by patriarchy, and thanks to that

theoretical framework, gender studies could evolve as an autonomous perspective crosscutting diverse disciplines in the humanities and social sciences.

However, although gender studies proliferated in the academic domain during the seventies and eighties, its influence on theoretical approaches to social sciences have been noted slowly. In an academic environment heavily dominated by males until recently, it has been hard for it to be admitted that gender is crucial for understanding social organisation (McDowell, 1999).

Until recently, sex was mainly used as a statistical variable in population analysis. The majority of social sciences implicitly considered society as uniform and genderless. However, gender studies largely demonstrated that they implicitly assumed the male stereotype as a social pattern (Moreno, 1986; MacDowell, 2000). In this way the specific and unequal social and economic conditions in which women lived were obscured or neglected.

The academy has been traditionally seen as an environment in which sex is irrelevant too. The traditional male predominance is now challenged by an increasing number of women in academic positions in the social sciences, although women are still underrepresented in top positions. Feminist studies have shown that a consequence of an academic tradition dominated by males is that male-centred interests and values have dominated academic output (Hanson and Monk, 1982). Research attitudes inspired by male patterns have also been very influential. Still today, in many research environments it is commonly assumed that the researcher should strongly separate his or her personal conditions from the study, instead of considering them as factors that unavoidably influence it. This is a value strongly inspired by the "impersonal" male scientific stereotype (Fox Keller, 1991).

Conditioned by that male academic environment, the concept of gender was introduced by female academics of social sciences during the seventies. The patriarchal discourse conceived sex difference as the fundamental argument to legitimate female oppression: women are naturally different from men, which conditions their social roles. Gender helped demonstrate the distinction between biological determinants and the social and culturally based symbols, norms and assignments causing women's inequalities.

The existentialist philosopher Simone de Beauvoir diffused the meaning that feminism would attach to "gender" in her renowned publication *The Second Sex*, first published in 1949. In this work, she wrote the well-known phrase that "one is not born, but rather becomes, a woman" (De Beauvoir 2005: 184), which led to the

development of the idea that it is society and not biology what attaches normative social roles, attitudes and behaviour to women. Her idea is expressed with clarity in the following lines:

No biological, psychological or economic fate determines the figure that the human female presents in society; it is civilization as a whole that produces this creature, intermediate between male and eunuch, which is described as feminine. Only the intervention of someone else can establish an individual as an *Other*. (Beauvoir, 2005: 184; emphasis in the original)

Beauvoir established the bases to think of femininity as a social construction, and of women as the "other". From her idea of gender it was possible to conceive of female and male identities as socially constructed, and differentiated from the biological body. Her work also denounced the fatalistic destiny of women, considered as the "inessential", while the male patron constituted the "essence", organizing society around it.

Following Beauvoir's teaching, since the 1970s gender theory has walked a long path. Classic gender theory has demonstrated that the normativization of male and female identities as biologically determined work as a crucial domination mechanism of patriarchy.

Based on the legitimacy of sexual differentiation, stereotyped behaviour and values are assigned to women, which also justify female social roles and a disempowered position in society. Conformity, intuition, gentleness, tenderness, tolerance, a caring nature, generosity, sacrifice, instability, irrationality, passion, emotionality and sensuality are normative assignments considered as "natural" to the female identity, and they are functional for legitimizing women's roles in a patriarchal society as mothers, wives, sisters, lovers, prostitutes, and so on. Instead, ambition, intelligence, roughness, rationality, control, heroism, responsibility, protection, desire, nobility and loyalty are assigned to the male identity, ensuring powerful social positions.

Gender theory has also shown "gender" to be a fundamental category in structuring society, at an economic, social and knowledge level. Economically and socially, society is structured according to the (female) private and reproductive sphere on the one hand, and the (male) public and productive sphere on the other. Western knowledge has been also strongly biased by gender, regarding the research

qualities and methodologies considered as valid and the scientific symbols that have fed the epistemological Western tradition (see chapter 8).

Gender power relations are the result of a historical process and are legitimized by everyday life practices: the public domain, education, institutions, the labour market, politics; and the private sphere, family, marriage, motherhood and sexual relations. These are social institutions and practices that are biased by gender and at the same time contribute to maintaining that gendered order.

Gender theory aims at opposing unequal power relations and as such it has included the attention to other forms of oppression that work with gender domination mechanisms, such as racism and classism. During the 1990s, strong critiques coming from Afro-American feminists denounced feminism as being an exclusive fight of white female intellectuals (bell hooks, 2005/1989; Hill Collins, 2005/1990). They accused feminism of ignoring and obscuring other forms of oppression that women from diverse ethnic and geographical origins and of low class suffered from, arguing that both men and privileged women contributed to that oppression.

Hence gender theory recognized that although patriarchy continued to be a fundamental concept for explaining female oppression, it could not embrace the diversity of dominations women were victims of. Moreover, this critique brought to light that feminist theory used a very simplistic conception of power, in which men were naturally assimilated as the enemy and women as victims, which did not help to understand the real power situations in which women lived. As bell hooks puts it:

Clearly, differentiation between strong and weak, powerful and powerless, has been a central defining aspect of gender globally, carrying with it the assumption that men should have greater authority than women, and should rule over them. As significant and important as this fact is, it should not obscure that women can and do participate in the politics of domination, as perpetrators as well as victims—that we dominate, that we are dominated. If focus on patriarchy domination masks this reality or becomes the means by which women deflect attention from the real conditions and circumstances of our lives, then women cooperate in suppressing and promoting false consciousness, inhibiting our capacity to assume responsibility to transform ourselves and society. (bell hooks 2005/1989: 465)

1.2.2. Ethno-androcentric power relations

Ethno-androcentrism is a concept that aims to give a more fine-grained approach than patriarchy to power relations occurring between genders in contemporary society. However, ethno-androcentrism does not substitute patriarchy, as specific forms of women's domination under male power structures are better explained by that concept.

"Androcentrism" is the term that describes the cultural and social order in which masculinity is the norm and measure of everything: the "male pattern" is the reference to humanity. The suffix "ethno" nuances that idea, expressing it as consisting of a pattern biased by a specific race and culture. Thus the concept of ethno-androcentrism conceives the social system as hierarchical, with the Western white male stereotype at the top, representing human universal values. All the rest—women, homosexuals, men and women from diverse races—are conceived as difference, the "other".

"Ethno"-androcentrism indicates that domination is not only inherent to relations between men and women, but is also dependent on other forms of difference. It is a postmodern term because it places emphasis on "difference", and because it recognizes the (Western) context of the analysis, with the implicit assumption that a universal explanation of women's oppression is impossible and, moreover, would be incorrect.

The public domain is organized according to such an ethno-androcentric pattern. Women engaged in public arenas may be alienated by the values and behaviour of the male stereotype. As such, they will be criticized for having become masculine. But they will still be considered genuinely female if they adopt female normative assignments such as seduction or emotion, or if displaying female stereotyped behaviour of wives and mothers in the private sphere. In this way, alienated female and male patrons that exert pressure on women (and men) to play expected ethnoandrocentric roles lead them in a kind of paradoxical and schizophrenic reality.

The naturalization of the male white Western pattern as the highest expression of humanity also legitimates the hierarchy of power relations between men and women, and between white Western people and other races and ethnic communities, as well as between heterosexuals and homosexuals. Domination mechanisms include violence and repression, but also other more subtle and very effective forms of normalizations such as "culture", morality, wealth, technological control and knowledge production.

Foucauldian theories about power help enrich the interpretation of the

mechanisms of domination and oppression of ethno-androcentrism. Following the French philosopher, Rodríguez-Magda (2004, 1994) criticizes the assumptions about power implicit in most left-wing intellectual movements, including classical feminist theory.

Firstly, power is conceived as a <u>property</u>. In the case of feminism, men have power and women lack of it. However, Foucault has shown that thinking about power as possession can only be an ideological strategy to publicly denounce the oppression of a group. When we attend to social and historical analyses, we realize that power is practiced by all members of society, and we are all victims of power relations as well. Obviously, however, we all do not share the same social legitimacy to practice power. As the previous quotation by bell hooks puts it, women dominate other women and men, although generally women can be considered as a social group suffering specific oppression. Foucault thinks power works as a complex and dense network of relations he describes as "capilar". Power is a permanent strategy and a violent relation: specific privileged positions in the ethno-androcentric network allow us to practice power and we fight for them.

Secondly, power has been thought of as localized in specific institutions, for instance the state government. Nevertheless, Foucault sees the state government as an instrument of power. Power is a number of multiple strategies that normalizes a specific order and legitimizes power relations. Ethno-androcentrism is not localised in government institutions, it is divided between multiple social practices. It is an inherent part of what we conceive as "normality".

Thirdly, power is not subordinated to patriarchy. Male domination does not preexist the relationship between men and women. Power relations are concomitant of gender differentiation and are maintained through their existence. Therefore, by fighting ethno-androcentrism we will not destroy power relations but transform them, theoretically, into a more equal basis for women, by surprising male forms of domination.

Fourthly, power is not inherent to males. Complementary to the false idea that men are in possession of power, or that power is localized in male dominated structures, power is also not a "natural" attribute of men. Foucault's work opposes ontological views of power. His conception of power argues that all social groups, individuals and spaces are contaminated by power since both dominators and dominated are engaged in power relations, although in different forms.

This has lead to Foucault's work being criticized for negating the possibility of resistance to power. Nevertheless, Foucault accepts that resistance is possible, but

opposes the myth that victims and rebels are pure and essentially good, i.e., that women are the noble savage. In this way we can understand real complex and paradoxical situations in which women live when analysing female social roles, behaviours and practices in the ethno-androcentric order, without accepting as fate that women constitute an oppressed group.

Fifthly, power is not exclusively expressed by ideology or violence. One of the most relevant contributions of Foucault is to demonstrate that the idea that power is exercised through coercion is partially false. To forbid, to manipulate, to repress, and so on, are very visible mechanisms of domination. Normalization, however, is more effective and stealthy. The alliance between power and knowledge is fundamental to the normalization of society. It is not only that knowledge is manipulated by power: even in the situations in which knowledge is recognized as neutral and objective, it facilitates a specific power practice. According to Foucault's analysis, knowledge produced by science—for instance, by medicine, psychiatry and pedagogy—have helped to establish normality and legitimize the specific power relations of society towards the mad, hysterical women and children. If this analysis is right, the discussion about sex differences and the nature of women that has been concomitant to the modern—and in which feminism has also played its own part—can be understood as a process of normalization of gender identities.

1.2.3. What happens to sexual difference?

Gender theory was born from egalitarian feminism and inherited its emphasis on equality. However, nowadays it would be inaccurate to assert that gender theory is strictly aligned with the equality branch of feminism. The reality is rather more ambiguous.

Effectively, we can distinguish an important theoretical and research production of gender studies that implicitly assume that in a hypothetic future in which we reached an equal society, gender would disappear; sex would be indifferent. However, the feminism of sexual difference claim that women's specificity is real and valuable has also influenced the understanding of the gender identity (Guerra, 2001). Some gender theorists think gender identities should be deconstructed in order to fight the ethno-androcentric bias that contributes to the domination of women. But a link between gender identities and the sexual body is recognized and considered as necessary. However, interpretations about this gender-sex connection vary according to whether they are gender theorists (who align

themselves to a constructive paradigm) or feminists of sexual difference (who are interested in the influence of the body in determining the female identity).

Feminism of sexual difference is inspired by the work of authors such as Karen Horney (1885-1952), Melaine Klein (1882-1960), Virginia Woolf (1882-1941), Ruth Benedict (1887-1948), Margaret Mead (1901-1979), Maria Zambrano (1904-1991), Hannah Arendt (1906-1975) and Simone Weil (1909-1943) (Rivera, 1994). Nevertheless, the theory of sexual difference was not conceptualized as a movement until feminism was strongly influenced by psychoanalysis, during the sixties. While American feminists were vigorously criticizing the Freudian conceptualization of women, French feminists started to explore psychoanalysis as a path for women's exploration of the unconscious and the search for female emancipation (Gatens, 1991).

The French group *Psychanalyse et Politique* established the theoretical foundations of the feminism of sexual difference and pointed to the project of constructing a new symbolic order for femininity. The movement was influential mainly in Italy, and arrived with less strength in other European countries and the USA. The main thinkers of that feminist movement are Luce Irigaray, Julia Kristeva and Hèlene Cixous. More recently we also find the work of Rosi Braidotti, the members of the Libreria delle donne di Milano and the philosophical group Diotima from the University of Verona in Italy (Rivera, 1994).

Feminism of sexual difference strongly criticizes feminisms from the equality branch for fighting patriarchy using its norms and mechanisms: engaging in the political, social and scientific institutions they criticize, thus partially accepting them. Alternatively, that branch of feminism thinks society has to be reconstructed from outside the current social order.

Feminism of sexual difference also criticizes equality feminism for implicitly conceiving femininity as the negative dimension of masculinity. When equality feminism claims that women should be equal to men, they implicitly assume one sex (the male one) is the only existing one. Sexual difference theorists argue that female liberation should consists in the social recognition of two sexes that are diverse and unique: "[A society in which] women's freedom is a result of being a woman and not in spite of her sex, as established by the Constitution and all the laws for equality that have followed it" (translated from Cigarini, in Rivera, 1994: 187).

Consequently, their project is much more epistemological than political. Or rather, as authors aligned to that theory affirm: their philosophical stance is profoundly

political, as they assert society cannot be transformed if we do not change completely the order that legitimates women's domination.

Hence the feminism of sexual difference faces the paradox we pointed out regarding the Enlightenment idea of a universal subject: equality can only be reached if it is recognized that there is not one universal subject, but two—men and women—, with a "difference" that is sexually determined. That is the meaning of the words of Luce Irigaray in 1984: "Sexual difference is one of the problems or the problem that must be thought about in our time" (translated from Irigaray, in Rivera, 1994: 183).

This means that feminists of sexual difference assume that sexual differentiation has been instrumental to women's oppression in modern Western thinking, but see it as something that can be positive (see, for instance, the quotation below from Di Cori). Like the Enlightenment thinker Thomas, who argued women could have only concrete feelings while men could reach universal love, this sexual difference author differentiates a physical and material dimension in all female acts. The recognition of a specificity of women is something she has is common with the Enlightenment author. Nevertheless, Di Cori believes that such similarities among women demonstrates the existence of a female universal subject, which is essentially different from the male one:

La característica de los productos culturales de las mujeres es precisamente el no ser nunca mera producción intel·lectual –de escritos, imágenes, sonidos– sino también siempre presencia física, sexual y material, de cuerpos, de espacios, de gestos. La peculiaridad de la cultura de las mujeres es la de corporalizar todas las cosas y los lugares, de interactuar con la realidad material de forma dinámica, señalándola físicamente. Este es también uno de los rasgos más universals, quizá el único que es possible encontrar, aunque con formas muy diversas, inevitablemente en todas partes. (Di Cori in Rivera, 1994: 184-185)

Sexual difference feminism recognizes cultural differences among women also exist. However, they place emphasis on the fact that despite cultures all women share having a female body, which give us a unity and which differentiates us from males. In addition, in contrast to gender theory that focuses on the parallel construction of male and female identities, the theory of sexual difference argues there that is no parallel between them: women's sexuality is considered specific because it is moulded by the body and the personal experience of the environment.

That experience is not similar to men's, although exploring male specificity has not been something that has interested the movement.

Nevertheless, since female identity has been oppressed under a patriarchal order, women lack reference points on femininity that has not been contaminated by male ideologies. There is no idea of how to freely be a woman:

Todas las mujeres han vivido esto, lo viven, como yo sigo viviéndolo. Lucha*mos* juntos, sí, pero quién: un hombre, y junto a él, cosa, alguien (una mujer) siempre en su parentesis, siempre rechazada o anulada en calidad de mujer, tolerada en calidad de nomujer, ¡"aceptada"! [...]

Y yo, insurrección, iras, ¿dónde me meto? ¿Cuál es mi lugar si soy una mujer? Me busco a traves de los siglos y no me veo en ninguna parte. Ahora sé que mis individualidades combatientes son masculinas [...]

Entonces ¿quién ser? Por más que recorra los siglos y los relatos que están a mi alcance, no encuentro mujer en la que introducirme. Para ella, no obstante, toda mi simpatía, mi ternura, mi tristeza. Pero, yo no, mi vida no. [...]

Deben de existir modos de relación heterogeneos a la tradición reglamentada por la economía masculina. Busco, pues, de forma apremiante y más angustiada, una escena en que se produzca un tipo de intercambio que sea diferente, un deseo tal que no sea complice de la vieja historia de la muerte. (Cixous, 1995: 31, 34-35)

Much work of the Italian feminism of sexual difference produced in the Libreria delle donne di Milano and the University of Verona has focused on building a female identity, an alternative to the male-biased one. They aim at conceptualizing an alternative female symbolic order constructed from and by women, in other words one that places women's genuine values and experiences at its centre.

As a consequence, Italian feminists of sexual difference embark on a tautological project: female identity is considered as built by and according to the male pattern, but they use female experiences as the basis to construct a new symbolic order for women. If the current social order is completely contaminated, how can they distinguish what is genuinely female from what is not? How is it possible to work outside the social order that fills our reality? Feminism of sexual difference finds answer in such questions in ontological arguments: sexual difference gives legitimacy to assert there are characteristics and values that are genuinely female, and the work of feminism is to shed light on them. Female sexuality, language,

symbols and psyche are considered to be the elements from which a female symbolic order has to be constructed (Foster, 1999).

"Figures" is the name given to the concepts through which the practice of sexual difference is proposed. There are three of them: maternal genealogy, *affidamento* and female authority.

The first figure places emphasis on making women's genealogy visible. A historical link among women is recognized, challenging the historical emphasis on mothers and wives, in other words as women in relation to men. The Italian word affidamento is used to describe a political relation between two women. The objective is to get around the central role of men in women's lives. Women are invited to acknowledge their female power independently from men. Luce Irigaray proposes the reconstruction of the relation with the mother—the symbolic order of the mother—as a way to empower a female vision of the world. The last figure, authority, is very much linked to affidamento. Woman is recognized as the centre of the world, the measure through which reality is constructed. Female authority is recognized in an experienced woman, who will guide an "inexperienced" female partner through a process of acquiring consciousness of herself as a free woman (Rivera, 1994).

At this point, two fundamental differences between gender theory and feminism of sexual difference must be acknowledged.

Firstly, sexual difference does not understand men as a social category. Man is not the subject that symbolizes and may assume the dominant role in the complex network of ethno-androcentric power relations, as I explained in regard to gender theory. Instead, man is conceived as having a sexed body, characterized by the Phallus, which determines his identity. For gender theory, gender—as a power category—is not possessed, rather it is culturally and socially constructed and reproduced through everyday practice.

Secondly, gender theory opposes the essentialism implicit in feminism of sexual difference. The female body is conceived as a positive base in which feminine identity is bound up. In that perspective women are linked to reproduction, feelings and nature. Gender theory recognizes that the body is fundamental in constructing female identity, but we cannot distinguish a natural female goodness that is independent from culture. Moreover, there are many female identities, and none of them is purer or more original than the others.

If gender theory has been accused of being contaminating by the ethnoandrocentric order that it aims to change, the feminism of sexual difference is accused of an illusion of purity (Guerra, 2001). As far as sexual difference feminism is conceived as a strong epistemological project in which only women can be fully involved, men are excluded from changing the social order. Moreover, most women are not engaged in—and may not wish to be—reconstructing a female identity based on supposed original characteristics dictated by a strongly critical theory. Hence the majority of women are also excluded from that feminist liberation project. Finally, because formal institutions are seen as contaminated by ethno-androcentrism, feminism of sexual difference also excludes itself from influencing society through them. As a result of that strict attitude, that feminist branch is regarded as strongly intellectual and philosophical and with little direct impact on society.

1.2.4. Sex and gender as fictions of a heterosexual order

Postmodern times have brought big theoretical challenges for gender theory and feminism of sexual difference. Both medical discoveries and technological advances, as well as the cultural emphasis on diversity, have been critical to improving our understanding of the complexity of the interactions between sex and gender.

The dualistic social organization between males and females has been challenged by the recognition of intersex individuals, in other words people showing a sexual anatomy that fits neither male nor female definitions. The study of the history of hermaphrodites shows that science has played a crucial role in building powerful ideas about the "true nature" of femininity and masculinity, and that the existence of intersex people always forced the medical community into an ambiguous and conflictive situation in which standards of masculinity and femininity got into crisis (Dreger, 1998).

Nowadays the claims for the public acceptance of intersex individuals have given a social dimension to that paradoxical situation. Organizations that fight for the rights of a health care system that respects intersexuality ask society to make interesting reflections on the power of heterosexual imagery in defining the sexual body:

Intersex is a socially constructed category that reflects real biological variation. To better explain this, we can liken the sex spectrum to the colour spectrum. There's no

question that in nature there are different wavelengths that translate into colors most of us see as red, blue, orange, yellow. But the decision to distinguish, say, between orange and red-orange is made only when we need it—like when we're asking for a particular paint color. Sometimes social necessity leads us to make color distinctions that otherwise would seem incorrect or irrational, as, for instance, when we call certain people "black" or "white" when they're not especially black or white as we would otherwise use the terms.

In the same way, nature presents us with sex anatomy spectrums. Breasts, penises, clitorises, scrotums, labia, gonads—all of these vary in size and shape and morphology. So-called "sex" chromosomes can vary quite a bit, too. But in human cultures, sex categories get simplified into male, female, and sometimes intersex, in order to simplify social interactions, express what we know and feel, and maintain order.

So nature doesn't decide where the category of "male" ends and the category of "intersex" begins, or where the category of "intersex" ends and the category of "female" begins. *Humans decide*. Humans (today, typically doctors) decide how small a penis has to be, or how unusual a combination of parts has to be, before it counts as intersex. Humans decide whether a person with XXY chromosomes or XY chromosomes and androgen insensitivity will count as intersex.⁴ (Emphasis in the original)

The text illustrates the Foucauldian idea that science has played a fundamental role in establishing an order that has legitimated the existence of male, female and intersex identities as a natural reality. For some authors that argument is a starting point to state that sex is itself a human idea.

That thinking is also latent in the work of the American philosopher Judith Butler, whose work strongly influenced the development of Queer theory, and which brought new criticism of feminism and gender theory, accused of complicity with an excluding heterosexual hegemonic order.

Butler argues that the fact that science determines the existence of sex proves it is a cultural category:

What is "sex" anyway? Is it natural, anatomical, chromosomal, or hormonal, and how is a feminist critic to assess the scientific discourses which purport to establish such "facts" for us? [...] If the immutable character of sex is contested perhaps this constructed "sex" is as culturally constructed as gender." (Butler, 2006: 9)

⁴ Intersex Society of North America, What is intersex? Consulted on 10 August 2008 from http://www.isna.org/faq/what_is_intersex

The work of Butler is inspired by her personal interest in demonstrating that heterosexuality has also been an assumption in feminist theory, fixing deterministic identities for women, and therefore contributing to the gendered power relations feminist aim at dismantling. In so doing, Butler challenges both the sexual difference assertion that we may find a feminine essence in the female body, and the gender theory conception that gender is a cultural and social construction independent from sex.

Regarding the feminism of sexual difference, Butler challenges the idea that the truth about gender identity is found in the sexual body by negating the existence of "woman" as a universal category. Differences among women from diverse classes, races, ethnicities and sexual orientations mean there is no possibility for unity. According to Butler, the establishment of a female identity by feminism excludes and oppresses the diversity of women. Moreover, the idea that patriarchy is crosscultural and that cultural variations are expressions of the same mechanisms of power are seen by the author as "epistemological imperialism" that cannot be justified philosophically or as a political alliance.

However, her ideas also contradict the notion of gender as culturally based and sex as naturally determined that have inspired gender theory. In concrete, her work opposes the conception that sex is a neutral and essential concept that gender—the socially determined category—gives meaning to.

Butler's critique of gender theory focuses on the underlying idea expressed by Simone de Beauvoir that "one is not born a woman, but, rather, becomes one". Butler argues that Beauvoir implicitly assumed the existence of a pre-gender subject: a subject who could liberate him or herself from gender identity, and indeed be a subject who can choose a gender:

For Beauvoir, gender is "constructed", but implied in her formulation is an agent, a *cogito*, who somehow appropriates that gender and could, in principle, take on some other gender. Is gender as variable and volitional as Beauvoir's account seams to suggest? Can "construction" in such case be reduced to a form of choice? [...] Within those terms, "the body" appears as a passive medium in which cultural meanings are inscribed or as the instrument through which an appropriative and interpretative will determines a cultural meaning for itself. In either case, the body is figured as a mere instrument or medium for which a set of cultural meanings are only externally related. But the "body" is itself a construction, as are the myriad "bodies" that constitute the

domain of gendered subjects. Bodies cannot be said to have a significant existence prior to the mark of their gender. (Butler, 2006: 11-12)

Like Beauvoir, Butler argues that we are subjects with a gender identity that is presented as a fundamental truth by the biological sex, but in contrast to the French philosopher, Butler believes we cannot distinguish the practice of gender from the gendered subject: "gender is always a doing, though not a doing by a subject who might be said to pre-exist the deed" (Butler, 1990: 25).

Inspired by the work of Foucault, Butler sees gender as an ideology giving a specific sense to reality:

Foucault points out that juridical systems of power produce the subjects they subsequently come to represent. Juridical notions of power appear to regulate political life in purely negative terms—that is, through the limitation, prohibition, regulation, control, and even "protection" of individuals related to that political structure through the contingent and retractable operation of choice. But the subjects regulated by such structures are, by virtue of being subjected to them, formed, defined, and reproduced in accordance with the requirements of those structures. If this analysis is right, then the juridical formation of language and politics that represent women as "the subject" of feminism is itself a discursive formation and effect of a given version of representational politics. And the feminist subject turns out to be discursively constituted by the very political system that is supposed to facilitate its emancipation. (Butler, 2006: 2-3)

Our identities are meaningful as a product of the hegemonic discourse that gives an order and sense to reality. Through practising our identity, we practise gender: we are unavoidably engaged in a repetition of norms that precede, exceed and restrict ourselves as subjects.

Hence the centrality of the body in constructing gender identity is false because bodies are constructed by the hegemonic discourse. Gender norms set the existence of sex, instead of sex determining gender. Moreover, gender is "the very apparatus of production whereby the sexes themselves are produced" (Butler, 2006: 10).

That critical view leaves feminism in a difficult situation: if women are engaged in reproducing the norms that perpetuate gender oppression, how is women's freedom possible?

Butler argues that non-hegemonic identities themselves do not challenge the social order because they are produced and given meaning by that order itself; categories like woman, gay or lesbian have a meaning in the heterosexual order in which they are represented as "difference". Apparently, there is a logical incoherence in the idea that subversion comes from such established categories. Nevertheless, Butler points out that we should not consider the hegemonic discourse as fixed or ontological, rather something that is transformed constantly through a signifying practice. Signification is only possible through repetition; it is through practice that identities exist and are also transformed:

The subject is not *determined* by the rules through which it is generated because signification is not a founding act, but rather a regulated process of repetition that both conceals itself and enforces its rules precisely through the production of substantializing effects. In a sense, all signification takes place within the orbit of compulsion to repeat; "agency", then, is to be located within the possibility of a variation on that repetition. If the rules governing signification not only restrict, but enable the assertion of alternative domains of cultural intelligibility, i.e. new possibilities for gender that contest the rigid codes of hierarchical binarisms, then it is only within the practice of repetitive signifying that a subversion of identity becomes possible. The injuction to be a given gender produces necessary failures, a variety of incoherent configurations that in their multiplicity exceed and defy the injuction by which they are generated. Further, the very injuction to be a given gender takes place through discursive routes: to be a good mother, to be a heterosexually desirable object, to be a fit worker, in sum, to signify a multiplicity of guarantees in response to a variety of different demands all at once. The coexistence or convergence of such discursive injuctions produces the possibility of a complex reconfiguration and redeployment; it is not a transcendental subject who enables action in the midst of such a convergence. There is no self who is prior to the convergence or who maintains "integrity" prior to its entrance into this conflicted cultural field. There is only a taking up of the tools where they lie, where the very "taking up" is enabled by the toll lying there. (Butler, 2006: 198-199; emphasis in the original)

For Butler, then, subversion is possible through the practice of parody, when the natural and real identity of genders is shown as "phantasmatic", "mimetic" or "a failed copy". Parody challenges gender norms and destabilizes "natural" identities, making possible new gender configurations. For the author, the task of feminism is to "locate strategies of subversive repetition enabled by those constructions, to affirm the local possibilities of intervention through participating in precisely those

practices of repetition that constitute identity and, therefore, present the immanent possibility of contesting them" (Butler, 2006: 201).

1.2.5. Interactions between sex and gender

In comparison to Butler's proposal, Rodríguez-Magda (2004) argues that we should not reject the influence of sexual difference in configuring gender ideology, although that does not mean we are able to find an ontological identity founded on the sexed body. Like Butler, Rodríguez-Magda follows the teaching of Foucault regarding the alliances between power and knowledge in establishing the limits of identity. However, she proposes a possibility of subversion that recovers an interest in the biological sex.

The author asserts that we should not see sex and gender as opposing concepts, and nor should we assume there is a separation between the sexual body and the cultural discourse that gives name to the body. Sex is biologically determined, but, at the same time, it is a product that is ideologically biased inside a cultural system. Sexed subjects are continuously interacting with power and knowledge construction, through the practice of institutions that are producers of knowledge (such as science). Subjects, however, should not be seen as passive. They influence those institutions and their meanings when they integrate and practice that knowledge.

In this way the author acknowledges that constructionist views on feminism and the attention paid to the body by feminism of sexual difference contribute both to a more complex and free understanding of male and female identities.

In contrast to Butler, she also asserts that the feminist fight is meaningful. Although we recognize reality is biased by the hegemonic discourse, the female body is still a "reality" for individual women. She thinks that we may find a path to explore free identities of women, based not on biological essentialisms but on the specificity of experiencing a body determined by the female anatomy:

En mi opinion, la identidad de género (divergente, pragmática, incardinada, múltiple) no es un mero episodio histórico en el desarrollo de la categoría de sexo, sino un eje retrospectivo constante, que la historia nos ofrece unido a la matrix heterosexual y cuyo horizonte futuro podría modificarse en unas prácticas de libertades más plurales. Otear este horizonte es labor deconstructiva y crítica, consolidación y reconstrucción de una historia y una identidad, que, en su dinamismo y modificabilidad, nos otorguen, sin embargo la certeza de sabernos sujetos. Esta praxis deconstructiva creativa tiene

como una de sus condiciones situadas la de realizarse desde un cuerpo, para el que la anatomía ya no debe ser un destino, pero sí una encardinación a explorar. Un cuerpo con piel, músculos, vagina, matriz... que me ofrece no una esencia a descubrir, pero sí toda una especificidad sensitiva, amorosa e incluso mítica. No existen los cuerpos neutros y universals, por más que el sexo sea un constructo y la sexualidad una elección. Ese cuerpo que queda bajo la elaboración científica cultural e histórica por medio de la cual se le interpreta, ese cuerpo que en cuanto lo nombro ya no es "mi cuerpo", sino el saber que lo normaliza, amortaja y explica, remite a una muda densidad de sensaciones y metabolismo, oleaginoso, fluido y limitado, entre el dolor, el placer y la inconsciencia, es a la vez el poderoso nucleo de los resortes del éxtasis y de las torpezas más humillantes. Ese cuerpo que tiene una medida, un peso, una constitución y unos órganos sexuales precisos. (Rodríguez-Magda, 2004: 215-216)

Following Rodríguez-Magda and also Butler, we should not conceive sex and gender as opposing concepts; sex is not passive or gender static.

Although we admit sex and gender are determined by culture, we may still recognize a dynamic two-sense interaction between a body that really exists and the social and cultural rules that signify that body. Similarly, we should not disconnect the individual experience from the abstract social gendered order. There is an individual who experiences a sexed body and the assignment and norms determined by gender, and who as a subject may repeat and/or transform established gendered practices.

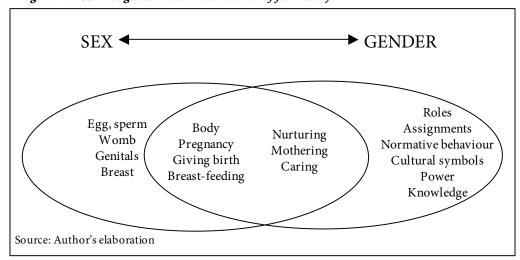


Figure 1.1. Sex and gender in the construction of femininity

Only in this way can we recognize concepts such as body, pregnancy, giving birth, breast-feeding, nurturing, mothering and caring not only as part of an ontological female identity, but also not as purely social constructions disconnected from nature.

For instance, that many women do not wish to be mothers shows us that this is not a clue to female ontological identity. But neither is it a fiction. Women from different cultures, races, classes, educational background, and so on, may experience motherhood in different ways, but only women can experience it. The possibility that a transsexual male shows us a male pregnant body, like the case of Thomas Beate,⁵ is the parody that, according to Butler, teaches us that gender norms and the reality of a sexed body are an illusion. But regardless of that teaching, motherhood is still a real experience for many women, subjected to cultural symbols and social roles, some of which individual women may oppose—individually and collectively—and transform. New meanings of motherhood contribute to challenging and possibly modifying traditional power relations in the gendered order.

1.2.6. Feminisms: a review

In previous sections the diversity of feminist perspectives have been introduced as part of a major discussion on women, gender and nature. In the following lines such feminist tendencies will be summarized in order to systematize the main elements before we continue our discussion of feminist and gender perspectives on the environment.

The diversity of feminist tendencies has been already pointed out. According to such diversity, there are also multiple classifications. Some authors propose classifying feminisms according to their theoretical and philosophical foundations or to the themes they deal with (Castells, 1996).

In relation to the issue we are dealing with, gender and environmental governance, the feminist tendencies that are relevant for the discussion are systematized according to their philosophical understanding of sex and gender, and their political project, equality or difference (Figure 1.2). The thematic branch of feminism that deals with ecology, ecofeminism, is also represented, although it will be described in the following section.

⁵ El País.com, El primer 'hombre embarazado' espera su tercer hijo. Consulted on 11 February 2010 from

 $http://www.elpais.com/articulo/sociedad/primer/hombre/embarazado/espera/tercer/hijo/elpepusoc/20100211elpepusoc_5/Tes$

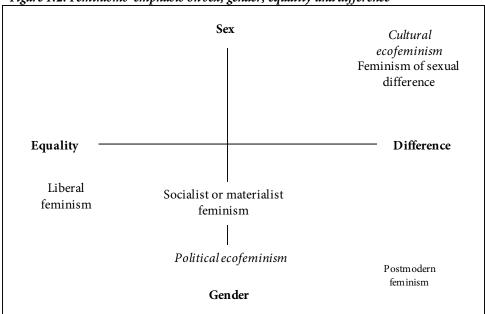


Figure 1.2. Feminisms' emphasis on sex, gender, equality and difference

Source: Author's elaboration

The difference tradition in feminism is identified in the feminism of sexual difference in which sex is considered as an ontological characteristic of female identity.

The attention to "difference" has also impregnated postmodern feminism, but in a very diverse understanding in which social differentiation is structured along multiple variables such as class, race, ethnicity, sexual orientation, education, occupation, geographical location, and so on. In that perspective, gender works together with other social variables, and it is not more or less influential than them.

However, in both radical interpretations, feminism of sexual difference and postmodern feminism, there is a sense in which "difference" and "equality" are incompatible. For the former, women should not fight over sex differences to be equal to men: the social order should be structured according to a humanity of "two" sexes. For the second, categories such as "woman" or "man" are meaningless: cultural, ethnic and class differences show there is no base for unity. Equality is seen as a domination discourse as soon as it reduces differences to fix categories that have the effect of excluding some groups.

The equality branch of feminism is represented in liberal feminism and in socialist or materialist feminism.

Liberal feminism conceives subjects as rational independent beings and hence men and women should be considered equal regardless of sex. Inspired by the Enlightenment ideal, it defends the possibility of a universal subject equating both men and women (Castells, 1996).

Socialist or materialist feminism became very relevant during the seventies and eighties when feminism was strongly influenced by Marxist theories. It considers that women's oppression results from a combination of the patriarchal order and the capitalist system (Castells, 1996).

Currently, while liberal feminism has maintained a fixed emphasis on equality between men and women as a political goal, the socialist or materialist tradition has integrated the interest in the social, cultural, racial and geographical diverse realities in which women live, influenced by intellectual discussions promoted mainly by Afro-American feminists and postmodern authors. The recognition of the specificity of women's experiences and perspectives inherent to feminism of sexual difference has influenced some socialist and materialist feminists as well, although they reject the existence of a female essence.

Both liberal and socialist or materialist feminisms have explicit political scopes and aim at transforming society through participation in formal institutions or lobbying them. For instance, the equal representation of men and women in the political system is a traditional claim of liberal feminism. The public denouncement of the double working burden assumed by women and the recognition of women's contribution to the national economy through their family and housework are traditional claims of socialist and materialist feminism.

1.3. Ecofeminist perspectives on women, nature and the environment

Although the ecologist movement had important contributions from women such as Rachel Carson (1907-1964), whose work *The Silent Spring* is recognized as inspiring the modern ecological movement (Lear 1998, in Carson 1999), there was not a feminist perspective on ecologism, which considered sex or gender irrelevant for transforming the relation between society and the environment.

Françoise D'Eaubonne was the first to propose the term "ecofeminism" in her book *Le feminism ou la mort!* published in France in 1974. The French philosopher used

that term to name a specific relationship between women with nature, and to acknowledge the potential of women to foster an ecological revolution.

Since then, ecofeminism has evolved into a theoretical branch of feminist theory that defends the existence of a specifically female concern for the environment. Ecofeminist authors also consider that social movements from all around the world in which women play a relevant role in protecting nature are examples of the practice of Ecofeminist politics.

During the 1970s and 80s, the ecofeminist movement consolidated and expanded from the USA and Europe to the economically poor countries of Latin America, Asia and Africa. In the process, it took different forms according to the social and economic conditions of the countries. Despite a few notable exceptions, high technological and industrialized countries concentrated most of the output of philosophical and ideological discussions. Meanwhile, economically poor countries concentrated most of the examples of ecological conflicts in which women participated as grassroots leaders and activists, for which they were identified as practising ecofeminism.

A number of environmental movements in which women were strongly engaged appearing during the eighties, and were discussed theoretically under the name of ecofeminism or environmental feminism. The Chipko and Green Belt movements are emblematic cases.

The Chipko movement took place in the Uttaranchai region of India. It consisted of a group of peasants, with a strong presence of women, who prevented the cutting down of trees and reclaimed their traditional forest rights that were threatened by the contractor system of the state Forest Department. The Indian physician and ecofeminist Vanada Shiva analysed the Chipko movement in a number of articles and was largely responsible for the high level of attention it received in ecofeminist circles. The Green Belt movement was possible thanks to the work of the biologist and feminist Wangary Maathai, who led rural women to plant trees as part of a soil conservation effort to avert desertification of their land. The project started in Kenya and expanded to other African countries

The role of women in protecting the environment in high technological and industrialized countries has also been documented, although with less emphasis. The English Greenham Common movement, the attitude of Central European women when the Chernobyl accident occurred, the case of Lois Gibbs in New York Love Canal, or, more generally, the active participation of female activists in grassroots movements against toxic waste disposal, and so on, have been argued as

examples of ecofeminist politics in the North. In this context, the work of women in protecting the environment has been analyzed for its connections with concerns about health and security.

Ecofeminist theory is not only diverse according to geographical contexts, but above all with regard to intellectual and political positions.

The multiplicity and diversity of contributions to ecofeminism has led to a proliferation of classifications: spiritual ecofeminism, radical ecofeminism, socialist ecofeminism, materialist ecofeminism, and so on. However, although each of them shows specificity, it is widely recognized that they can all be aligned to two fundamental traditions, "constructivist ecofeminism" and "cultural ecofeminism" (Puleo, 2006). These traditions reproduce major feminist intellectual divergences, as shown by figure 1.2.

Cultural ecofeminism developed in the United States during the seventies through authors such as Mary Daily, Susan Griffin and Starhawk, who wrote texts in which they affirmed that the female body was the place to find resistance to a destructive male-dominated Western culture. Female identity was found in the original radical ecofeminism in mystical and religious practices, such as the sacralization of Mother Earth (Mies and Shiva, 1997). During the eighties, a strong influence arrived from Southern voices, mainly the Indian physicist and feminist Vandana Shiva, who brought analysis developed in the crude reality of Third World countries. In addition, she interpreted them showing a non-Western philosophical and religious alternative, which was celebrated by American cultural ecofeminists who supported a counter-Enlightenment and anti-Western thinking (Puleo, 2004).

Cultural ecofeminists believe that women are victims of Western culture, which is accused of causing the environmental crisis, war, colonialism, scientific and technological domination, and the alienation and spiritual impoverishment of people. They also think women have a specific concern for nature due to biological determinants that give them the power to fight Western degradation. Women are seen as having a strong connection with life during the whole sexual cycle: menstruation, pregnancy, breast-feeding and the menopause. These experiences would make women particularly sensitive to the conservation of nature. Moreover, according to the cultural tradition, female biological specificity entails a spiritual connection with nature that makes us guardians of the environment. Because women experience life, we perceive environmental degradation as aggression towards ourselves. This is seen, for instance, in the following words of Maria Mies and Vanadana Shiva:

Aunque el espíritu es femenino, no se concibe separado del mundo material, sino como la fuerza material que esta presente en todas las cosas y en todo ser humano: se trata, de hecho, del principo de connexion. La espiritualidad entendida en estos términos más materiales está más cerca de la magia que de la religion, tal como ésta se entiende habitualmente. Esta interpretación de la espiritualidad también se encuentra en los escritos de Starhawk, quien identifica en gran parte la espritualidad con la sensibilidad de las mujeres, con su energía sexual, su preciosísima fuerza vital, que las vincula entre sí, con las demás formas de vida y con los elementos. Es la energía que les permite amar y celebrar la vida. [...] El espíritu es inherente a todo, puesto que nosotras mismas no podemos separar en nuestros cuerpos lo material de lo espiritual.

[...] La relevancia ecológica que se concede a esta "espiritualidad" radica en el redescrubrimiento del carácter sagrado de la vida, del cual se desprende que su conservación solo sera possible si las personas vuelven a considerar sagradas todas las formas de vida y a respetarlas como tales. Esta cualidad no reside en una divinidad utraterrenal, en una trascendencia, sino que está presente en la vida cotidiana, en nuestro trabajo, en las cosas que nos rodean, en nuestra immanencia. Y este carácter sagrado debería celbrarse de vez en cuando mediante rituales, danzas y cantos. (Mies and Shiva, 1997: 31)

There is empirical evidence that in economically poor countries women's roles in reproductive activities involve a close connection and a strong dependence on the natural environment. This is the case as regards women's responsibility for collecting water and wood, or producing subsistence agriculture. Once environmental degradation negatively affects such activities (e.g. they have to walk longer distances to collect wood), women are the first to suffer the direct impact and become concerned for their families' subsistence. In contrast to the previous approach, constructive ecofeminists think that women's dependence on the natural environment, together with the economic and legal deprivations that women suffer—and not a supposed biological link with nature—, explain the environmental concern women have shown in developing countries (Agarwal, 1992).

Authors aligning themselves with constructivist ecofeminism argue that gender differences regarding the values, interests and perspectives on the environment exist, but that they are cultural, social and economic processes, and they strongly oppose essentialist interpretations given by cultural ecofeminists: "We suggest there are real, not imagined, gender differences in experiences of, responsibilities for, and interests in 'nature' and environments, but these differences are not rooted in biology *per se*" (Rocheleau et al., 1996).

Both constructivist and cultural ecofeminisms agree that women and nature are oppressed in the ethno-androcentric order that dominates Western society. Strong theoretical analysis has demonstrated that the oppression of women and nature is based on a dualistic thinking born with the Enlightenment and sanctioned by modern science (Merchant, 1986, 1995). That thinking establishes a radical separation and hierarchical relation between Reason and Nature, associated with men and women respectively (Plumwood, 1991, 2004). But a fundamental divergence separates the two ecofeminist traditions: while constructivist ecofeminists think the supposed link between women and nature is culturally constructed and contributes to the oppression of women (Warren 2000; Y. King, 1992), cultural ecofeminists believe that it is real, must be reinterpreted as positive, and it is indeed the only path towards the liberation of women and nature (Mies and Shiva, 1997).

The following figure summarizes the major differences between the two main ecofeminist branches in relation to their theoretical basic conceptions, the interpretation of the women-nature relation, and the political proposal.

Figure 1.3. Cultural and political ecofeminisms

ECOFEMINISM(S)		
Cultural Ecofeminism		Constructivist Ecofeminism
Sexual differences Inversion of dualisms	Conception	Gender differences Deconstruct and overcome dualistic thought
Women: biological link with Nature (life) Menstruation, pregnancy, giving birth, breastfeeding, mothering, menopause	Interpretation	Femininity (life experience): specific perspectives, responsibilities and concerns in the environment
Women as spiritual and political leaders for an ecological revolution	Proposal	Femininity as the source for an alternative relation between society (men and women) and nature
Source: Author's elaboration		

Regarding its theoretical roots, constructive ecofeminism follows the philosophical and political principles of socialist or materialist feminism, and the analytical tradition of gender theory.

In contrast, cultural ecofeminism has inherited theoretical assumptions from American feminism of sexual difference. For instance, the work of the radical essentialist feminist Mary Daly was fundamental for the initial development of ecofeminism in the United States (Puleo, 2004).

However, it is worth noting that American feminism of sexual difference shows divergences with the European tradition described in a previous section. Although the two movements coincide in affirming that female identity is rooted in the biological body and in valuing femininity as an alternative to the masculine order, they differ in theoretical elaborations.

Firstly, whereas feminism of sexual difference engages in an epistemological reflection about the body and about authority relations between women, cultural ecofeminism searches for alternative forms of female subjectivity in pre-capitalist and non-Western cultures, considered to be closer to nature, and therefore where we may find the genuine nature of female identity.

Secondly, whereas feminism of sexual difference focuses on notions such as patriarchy and phallocentrism to describe the male domination system, cultural ecofeminism focuses on men's technological, military and capitalist control. They consider that the disengagement of white males from their natural roots has led to ecological degradation, the industrialized and materialist economic system, and to conflict. Because only women are unavoidably linked to nature through the reproductive body, cultural ecofeminists think they will guide humanity to an ecological revolution.

Historical views of cultural ecofeminisms in which women are seen as victims of colonialism since it destroyed the harmonic female relation with nature are accused of simplicity, reductionism and inaccuracy by gender studies and constructive ecofeminist authors (Nash, 2000). The romantic and populist view of women and nature professed by cultural ecofeminism has been also severely criticized. It has been said that cultural ecofeminism contributes to reimposing fixed and deterministic discourses on women (Biehl, 1991). Moreover, some feminist authors also think cultural ecofeminist thinking could lead to retrogression in women's liberation. For instance, cultural ecofeminists radically oppose reproductive techniques, which are considered to be the mere instrumentalization of the female body. That narrow understanding obscures the way such techniques

have also helped women to be more autonomous. The biological arguments that cultural ecofeminists use to celebrate women as carers also provide reasons to maintain the traditional sexual division of work (Puleo, 2004).

The mystification of women's concern for nature has been also opposed with concrete examples. Mawdsley (1998), for instance, offers a critical view of Vandana Shiva's analysis and interpretation of the Chipko movement, one of the most celebrated examples of ecofeminist politics. The author discusses the empirical solidity of Shiva when she describes women's "natural" concern for the environment in opposition to men's interests in economic benefits. The author also criticizes Shiva's proposal to recover traditional "Indian" figures of women and nature such as *shakti* (female basic energy) and *prakriti* (its manifestation in nature) to advance towards a more harmonious relation between men and women and nature.

Firstly, although Mawdsley does not deny the significance of the Chipko movement for feminist analysis of the strong relevance of women's role, she thinks Shiva does not show the complex reality of actors and interests involved in the movement and she tends to reject or ignore the role of male leaders, as well as students and leftwing activists. Indeed, Chipko started as a revolt by a small local company, Dasholi Gram Swawajya Sangh (DGSS), which opposed the Forest Department for offering a large number of trees to the multinational company Simonds, while they were denied the use of trees from the same forests. After the DGSS succeeded in stopping the cutting of trees in some forests, they looked for support from local residents. Many local women and men followed their protests as they received few benefits from the management of forests and, in addition, the region was suffering strong environmental degradation. Secondly, Shiva also tends to disregard such economic benefits that women seek in the Chipko movement and she claims women opposed the Forest Department because of a female principle of using and managing the forests according to a respect for life. Mawdsley challenges that simplistic view and offers a testimony of a female activist from the Chipko movement who laments that the initial fight for self-determination and the right of local inhabitants to manage the forests turned into a protectionist claim. Another female activist, reflecting on Chipko twenty years later, argues that as a consequence of the strong protectionist legislation imposed by the Forest Department, the development of the region was halted with several negative consequences for women and their children. Finally, Mawdsley explains that the "Indian" concepts of shakti and prakriti must be contextualized. According to the author, there is a positive sense in them, but they also have negative consequences. Men's fear of shakti, considered to be the sexual power of women, is the basis for the "Manu" law that subordinates women to male

control during their whole life: as girls to their fathers, as adults to husbands, and as widows to their sons.

For Plumwood, the cultural ecofeminist identification of women with nature is an uncritical and wrong strategy, as it accepts the false Reason/Nature dichotomy, which has been instrumental for the domination of women and nature. Ecofeminism should fight to overcome oppressive and exclusive Western dichotomies by showing they are culturally constructed and not essential (Plumwood, 2002).

In contrast to the cultural strand, some constructivist ecofeminists have also pointed to women's concern for the environment as a way to fight the environmental crisis, but they offer other interpretations and proposals.

Some initiatives in constructivist ecofeminism has been inspired by women's social roles as carers to build a new ecological ethics proposal, though obviously they maintain a social and cultural perspective, not a deterministic one (Merchant, 1995; Warren, 1998, 2000). They argue that women's knowledge, experiences and responsibilities of caring reveal attitudes that are much more respectful towards the environment. Therefore, femininity could lead humans (women and men) to explore a more respectful relation between society and the environment. I will explore that proposal further in chapter 8.

Similarly, other authors inspired by Marxist thinking acknowledge the marginal position of women in society as a source for a more equal and respectful relation between society and the environment, which should be socially acknowledged. That view is very well illustrated by the following dialogue between the ecofeminist Ariel Salleh and a scholar:

MH [scholar]: One can point to common themes in the subordination of women and nature—their inferior positioning in Western thought and their common exploitation by the capitalist economy, but I do not see how this gives women a better capacity to understand these problems.

AS [Ariel Salleh]: [...] In contrast to the postmodern trend which sees everything determined by discourse, I believe—along with Marx (1873)— that while people find themselves living in conditions that are not of their own making, they also have a capacity to remake the world around them. Like Marxists, I call the process "labor", but place emphasis not just on factory work, for example, but on the deeper anthropological sense of labor as a "socially reproductive" metabolic exchange with the environment.

The historical reality is that a majority of human beings, globally speaking, are engaged in work of this kind, subsistence and care giving activities at the interface with "nature", so called. As such, they constitute a hitherto unrecognized "meta-industrial class". My book contends that this class holds insights and skills, which we need to learn from to find our way out of the twentieth century industrial catastrophe.⁶

The argument that women share a specific and privileged position that is valuable for the production of knowledge has been also explored by science feminists, particularly through what is known as "standpoint theory" and "situated knowledge". I will explain these arguments and the opportunities and contradictions they lead to in chapter 8.

1.4. Gender studies on the environment

Constructivist ecofeminism has had the most influence on gender studies on the environment. However, gender scholars working on the environment do not necessarily have an explicit identification with the ecofeminist movement.

The equality guise inspiring gender theory, which considers that women and men should share the benefits, responsibilities and burdens of society on an equal basis, has fostered the approach towards "redistributive justice" that is behind this kind of study (Young, 1990; Fraser, 1996). Therefore, when gender studies have addressed environment related issues, they assess the unequal position of women in problems and conflicts and in the political initiatives on the environment.

Gender studies on the environment are very wide-ranging and show very different case experiences depending on whether they are applied to high technological and industrialized or developing countries. In addition, there is also the work of women's groups that also produce gender-based knowledge on the environment. That enormous diversity of academic and activist production makes it difficult to complete a systematic classification. In 1997, Bru-Bistuer proposed four areas in which, at that time, gender studies and women's work on the environment could be classified (Bru-Bistuer, 1997). I have adapted her original proposal and added some more items to propose the following classification:

⁶ Salleh, Ariel; Hansen, Meira, 1999. *Talking Ecofeminist Theory*. Consulted on 13 August 2008 from http://www.arielsalleh.net/tet.htm

- Women and sustainable urban planning
- Women, consumption and health
- Women, pollution and security
- Women's environment-related grassroots movements
- Gender, climate change and energy
- Gender and landscape
- Women and sustainable development
- Women and global environmental governance.

Without aiming to be exhaustive, I will present some works that illustrate the main issues that gender scholars and women's groups discuss for each of the proposed items. Inevitably, environmental topics that have been rarely addressed by gender scholars will not be included.

1.4.1. Women, sustainable urban planning and mobility

Urban planning and mobility have been traditional areas of gender study since the sixties (Vaiou, 2000), and have been an important issue for feminist geographers (for instance García-Ramon, Prats and Ortiz, 2004⁷) and urban planners (for instance Velázquez, 2004). However, a concern for environmental issues was not present until the strong attention paid to sustainability in academic and political circles during the nineties influenced such scholars.

Feminist scholars believe that the city is not immutable or a mere physical content; urban space is something that is built and modified by social practices. Gender is relevant in the designing practices, as the built environment determines the opportunities and limitation offered to the social groups that "are expected" to live in it. As Rose put it, "many feminists have argued that the build 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" (1993: 148).

Departing from a focus on the mechanisms through which urban space could become a form of discrimination, gender studies have made very relevant contributions to improving urban planning and management and to advance in the

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⁷ In the Spanish context, the group of gender and geography of the Autonomous University of Barcelona have made very relevant contributions to the topic of urban planning and mobility from a gender perspective (see http://geografia.uab.es/genere/cpedone.htm).

emancipation of women. In particular, feminist scholars have challenged traditional meanings attached to concepts such as public/private, productive/reproductive and policy/home, by putting women at the centre of the urban analysis (Vaiou, 1999).

Several groups of women, NGOs and public institutions have also contributed to analyzing urban space from a female perspective. The degree to which gender is present in political structures, mechanisms and resources and participation initiatives, and the equal access to power and services have been considered indicators of gender-sensitive cities (Michaud, 2002).

In 1994 the first international conference on "Women in the City, Houses, Services and the Urban Environment" took place in Paris, organized by the OECD. Women's perspectives on the city was also promoted through the "First Congress of Women from the City of Barcelona" in 1999, in which women discussed aspects related to city services, the organization of time and urban space, and female participation in urban planning and decision-making. In this case, the need to assess gender publicity in the urban space was also acknowledged because of its power to reproduce traditional stereotypes about gender roles and values.

Another relevant women's groups' initiative is The European Charter for Women in the City, supported by the Equal Opportunities Unit of the European Commission. The charter highlights that cities should fulfil the needs and expectations of women and men alike. It argues that obstacles for women in town planning, housing and living conditions should be removed, and proposes to develop new democratic decision-making procedures that are more inclusive for women, as well as bringing urban decision-making closer to citizens' daily concerns and human values.

At a local level, the Open Sesame project is an example of a gender-sensitive urban policy promoted by a town council. The Council of Haringey in the UK organized two action days in which women of the city were invited to visit the local shopping centre with their baby buggies, shopping bags or wheelchairs to survey the accessibility of shops. Senior male planners were also invited to visit the city in similar conditions to experience accessibility problems first hand. The project resulted in publishing access guidelines for shops and facilities in town centres,

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⁸ UNESCO. *The European Charter for Women in the City*. Consulted on 18 June 2003 at http://www.unesco.org/most/westeu20.htm.

which were elaborated with the direct contribution of women from community groups.⁹

The relevance of urban design for female security in the city is another fundamental argument of gender scholars and women's groups (CAFSU, 2002). They denounce the fact that women are particularly vulnerable to robberies or sexual violence, for which an appropriate urban design may contribute to reducing problems of insecurity and tackle the limitations to women's accessibility to specific areas of the city due to risk perception.

Urban mobility is an important issue for gender scholars and women's groups working on urban planning, which is increasingly including a perspective on sustainability. Studies conclude that men and women have different options in relation to the availability of cars, the possession of a driving licence or preferences for transportation means (Littig, 2001). They also show that women in Western countries tend to be closer to the male mobility model, which is a result of the female emancipation movement. However, differences between women living in urban and rural environments or among women experiencing different periods of the life cycle exist. In addition, apart from the changes in women's lifestyles that modify mobility needs, scholars also claim aspects related to urban planning are fundamental to explain and combat the increase of female mobility, without opposing women's emancipation rights (Droogleever and Karsten, 1999).

The urban segregation of residential and commercial and productive areas, the availability of public transport, and the organization of time are cited as key aspects (Garcia-Ramon, et al., 1995). The double work burden shouldered by most women leads to time constraints and the need to combine different routes according to their daily tasks (taking the children to and back from school, shopping, going to work, caring for elderly family members, and so on). Mobility could be improved and women's work facilitated if urban planners were to combine different activities (residential, commercial, productive, leisure) in the same area. If distances are reduced, sustainable mobility—on food or by bicycle—are also favoured. Some scholars also suggest that journeys would be reduced if activities were to be found in the same space: for instance, shops and other services (laundries, shoes repair shops) in train and metro stations, or care services in office buildings (Droogleever and Karsten, 1999).

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⁹ UNESCO. Women And Accessibility In Town Centres: Open Sesame Project United Kingdom. Consulted on 18 June 2003 from http://www.unesco.org/most/westeu23.htm.

Gender and transport was considered a key issue for women's groups who participated in the 2002 Earth Summit taking place in Johannesburg. They affirmed that differences in mobility and transport choice patterns between women and men, as well as the diversity of situations in which women live, explain the need for a gender perspective in urban analysis and decision making (Hamilton, 2002).

1.4.2. Women, consumption and health

The connections between environmental politics and issues related to daily life and reproduction has been seen as a specific characteristic of feminist environmental politics and of women's groups on the environment (Nesmith and Radcliffe, 1993). In this sense, women's consumption in the private sphere is used as a powerful mechanism to lobby business and government on environmental issues (Littig, 2001; Seager, 1993).

Women's groups have developed campaigns to empower women as consumers and to urge them to put pressure on industry regarding environmental policies, production and waste management. A well-known case is the English female-oriented organization Women's Environment Network¹⁰ (WEN). It lobbies businesses on the negative effects on the environment and on women and children's health. Examples of their successful campaigns include the request to reduce chlorine in sanitary protection and nappies, claims of excess packaging in supermarket products, or the work in raising awareness about the environmental impact of disposable nappies.

Complementing the work of women's groups, gender researchers have also acknowledged the handicaps individual women face in influencing policy-making in industry. They point to women's exclusion from business and political decisions concerning production, and they have also denounced companies for manipulating female consumers. Scholars also claim women need a high level of knowledge to make environmentally and socially friendly decisions about consumption that exceeds common sense, and that responsible consumption is also limited by time and economic constraints. Labels identifying the content and origin of products have been proposed as a solution to guarantee an informed choice (Littig, 2001).

¹⁰ See WEN's web site www.wen.org.uk.

1.4.3. Women, pollution and security

Gender studies have shown the environmental impacts of the policies of Western industries in developing countries—like dumping hazardous chemicals or selling unsafe products—, and their negative effects on women's health and living conditions (Seager, 1993).

Female workers exposed to hazardous chemicals and poor working conditions has also been an issue under discussion (Littig, 2001). Health risks in jobs occupied mainly by women in which chemical products are used (household activities, cleaning, industrial or chemical jobs) and the specific impacts of toxics on the female body, particularly during diverse phases of the biological cycle (puberty, pregnancy, breastfeeding, menopause and old age) are some of other main topics of women's organizations and gender researchers (WEN, 2005; WECF, 2003; Littig, 2001).

Among women's groups, we find the work of Women in Europe For a Common Future (WEFC). In 2003, WEFC organized a conference entitled "Working Towards a Toxic Free Future", in which one hundred—mainly female—environmental activists, scientists and policy makers participated. The conference focused on the issues of "the impact of toxic chemicals in our daily life" and "the importance of civil participation in the EU chemical policy reform". As documentation to inform the conference, WEFC compiled a "toolkit" about the influence of toxic chemicals in daily life, focusing on households, cosmetics and the community, and referring to issues of health and EU policy (WEFC, 2003).

Another case of women denouncing the effects of toxic chemicals is the work of the artist, activist and journalist Matuschka, who has been raising awareness of environmental pollution and the effects on breast cancer through art exhibitions, interviews and conferences since 1990. Suffering herself from breast cancer, Matuschka has made photographic self-portraits in which she shows in a realistic and crude way the physical effects of the disease (Schlessinger, 1997).

The concern for the negative effects of chemicals on women's bodies and the consequences for newborn babies and breast-fed children has influenced political agendas as well. For instance, in 2004, Margot Wallström, the European Commissioner for the Environment, published an article in which the European programme for the control and management of chemicals (REACH) was presented as a strategy to deal with the impact of chemical substances in the body of women and babies (Wallström, 2004). In the same UN volume on "Women, Health and the Environment", Sharyle Patton, the Director of the Health and Environment

Program of Commonweal, claimed that the fundamental rights of women were being compromised by their exposure to toxic chemicals, pointing to breast cancer rates and increased infertility as indicators. The article also pointed to uncertainties linked to the population at risk and the consequences of the "thousands" of chemical substances in use that had not been tested for their impact on human health (Patton, 2004).

1.4.4. Women's participation in environment-related grassroots movements

Women's concern for health and security has been pointed out to explain the high level of female participation in grassroots mobilizations during the eighties and nineties, particularly in toxic waste conflicts (Brown and Ferguson, 1997; Brú-Bistuer, 1996).

More recently, gender tendencies in grassroots activism have been also observed in other types of environmental conflicts related to landscape and resource conservation, and they have been explained by pointing to female concerns for future generations, quality of life and sense of belonging (Alfama and Miró 2005, Agüera-Cabo, 2006).

The issue will be developed in detail in chapter 4.

Gender studies that focus on environment-related grassroots movements are also interested in women's power to influence environmental decision making inside groups and beyond. The analysis of female participation at a grassroots level indicates that the gender distribution of the roles found in public and private spheres is transferred inside the organizations, for which men tend to be the leaders while women are mainly in supporting activities. Studies also demonstrate the specific nature of female activism: women apply gendered strategies when engaging in resistance activities, for instance combining grassroots actions with reproductive tasks and involving their children in the day-to-day life of the grassroots movements (Brú-Bistuer 1996; Alfama and Miró 2005, Agüera-Cabo, 2006). Hence female activists challenge traditional androcentric divisions of space and social organization, such private/personal/home and public/impersonal/political. That topic will be analysed in depth in chapter 6.

Some studies have also focused on analysing the type of activities women carry out in relation to an environmental conscience. Women tend to canalize their environmental concerns through family roles and everyday life activities like buying environmentally responsible products, recycling and reducing water and energy consumption (Caiazza and Barret, 2003).

Regardless of the fact that women tend to be active in grassroots organizations, they appear to have a lower level of participation in formal environment-related politics, such as ecologist organizations. Androcentric biases in traditional political structures have been seen as hampering women's participation in ecologist organizations (Walsh, 2001). That issue will be explored in chapter 6.

1.4.5. Gender, climate change and energy

The thematic field of gender and energy is recently receiving interesting insights, particularly in relation to climate change and renewable energies.¹¹

In 2006, the female organizations Genanet, LIFE e.V. and WECF elaborated a document on Gender and Climate Change, based on consultations with women's organizations and gender experts from around the world, in order to lobby the negotiations of the Kyoto Protocol (Genanet, LIFE e.V. and WECF, 2006). The document raised awareness of the lack of a gender-sensitive strategy in climate change policy making. According to the report, "studies have shown that women and men experience climate change differently in terms of their adaptability, responsibility, vulnerability and aptitude to mitigation" (Genanet, LIFE e.V. and WECF, 2006: 2). Therefore women's groups argue that the lack of a gender perspective in climate change politics leads to gender inequalities, as well as negative effects on the efficiency and effectiveness of measures and instruments. Women's groups also denounced the lack of gender-sensitive data on climate change, for which they recommend investment in gender research, particularly into mitigation and adaptation. As an example that shows the relevance of a gender perspective in climate change policies, the report proposed that a gender assessment of mitigation strategies should ask:

Who is causing how many emissions, and for what purpose? How can we best inform women and men about the connections between their behaviour and climate change? How can we help women and men to change their behaviour and cause fewer emissions? What impacts do mitigation policies have on women and men in their work and daily lives? Will rising energy prices affect women and men differently? (Genanet, LIFE e.V. and WECF, 2006: 4)

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¹¹ See the Gena Net website: www.genanet.de.

Gender researchers and women's groups have also denounced gender inequalities related to the emerging economic sector of renewable energy. The different risk perception shown by men and women is emphasized and contrasted with the fact men tend to be the main decision-makers on energy use in the household. Women have a limited role in the choice of energy resources due to economic constraints in the case of single parents, and due to gender traditional roles in conventional families. Critics also point to the fact the new industrial sector of renewable energies is offering few jobs to women, and gender inequalities are similar to the traditional energy sector (Roehr, 2001).

1.4.6. Gender and landscape

Already in 1993, the geographers Nesmith and Radcliffe signalled the challenges of a gender reading of landscape, influenced by the interest in the issue generated by the socio-cultural turn that was geography was taking at the beginning of the 1990s (Nesmith and Radcliffe, 1993). However, landscape is currently an issue that is still scarcely considered by gender scholars. They recognize that landscape speaks clearly about class, racial or ethnic inequalities, but gender is almost invisible because it cuts across economic and social groups. Studies have not provided appropriate theoretical and methodological tools to critically analyse contemporary landscapes, which is seen as an urgent task by some feminist authors (Dowler, Carubia and Szsczygiel, 2005).

Feminists who have started to explore that field argue "that the landscape not only reflects certain moral codes but performs a medium to perpetuate socially constructed gender stereotyping" (Dowler, Carubia and Szsczygiel, 2005: 1). It has been also suggested that men and women view the natural environment in different ways, according to their social roles. For instance, studies about Europeans impressions of North America describe how men tended to emphasize the grandeur of the scenery and to express their intentions to master and control the new world, the "virgin land", while most women saw the landscape according to its potential to become a "home" (Seager and Domosh, 2000).

Landscape is interesting to gender researchers as a medium of representation of cultural images about gender assumptions, which have a physical translation in the built-up environment, and which is also fundamental in the symbolic ideas about the representation act in which the surveyor is mainly associated with a male pattern, while nature is seen as a female entity, with the unequal power relations that this representation leads to. As Rose puts it:

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 landscape can be gendered is through the long history in Western society of describing the female body as a terrain or landscape. Both of these ideas rest on an associated tradition that connects creative representation with men and the objects which give pleasure to a male viewer as feminine. (Rose, 1993)

In a rather different context, gender researchers have also pointed to the interest of landscape as a mechanism through which citizens channel their concerns for the environment. In this way, by studying the claims for conserving the landscape, we can distinguish different gendered forms of appropriation of the space. In the case of women, their concern for the landscape reveals a female-biased feeling of the sense of place, in which women's roles and experiences take a leading role. (Brú-Bistuer 1996; Alfama and Miró 2005, Agüera-Cabo, 2006; 2008). For instance, women often point to the need to preserve their everyday landscape as heritage they would like younger generations to enjoy. That argument will be explored in chapter 4.

1.4.7. Women and sustainable development

One of the most relevant contributions of women's groups to sustainable development has been the lobbying of international politics on the environment, mainly in the case of the 1992 Rio Summit and the 2002 Johannesburg Summit. During the first Earth Summit, the women's lobby succeeded in getting gender issues included in the final document of Agenda 21. Nevertheless, the advancement towards sustainable development was assessed negatively in Johannesburg ten years later, also regarding the improvement on gender issues. That process has been analysed by various authors (Brú and Agüera, 2004, Littig 2001). Women's claims and the demands that have been included in global environmental politics on sustainable development are going to be described in detail in chapter 2.

On the other hand, women's groups and gender studies have made important contributions to sustainable development in the context of developing countries. I

already pointed out how gender studies have shown that in developing countries women are more likely to be affected by the deterioration of a healthy environment and the resources available for their communities due to their social roles and economic disadvantages (Agarwal, 1992). Studies document the fact that in developing countries women tend to have little control of land and natural resources and limited access to training and technologies, despite shouldering the bulk of agricultural work (Nightingale, 2006).

Regarding development programmes, a key issue is empowering women as managers of the environment at a community level (Littig, 2001). We find interesting practice-oriented studies about women's role in the management of energy, water and agriculture at the local level, and proposals that include women in decision-making processes. Such studies are parallel to the work of numerous NGOs, like the UN organization INSTRAW, 12 which target women in communities in Third World countries for implementing local projects for the conservation of the environment.

While the topic of gender and sustainable development has a long tradition in developing countries and through North-South cooperation programmes, not many institutions, gender researchers or women's groups have focused their work on sustainable development in Western countries.

Exceptionally, in 2001 the European Commission published a report in which the Environment and Sustainable Development (ESD) sub-programme and all submitted proposals (in total, 2,125 abstracts and summaries) were assessed from a gender perspective. The "gender impacts" of the ESD sub-programme were analysed according to equity/equality and sustainable science. In the first criteria, the participation of women in research activities, the attention to women's needs and interests, and the understanding and inclusion of gender issues of the whole programme and of each proposal was considered. The approach of "sustainable science" pointed to the use of interdisciplinary and transdisciplinary methods as criteria to distinguish more gender-sensitive proposals. It also included the analysis of the gendered division of labour and women's work, the organization of our personal life and the shaping power of women in science, technology and politics as criteria of the assessment (Schultz et al., 2001). I will deal with this proposal in chapter 9.

¹² INSTRAW: http://www.un-instraw.org

1.4.8. Women and global environmental governance

Just as in the area of sustainable development, women's groups have tackled the relevance of governance for environmental politics and the need to include a gender perspective in international events like the two Earth Summits.

In order to assess the participation of women in sustainable development, the international women's organisation WEDO (Women's Environment and Development Organization) proposed the development of indicators covering the areas of participation in environmental decision-making, water, energy, forests, human settlements, environmental health, urban environment, land and credit (Corral and Ransom, 2002).

Generally speaking, developing countries have longer tradition than Western ones in applying participatory methods to environmental management. Some developing programmes also focus on empowering women. However, the global assessment of participatory activities in economically poor countries still point out that women are more disempowered than men (Corral and Ransom, 2002).

High female illiteracy rates, the lack of understanding of governmental processes, infrastructure limitations to attend participatory activities, and social constraints (such as husbands not wanting their wives to attend meetings, the lack of child-care facilities, and so on) have been seen as difficult challenges for the participation of women and their access to environment-related information in developing countries. In addition, NGOs and women's groups negatively assess the role of governments, which are described as slow, bureaucratic and often ineffective, tending to have a conservative approach and acting with insufficient consultation with affected communities (Corral and Ransom, 2002).

In relation to international politics, also in 2004 the Network of Women Ministers of the Environment was established, which seeks to develop recommendations on the environment, build partnerships with civil society, NGOs and intergovernmental agencies and to create a critical mass to influence international and national policies on the environment with a specific perspective on women (Liswood, 2004).

Participatory activities on sustainable development have focused on Local Agenda 21 in the case of Western countries. However, that topic has been relatively immune to a gender analysis and to the work of women's groups. Exceptionally, Buckingham-Hatfield (1999) analysed the involvement of women in setting the Local Agenda 21 in West London, with the aim of illustrating a gender monitoring of LA21. Buckingham-Hatfield and Matthews (1999) also offered a gender-

compared analysis of the response of the British and Australian government to Agenda 21. The authors concluded that few LA21 initiatives had addressed disadvantaged groups, for which the UN advocacy to include the interest of women in shaping the LA21 was a pitfall.

Finally, regarding women's groups working on Local Agenda 21 in Western countries there is the exceptional case of the German organization FrauenUmweltNetz (Women's Environmental Network). The group has worked on promoting women's views on the LA21 since 1996, through the organization of conferences and the publication of materials.

SUMMARY OF CHAPTER 1

Chapter 1 introduced key concepts of and epistemological reflections on feminist and gender theory and ecofeminism that underlie the discussions that were presented in the rest of the chapters.

First of all, the chapter dealt with the theoretical division between equality and difference inherent to the different branches of feminism. To a large extent, such a division is the result of a different perspective on how to fight the dualistic order women-body-nature versus men-reason-culture, which is at the basis of Western culture and explains women's subordinated position in power relations.

We have seen that from a historical perspective such a dualistic order had already appeared in philosophical and religious discussions of very influential Greek and medieval thinkers, and was assimilated uncritically and reinforced implicitly or explicitly in the modern discourses elaborated by thinkers such as Kant, Rousseau or Diderot. It was also very influential on the contributions from scientific advances during the nineteenth century. The strong development of biological sciences involved biological determinism being the theoretical paradigm that served to establish the differences between the sexes. In consequence, characteristics of the sexes much more related to cultural and social influences were considered as natural. In addition, the increased social relevance of science made it even more difficult to question the cultural importance of sex differences.

Faced with that situation, to demonstrate women are or can be equal to men in all aspects of life was the first claim of the feminist movement that emerged during the Enlightenment movement. This argument has also inspired the different perspectives aligned to the "equality" branch of feminism. By contrast, to demonstrate women are unique and different from men and that femininity is valuable *per se* and not because of any comparison with masculinity has been the claim of perspectives aligned to the "difference" branch of feminism.

Classic gender theory belongs to the equality feminist tradition. By distinguishing between sex (biological differences between men and women) and gender (culturally and socially established differences), it developed a critical view that demonstrated ideological biases in the

arguments that, by pointing to supposed natural and inherent differences in genders, excluded women from public spaces and power in our society. Moreover, gender theory also demonstrated the unequal power relations that implicitly rule Western society, which places white males at the top of a hierarchy that subordinates not only women but also people from different races and ethnicities. In this line, chapter 1 also discussed different approaches to power in feminist theory, pointing to the relevance of applying Foucauldian notions of power to feminist analysis.

Despite such important contributions, we have seen that feminism of sexual difference criticizes equality feminism by arguing that the fight for demonstrating the cultural and social weight of gender differences implicitly assumes an ideal universal subject that is not genderless but male, as men are the ones to which women should equate. That, they claim, also undervalues femininity and women: it is a political position that implicitly helps the patriarchal order. This is the reason that leads such a branch of feminism to focus its theoretical contributions to the search for a supposed female genuine identity, as has been set out in the chapter. Nevertheless, I pointed out that the path followed by feminism of sexual differences leads, again, to essentialist readings about femininity that run the risk of underestimating and veiling the diversity of women's identities.

In contrast to that ideological project, postmodern feminist authors have explored the limitations of classical gender theory in a different way. I set out the critical argument that takes sex to be as culturally constructed as gender. For some authors gender is the ideology of a hegemonic heterosexual discourse that presents reality based on two sexes. These two sexes are not real *per se*, but are made the "norm" by gender ideology and put into practice by men and women's everyday "practice" of gender.

The last part of the chapter focused on presenting up-to-date feminist and gender approaches to the environment.

Ecofeminism is a thematic branch of feminist that connects women's struggle with the ecologist struggle. The two main strands of the feminist movement described above—"equality" and "difference"—also involve different interpretations about the connection between women and nature: essentialist or cultural ecofeminism and socio-cultural or constructivist

ecofeminism.

Cultural ecofeminism tends to be a counter-Enlightenment and anti-Western movement. The critical thinking of this branch of ecofeminism connects the environmental crisis with war, colonialism, scientific and technological domination, consumerism, and the spiritual impoverishment of people in Northern countries.

For the essentialist interpretation, women are strongly linked to nature because of the biological processes linked to sex (menstruation, pregnancy, breastfeeding, etc.). Such a connection is celebrated to the point that women are recognized as the saviours of nature, the leaders that can fight the destructive male-dominated Western culture causing environmental degradation. This case also includes the search for a supposed female essence; the aim is not to reach the same level as men, but to claim the uniqueness and value of femininity. However, a specific characteristic of cultural ecofeminism is the development of a mystical and religious approach to the search for an essential female-nature connection, which is inspired by pre-modern and non-Western cultural traditions.

By contrast, constructivist ecofeminism considers that the women-nature connection is historical, socio-culturally and economically based. In the case of Southern countries, the role of women in protecting the environment is seen as a consequence of the basic resources for family survival that women find in the environment and not because of a "natural" or mystical connection. Constructivist ecofeminists also consider that gender differences in the values, interests and perspectives on the environment exist, but they are the result of socio-cultural and political processes.

Moreover, socio-cultural ecofeminism maintains that the supposed link between women and nature is culturally constructed and historically has contributed to the oppression of women. Therefore, they believe that there is no reason to celebrate it. In this sense, they criticize cultural ecofeminists for accepting uncritically the women-body-nature versus men-reason-culture dualism.

However, some constructivist ecofeminists also propose the women-nature relationship must be explored for its political interest, despite lacking

essentialist readings. From this perspective, women's deprived position in society may lead to a specific and privileged perception about environmental degradation. It also considers that it may be the source of ethical reflections about a more equal and respectful relationship between society and the environment.

Finally, the chapter ends with a basic introduction to gender perspectives on the environment. The presentation of a list of environmental topics that have received a gender analysis helps to provide a broad and systematic view of the diversity of issues discussed. Throughout the thesis, many of these topics are referred to again to focus on specific empirical or theoretical discussions.

In conclusion, theoretical discussions of feminism, gender theory and ecofeminism presented in the chapter allowed for the development of certain reflections useful for the interests of the study of the thesis and that are going to be developed in the following chapters. Here is a summary of the main reflections:

- 1) It is not possible to neatly distinguish between biological and cultural influences in relation to gender differences, because reality is always interpreted from a social and cultural standpoint. Nevertheless, that does not imply that natural reality does not exist and that sex is a fiction, as some postmodern interpretations have suggested. The biological dimension of the sexes is as real as the socio-cultural interpretations that describe those differences.
- 2) Arguments about gender "specificities" that are based on natural differences have been very powerful and have received strong social legitimacy. However, we may be suspicious about ideological gender biases transmitted through them.
- 3) Arguments about gender differences are based on and reinforce the dualistic order that connects women to the body and nature and men to reason and culture. From an ideological point of view, such arguments have been instrumental in excluding women from public spheres and attributing a subordinated position in society to them.
- 4) In this sense, a mystical interpretation of the women-nature

connection—like the ones celebrated by essentialist ecofeminism—may be rejected as they uncritically assume such a dualism, although they attach social value to it. Moreover, by assuming such a dualism, women and the environmental movement are separated from rationality, which is a weak strategy that may be counteractive for both the feminist and ecologist struggle.

- 5) However, social values assigned to femininity and how they influence women's concerns with nature may be explored as a source of reflection that is valuable for the ecofeminist movement on the one hand, and for environmental management on the other.
- 6) The interest of the present study is to find empirical evidence and develop theoretical interpretations about gendered interests, concerns and perspectives on nature and the environment because the identification of gendered tendencies in citizens' perceptions is valuable for participatory decision-making.
- 7) Following constructivist ecofeminism, gendered perspectives on the environment are considered the result of socio-cultural and economic influences. A specific focus is placed on women's specific gendered experiences of public and private everyday roles, as well as perceptions of socio-cultural assignments regarding femininity. Nevertheless, I argued that gender is not a unique and fixed category, and we may be aware of multiple experiences displayed by a diversity of women's identities.

Chapter 2. Governance, sustainable development and gender perspective

2.1. Governance

"Governance" is a widely encountered concept that is used with several meanings. Rhodes (2003: 46-47) has pointed out six different ones:

- as the minimal state
- as corporate governance
- as the new public management
- as "good governance"
- as a socio-cybernetic system
- as a self-organizing network

In this chapter I refer to governance as a form of political government, which encompasses the first, third and fourth meanings proposed by Rhodes.

During the eighties much discussion of political theory analysis focused on the so-called "governability crisis" that had shocked advanced democratic regions with leading world powers—America, Europe and Japan—since the seventies. A foundational document triggering the debate was *The Crisis of Democracy*, ¹ edited by the Trilateral Commission² in 1975.

The governability crisis described the situation in which states and international authorities lost their traditional central role in democratic societies. As world society became ever more complex and globalized, governments were incapable of predicting the consequences of their actions. In addition, they were ever more disconnected from civil society. As society increased in plurality in terms of cultural and social diversity, and in complexity in terms of social organization and communication, national government actions aimed at answering public demands failed, causing a general dissatisfaction with politics. Moreover, on a global scale, governments lost their real capacity to act in the face of an international market economy that concentrated a high proportion of decision-making power.

¹ The Trilateral Commission, 1975. *The Crisis of Democracy*. Consulted on 14 August 2008 at http://www.trilateral.org/projwork/tfrsums/tfr08.htm.

² The Trilateral Commission is an organization made up of private citizens from the United States, Europe and Japan who seek to foster alliances to maintain the world leadership of these three geographic and economic areas.

However, the word "governance" would not appear in the political domain until the nineties. Initially it referred to both a concept to describe the governability crisis, and a new governing strategy that adapted to the complexity and interconnections of that increasingly globalized society (Hewson and Sinclair, 1999).

In a descriptive sense, governance named the real transformations in the forms of government that had started to take place in modern states affected by the process of globalization. In this sense, governance has been seen as the new conceptual framework of "an era marked by shifting boundaries, relocated authorities, weakened states, and proliferating non-governmental organisations (NGOs) at local, provincial, national, transnational, international and global levels of community" (Rosenau, 1999: 287). Although in very different ways and intensities, both the private sector and civil society started to increase their capacity to take part in government decisions in the last quarter of the twentieth century.

In 1997, the United Nations Development Programme described governance as follows:

Governance can be seen as the exercise of economic, political and administrative authority to manage a country's affairs at all levels. It comprises the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences.

Good governance is, among other things, participatory, transparent and accountable. It is also effective and equitable. And it promotes the rule of law. Good governance ensures that political, social and economic priorities are based on broad consensus in society and that the voices of the poorest and the most vulnerable are heard in decision-making over the allocation of development resources.³

The quotation illustrates the main characteristics of governance as governing strategy. Governance names a new form of decentralized government based on the regulation and coordination of power networks working at multiple levels, from the local to the international. It has been argued that governance entails a relocation of authority across multiple levels and arenas (Hewson and Sinclair,

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³ United Nations Development Programme, 1997. *Governance for sustainable human development*. A UNDP policy document. Consulted on 14 July 2008 at http://mirror.undp.org/magnet/policy/chapter1.htm#b.

1999), for which it has also been called "multilevel governance" (Bache and Flinders, 2005). Finally, governance also points to networks of cooperation between the public and private sectors and civil society in decision-making and management processes. It involves "building consensus, or obtaining the consent or acquiescence necessary to carry out a programme, in an arena where many different interests are in play" (Hewitt De Alcántara, 1998: 105). As such, participation processes have appeared as a practice of governance, from the global to the local scales. However, clearly the claim for a more powerful voice in management and decision-making by civil society organizations and citizens is often a result of resistance and not of cooperation, as the views of the government and the general public may be at odds. In this sense, it has also been stated that governance is "composed of one overarching trend but several dialectical and contradictory tendencies" (Hewson and Sinclair, 1999).

2.1.1. Opportunities and challenges offered by governance

Political scholars have seen governance both as an opportunity to overcome the crisis of ideologies and empower new actors, and as a vague political strategy that does not offer the solutions it promises.

Anthony Giddens (2004) refers to the "Third way" to label a transformation of governing practices from less centralization to a "greater governance of local processes", led by Anglo-Saxon left-of-centre parties with a strong influence on continental European counterparts. The author argues that to transfer responsibilities to the public and decentralize government is an alternative to the two big ideological options that have dominated the Western political arena since the end of the Cold War: "old" progressivism and neoliberalism. According to the author:

The cornerstones of the new progressivism are said to be equal opportunity, personal responsibility and the mobilizing of citizens and communities. With rights come responsibilities. We have to find ways to take care of ourselves, because we can't now rely on the big institutions to do so. Public policy has to shift from concentrating on the production of wealth to promoting wealth creation. Rather than offering subsidies to business, government should foster conditions that lead firms to innovate and workers to become more efficient in the global economy. (Giddens, 2004: 2-3)

Giddens sees the Third Way as a political culture in which "market liberalism" goes along "social progressiveness", and which points to centre politics because "old" left/right division no longer illuminates the debate in many issues. However, critics have called the Third way an "amorphous political project, difficult to pin down and lacking direction" (Giddens, 2004: 22). Those criticisms are similar to the ones that governance receives.

In contrast to Giddens, some authors oppose the smooth acceptance of governance as a "natural" evolution of democratic forms of government that guarantees openness, plurality and consensus of diverse actors with specific interests (Merrien, 1998). They consider governance to be often advocated as a neutral technical solution, which dangerously masks the ideologically opposed views hidden behind it.

For instance, De Alcantara (1998) noticed at the end of the nineties that "governance" had successfully spread in the world of human development policies, mainly through United Nations publications. The author argued that the general acceptance of the term was in part thanks to the fact that it seemed to point to a more technical and less political model of government. However, he warned of the ideological ambiguity associated with the concept.

Some authors also point to the loss of the traditional distinctions between the public and the private, which is implicit in the practice of governance. Responsibilities that were traditionally in the hands of public authorities are transferred to the private domain, while aspects of personal life become the interest of governance practices:

Network governance tends to dissolve or obscure the distinctions between the public and private sectors and the emphasis on collaborative governance fudges the boundary between what issues are considered to be the domain of collective public responsibility (and thus subject to the formal processes of politics and policy) and what are the responsibilities of individuals, families and households. (Newman, 2005: 3)

Others consider that as long as traditional responsibilities are dismantled and relocated to the public level, the idea of opposition and resistance is weakened. Therefore, although governance may open the possibility to include and empower new actors, the emphasis on consensus and shared responsibility may shade the apparition of opposing views, a healthy aspect of any democratic process. With a

radical critical view, some authors see the capacity of governance of extending power networks from the global to the personal levels as an expression of the "governmentality" practice described by Foucault: an oppressive governmental regime in which regulatory and "surveillatory" institutions proliferate, and in which citizens are profoundly engaged in the same process of surveillance as responsible actors in the application of hegemonic politics (Latham, 1999).

2.1.2. Environmental governance

The advantages and fears expounded by political scientists can be extended to the field of environmental governance.

At the beginning of the nineties, Ulrick Beck (1992) alerted Western democracies to the shortcomings and consequences of a "risk society" in which conflicts related to the redistribution of resources are replaced by concerns for health and security, and in which environmental impacts transcend ideological and national boundaries and go right to the heart of the wealthiest societies. Likewise, Giddens (1998) exposed the individualistic trends of a Western population dominated by consumerist patterns, in which old social coalitions such as class, family or nation are weakened. In the face of the discrediting of traditional forms of government, in which the ecological debate plays a big part, governance emerges as a fundamental piece to face up to the environmental crisis: the multilevel approach of governance and the attention to complex and multiple power networks allows us to structure the problem globally and at the local level, and to openly search for consensus solutions that appeal to common and individual responsibility.

As we shall see in section 2.2, the inclusion of civil society in environmental management and decision-making was advocated by the document of Agenda 21 that came out of the Rio Summit in 1992. Governance was also established as a main objective of the UNEP Conference of Johannesburg in 2002. These intergovernmental initiatives illustrate how governance offers the opportunity of opening up the environmental debate to civil society and the private sector, and recognizes that their engagement is fundamental to find ways of overcoming the environmental crisis.

Nevertheless, the new situation also poses very relevant challenges. The "technical" and "neutral" appearance and the ideological ambiguity of the term help it to be well received by different actors, but it also hides opposing interests, views and expectations. Too often the "different" atmosphere expected in governance practices has met with business as usual power positions. For instance, regardless

of the fact that governance is officially recognized as the way to apply environmental politics, NGOs and other social organizations that met at the last Earth Summit intensified their claims about the need of really opening environmental management and decision-making to the participation of civil society, and were very critical of the role of governments. A fundamental risk of governance practices is when they do not (or cannot) solve social discontent, they deepen the social distrust of politics.

Something similar happens on the local scale: regardless of the fact that participatory processes have spread as a method for ensuring a plural consensus in sustainable development, real initiatives prove that perspectives which are normally not heard are once again excluded. Citizens have ever more negative views on politics when they see participatory practices take place, but at which critical issues are ignored and decision-making continues as usual (I shall return to this topic, addressing practical case studies in chapter 5).

At a more abstract level, the technical and neutral appearance of environmental governance contributes to handicapping the comprehension of the multiple visions and perspectives on the environment that coexist. The rhetoric of governance has expanded and become very much intertwined with the concept of "sustainable development". Like governance, "sustainability" is also an ideologically weak concept whose ambiguity makes an open debate about the interests and the fundamental positions in play more difficult. However, before going in-depth into that debate, it is worthwhile presenting the main events that have brought the environmental discussion to the international arena, and which in turn have spread the practice of sustainable development to the local level worldwide. I will return to the discussion in section 2.3.

2.2. International politics facing the environmental crisis

Since the last quarter of the twentieth century, we have taken part in a number of political events in which the world's governments met to discuss, negotiate and make agreements to fight the global environmental crisis. International conferences on the environment show the slow and long path through which the political community has steady recognized the global scale of environmental problems, the negative consequences of the Western model of development, and the limits of science and technology to control the global environmental crisis. That political awareness has been dictated by the analysis brought by officially recognized scientific bodies.

The process is illustrated by the analyses of four key documents of international environmental politics: *The Limits to Growth* (1972), *Our Common Future* (1987), Agenda 21 (1992) and the *World Summit on Sustainable Development (WSSD) Plan of Implementation* (2002).

Table 2.1. Assessment and action recommendations as reported by the four major environment-related international reports

Document	Assessment (main contributions)	Recommendations for action
The Limits to Growth, Club of Rome, 1972	 - Uncontrollable decline of population and industrial capacity if growth trends continue unchanged. - New technologies will probably not be able to handle the crisis. 	- The global future will depend on choosing between a self-imposed gradual limitation of growth or by a limitation that is naturally imposed by the collapse of the societal model. The world's nations should take the first option.
Our Common Future, Brundtland Commission, 1987	- Development trends provoke increasing poverty and the degradation of the environment. - Technology has been able to bring important growth but it has also led to damaging side effects. - Economic growth and a fair distribution of resources are essential for meeting the needs of the poor.	Birth of the term "sustainable development". - Developing and high technological and industrialized countries should take the path of "sustainable development": a type of growth that ensures human progress into a distant future. - The world's governments should meet in an international conference to discuss the environmental crisis and to agree future common actions.
Agenda 21, 1992	It opens the path for global governance: - Recognition of the global scale of environmental problems: national governments are	- Governments should adopt sustainable development. In the case of industrialized countries it may consist mainly of the introduction of environmental correctness criteria to current

	accountable for the environmental impact on other countries. - Civil society involvement in global scale environment-related politics.	development trends. By contrast, developing countries may promote economic growth in order to fight poverty. However, the western model of development is not an option because it has shown to cause devastating effects on the environment.
Johannesburg Declaration on Sustainable Development and Plan of Implementation of the World Summit on Sustainable Development, 2002	 Recognition of the failure of national governments in taking action against environmental degradation. Globalization introduces new challenged and opportunities for sustainable development. Citizens from poor countries may lose confidence in political institutions if the economic and environmental crisis persists. 	- Recommendation of more effective, democratic and accountable international and multilateral institutions.

Source: Elaborated by author

The environmental debate took on political and social relevance after the publication of *The Limits to Growth*. The document was commissioned by the Club of Rome, an independent think tank that brought together scientists, economists, businessmen, international high-ranking civil servants and heads of state from the five continents.⁴ For the first time, a politically influential independent institution raised the problem of environmental degradation.

The study consisted of a world model based on the growth trends of industrialization, population growth, pollution, food production and resource depletion. The main conclusion was that the world would reach a collapse within the following one hundred years. The collapse would affect both population and industrial capacity. Even in the most optimistic version of the model, in which technological developments would solve problems related to energy, renewable resources, pollution and birth rate, the result was still a collapse before the year

⁴ http://www.clubofrome.org

2100. The authors of the report advocated a state of global equilibrium that could be reached by a self-imposed limitation to growth or by a natural collapse.

In 1983 the UN General Assembly established the World Commission on Environment and Development (WECD), popularly known as the Brundtland Commission, which first met in October 1984 and published its final report in April 1987. The Commission was independent from the UN system, and was responsible for assessing the environmental and development situation of the world, and drawing up proposals to cope with the crisis, which also included policy-oriented recommendations about new forms of international cooperation. The Commission's mandate also requested to call upon citizens, organizations, businesses, institutions and governments to take action.

The report pointed to current development trends as the cause of the increased economic disparity between rich and poor countries, and the degradation of the environment. In turn, it showed that the economic system of industrialized countries was vulnerable to environmental degradation. The document also warned about the damaging side effects brought about by technology, in spite of its important contribution to the current model of growth. Lastly, it stated that in order to meet the needs of poor countries, economic growth, as well as an equitable distribution of resources, was essential.

The main contribution of the Brundtland Commission was to put forward the concept of "sustainable development". Through that concept the report recommended that the world's nations should adopt a new development path, which should both secure human progress and ensure it continued into the distant future. In order to engage the world's nations in the path of sustainable development, the WCED advocated the creation of a UN Programme on Sustainable Development and the celebration of an international conference that should review the progress made and to promote new commitments (WCED 1987).

Following this recommendation, the UN convoked the world's governments to the United Nations Conference on Environment and Development, which was held in Rio de Janeiro, Brazil, in 1992. Governmental representatives from 178 countries attended the Earth Summit.

Whereas the Brundtland report had drawn up the idea of sustainable development, the Rio Summit brought the environmental debate to the global arena and the political engagement of a significant number of nations. A relevant result of the process was the publication of Agenda 21, a declaration and plan of action.

Agenda 21 made clear that environmental problems were crossing geopolitical boundaries, and that national governments should be accountable for the damages that their activities could cause to other countries. Specific attention was paid to the precautionary principle. It was advocated that authorities should not postpone their decisions when serious or irreversible damage could happen and levels of scientific uncertainty were high.

Besides, the Rio Summit represented an important milestone for the political involvement of civil society at the global scale. Parallel to the governmental forum, the Global Forum took place. Led by NGOs, the Global Forum lobbied the discussion taking place in the official forum through the elaboration of counter-documents, such as the *People's Earth Declaration* or the *Women's Action Agenda 21* (to which I will refer later).

Governance was established as the best form of government to deal with environmental problems after the Rio Summit. The Agenda 21 Declaration called upon authorities to promote the involvement of citizens in environment-related decision making in principle 10 of the Agenda 21 declaration. Specific attention was also paid to encouraging the involvement of the so-called "major groups": women, young people and indigenous people (UN, 1992).

Johannesburg+10 was celebrated in 2002 with the aim of assessing the progress made since the Earth Summit and launched a plan of action for the following decade. The resulting document, the Report Summit of the World Summit on Sustainable Development, included the Johannesburg Declaration on Sustainable Development and the Plan for Implementation. The report recognized the failure of national governments to take action against environmental degradation, but little new commitments were agreed in order to fight it.

The document pointed to the new economic and social conditions resulting from globalization. It also reported how people from poor countries were losing faith in political institutions. Governance was stressed as the only path to achieve sustainability: the governability of the world environment needed "more effective, democratic and accountable international and multilateral institutions" (UN 2002).

2.3. Sustainable development: re-inventing progress

As I pointed out above, the abovementioned documents testify to the "official" recognition of the limits of the Western model of development by the United Nations. However, the idea that "growth" is possible (and desirable) has not changed substantially. When Agenda 21 claimed that the world's nations should

take the path towards sustainable development, economically developed countries were encouraged to introduce policy and technology-related measures and actions to correct any impact on the environment, but not to change their development trends. Paradoxically, developing countries were recommended to enhance economic growth in order to fight poverty, but they were also prevented from following the Western development model that had been so harmful for the environment.

For instance, macro-directives in the field of energy for industrialized countries pointed to legislation and planning and to the adoption of new technologies. By contrast, sustainable energy-related technologies (developed in industrialized countries) were recommended as the best option for the energy systems of poor countries. In the case of agriculture, whereas biotechnology was recommended to economically developed countries, sustainable techniques were proposed to developing ones (Bru-Bistuer and Agüera-Cabo 2004).

Agenda 21 illustrates how sustainable development has been officially conceived as a model that introduces corrections, but does not involve profound changes to prevalent economic and social trends. In that version, a technocratic perspective inspires the core idea of sustainable development.

1. The "technological efficiency model"

The "technological efficiency model" is how Bru-Bistuer (1997) terms the discourse and practice of environmental management that introduces regulations in the market economy and industry, and science and technological advancements to manage environmental impacts. That model takes the name of "ecological modernization" in the Anglo-Saxon literature (Littig, 2001; Bru-Bistuer, 1997). The aim of the model is to optimize economic costs, technological investment and environmental improvement. In that conception, science and technology play a fundamental role in bringing solutions to "correct" the environmental crisis, yet there is no renouncing of economic and social growth. That environmental management model is responsible for the conception of "sustainable development", which has been spread as a (supposed) common social objective all over the world.

Sustainable development has played a fundamental role in overcoming the crisis of the ideal of progress that afflicted Western democracies after the seventies (Bru-Bistuer and Agüera-Cabo 2004).

According to Bury (1971), progress is a modern idea that describes the will that society moves in the desired direction. In Western thought the end of that direction has often been identified with happiness. In order for progress to be possible, there are at least four necessary conditions:

- 1. A sense of evolution from a worst past to a better future must be recognized.
- 2. Progress needs unlimited time or, alternatively, that there is no risk that the life span of humanity will be shorter than the possibility of a better future.
- 3. It also needs trust in the capacity of humanity to control and transform the environment for its ends.
- 4. All the previous conditions indicate that, ultimately, progress needs social confidence, because there is nothing in nature that ensures us it is real.

In modern times, science has played a fundamental role in promising progress. On the one hand, discoveries from astronomy ensured human life was possible for thousands of years, for which society had plenty of time to evolve. On the other hand, science represented itself the major expression of progress, which has taken a concrete form through technological advances and its consequences for economic growth.

The modern idea of progress was undermined by social movements taking place in Europe and America during the second half of the twentieth century that severely criticized the Western model of development.

Anti-imperialist ideologies had gained the upper hand in the context of the Cold War questioning the idea of Western society as a superior form of civilisation (Martinez-Alier 1992). Pacifism also featured heavily in the seventies revolt, together with the ecologist movement and feminism. In that period the Ecofeminist movement was also born, which introduced a feminist perspective into the ecologist critique.

Departing from the seventies' social movements, deep ecology and cultural Ecofeminism were established in a radical opposition to Western development models, and to the anthropocentric principles underlying this model. In the case of cultural Ecofeminism, the critics took an anti-modern position, celebrating premodern and non-Western cultures.

However, beyond ideological movements, chronological events related to environmental politics clearly illustrate the relevant role that the ecological problem has played in the crisis of the idea of progress. Even official documents questioned the idea of progress. For instance, the report of the Club of Rome warned that human life could end in hundred years, while *Our Common Future* exposed science and technology as partly responsible for the environmental crisis.

Hence the basic aspects of progress described above are cancelled out: it is unclear whether the future will be better than the past, and the unlimited time to evolve is uncertain. Moreover, the ecological crisis places doubts on the possibility that human efforts are able to improve our lives, and even science and technology are engaged in causing risks.

In this context, sustainable development has played a fundamental role in offering a "temporary" solution to that crisis. Moreover, sustainable development has come to represent progress itself again: the promise that a better future is possible.

2. The redistributive environmental justice model

In contrast to the technological efficiency model, social movements that emerged in the seventies are the origin of a model of sustainable development that Bru-Bistuer (1997) calls "redistributive environmental justice".

The ideological basis of this model was inspired by Marxism (Bru-Bistuer, 1997), from which it recognizes a fundamental connection between social inequality and environmental degradation. However, over time, the identification with a specific ideological guise has been expressed less openly or neglected directly.

It shares with the technological efficiency model a certain faith in the role of science and technology to overcome environmental degradation, but it is much more critical of the negative effects of science and technology on the environment. In this perspective, science and technology are instruments for overcoming the environmental crisis, but not the basic solution.

Redistributive environmental justice has also appropriated the concept of sustainable development. However, it is understood in terms of social equality and environmental responsibility. The ideal that local action is the key to advance towards sustainable development has helped in the popular diffusion of the concept and in calling for individual engagement: civil society is addressed as having a fundamental role in fighting the environmental crisis, for which more "sustainable" lifestyles are advocated.

It is also in this model in which participation processes have become increasingly relevant. Participation is seen as a tool to inform and raise awareness about the environmental degradation among citizens and local stakeholders. It is also

conceived as a strategy to overcome technocentric views in environmental management, to involve multiple perspectives and the interests of minorities, and to widely legitimize environmental management practices.

Participation processes started to be applied in developing countries mainly through the work of NGOs. It was also fostered by local governments, such as Porto Alegre (Brazil), where the municipal budget was appointed through the involvement of the local population (Waiselfisz et al., 2003), a reference case throughout the world.

In Western countries participation processes have been mainly taken a top-down approach, promoted by local governments as responses to global demands. In this way, fundamental elements of the "redistributive environmental justice" model, strongly defended by NGOs and other civil society organisations, have been appropriated by official politics.

An example of these types of governmental practices is Local Agenda 21. Europe is the continent in which authorities have started more Local Agenda 21 (LA21) processes (ICLEI, 2002). In fact, independently from the political guise of governments, participation processes are a technical solution to the management of the environment.

As a consequence, there are important ideological ambiguities implicit in participatory processes. They are complex and conflictive processes that are profoundly biased by the agenda of the institution or group that fosters them. They are seen as a mechanism to overcome local conflicts on the environment, but whenever they are not addressed properly citizens' disillusionment with politics and the conflicts that needed solving increases to a disturbing level.

Grassroots environmental groups also see participatory processes among their lobbying activities. They aim to inform citizens and ascertain their opinions to put pressure on governmental authorities. In the case of Salvem l'Empordà, one of the citizen's committees that has been analyzed in this study, it organized a participation process in 2004. Its aim was to publicly acknowledge citizen's views about the Empordà region. It also intended to find enough opposition to the participatory process that had been appointed by the autonomous government of Catalonia, the Generalitat de Catalunya, which the group saw as insufficient. In this way the real conflict had finally emerged. However, the government was not interested in the initiative of the citizens' group.

Obviously, the representative of the organization reported that she found participatory processes counted little for politicians. The strong words she used to

describe her disappointment were an indicator of the negative consequences of shallow participatory actions. The level of confidence in politicians, and also in participatory processes, decreases tremendously (I will return to the issue of political distrust in chapter 6).

Nevertheless, the risk of increasing dissatisfaction among civil organizations and citizens is not the only weakness of the current practice of participatory activities. Without a proper approach, they may obscure the diversity of interests that exist in the environmental issue, maintaining business as usual power relations, which negatively affects a gender approach.

A priori, the fact that the redistributive environmental justice model considers social equality an inherent part of sustainable development and facilitates a gender perspective on the environment is accepted.

Nevertheless, too often the idea of involving "multiple perspectives" does not include paying attention to gender. Different perspectives are recognized from stakeholders and organized groups of citizens. It is not considered whether social conditions such as gender, class or race could bring a different outlook to the environmental problem. Moreover, the fact that gender crosscuts all social categories makes it even more difficult for women to emerge as an interested group. In the best conditions, women may be among the experts, the organizers and the participants in a participatory activity. However, as far as women are scattered and a gender perspective is ignored, it will be extremely difficult for female participants to recognize gender interests and bring them into the debate.

In practice, gender has been little considered in participation processes started by LA 21, as the indicator on "women's issues" for Europe demonstrates (ICLEI, 2002). The consequences of that are going to be explored through the analysis of LA21 initiated in Catalonia in chapter 2.5.

However, before going into that topic it is worthwhile presenting the elements of a gender approach in the guiding document of Agenda 21, which inspires LA 21. In the following section I will set out the way women made their demands to the Earth Summits, and the way their interests were included in the official documents.

2.4. Women's groups lobbying international politics on the environment

Women's groups working internationally have played a fundamental role in promoting the introduction of the gender dimension in environmental issues worldwide. Despite the failures of global politics to foster the application of sustainable development, we must acknowledge that United Nations intergovernmental conferences have been fundamental for the promotion of environment-related policies worldwide. They have become a forum for organized civil society to lobby governments on global issues. Nevertheless, the introduction of the gender perspective has been difficult.

Although documents resulting from international conferences have steadily incorporated a gender perspective, women's demands have been fractured and disconnected from the critical view that provoked them. As a consequence, the attention paid to gender is often considered as a thematic input into official documents that used to be referred to as "women's issues". As we shall see below, together with the progress made in the inclusion of gender in the most important international environmental conferences, the evaluation undertaken by women's groups on environmental politics and the attention paid to gender becomes more critical over time.

The following box gives a general view of milestones for the advancement of policies for the environment and gender of the main intergovernmental events.

Table 2.2. Milestones of the main intergovernmental events dealing with the environment and gender (1945-2005)

Year	Event	Main contributions
1945	Charter of the United Nations	The equality between men and women is for the first time stated as a fundamental human right in an international official document.
1976-1985	UN Decade for Women	Assessment of the status of women's rights worldwide and promotion of women's political participation.
1985	United Nations Third World Congress on Women (Nairobi, Kenya)	The resulting document was the Nairobi Forward-Looking Strategies (NFLS). Women raised their concern for the deterioration of the global environment. Their lobbying influences the development of the Brundtland Commission in 1987, which would recommend the organization of an intergovernmental conference for discussing the environmental crisis.
1991	First Women's World Congress for a Healthy	1,500 women from 87 countries met to bring a women's voice about the deterioration of the

	Planet (Miami, Florida, USA)	environment worldwide. The result of the discussion process was the Women's Action Agenda 21, which would be presented in the Earth Summit one year later.
1992	UN Conference on Environment and Development, Earth Summit (Rio de Janeiro, Brazil)	Women and gender-related issues were considered in the main topics discussed by Agenda 21. In addition, there was a specific chapter entitled "Global Action for Women Towards Sustainable and Equitable Development".
1995	UN Fourth World Congress on Women (Beijing, China)	A key result of the Congress was the commitment of 189 governments to fight gender discrimination and inequality at a political, economical and social level, set out in the Beijing Declaration. They adopted the Beijing Platform for Action (PFA) as a tool for implementing their gender-equity goals, which introduced the issue of gender and the environment in section K. The introduction of quota systems has been instrumental for the political advancement of women in several countries.
2000	UN Beijing + 5 Review Session (New York City, USA)	Governments reaffirmed their commitment to implement the BPA.
2000	UN Millennium Summit (New York City, USA)	191 governments reaffirmed their commitment to gender equality and the empowerment of women, as a way towards sustainable development
2002	UN World Summit on Sustainable Development, Rio + 10 (Johannesburg, South Africa)	The Women's Caucus presented the Women's Action Agenda for a Healthy and Peaceful Planet 2015.
2004	UNEP organized the First Global Women's Assembly on Environment: Women As the Voice for the Environment (WAVE)	It was attended by 150 participants from 60 countries. The result was a WAVE manifesto and WAVE recommendations and project ideas were presented to intergovernmental conferences, including the Beijing + 10.

	(Nairobi, Kenya)	
2005	UN Beijing + 10 Forty- Ninth session of the Commission on the Status of Women (New York, USA)	Governments publicly declared the challenges and obstacles they had encountered in the implementation of the PFA and reaffirmed their commitments to it.

Source: Elaborated by the author

In 1945, the Charter of the United Nations that was signed in San Francisco was the first international agreement that stated that equality between men and women was a fundamental human right. Since then the UN has been committed to promoting gender equality through a number of conferences, which have led to it publicly advocating the fight against sex-related discrimination and violence, and the promotion of women's participation at a social, economic and political level.

The attention to the way gender and sustainable development are intertwined has increased steadily, helped by a number of international events and to the work of NGOs.

Already in 1972, the Environmental Liaison Centre International (ELCI) organized a seminar on "Women and the Environmental Crisis" at which the Chipko movement was presented for the first time. However, women's attention to environmental issues only took a global dimension in the 1985 UN Third World Congress on Women in Nairobi, Kenya. For the first time women brought to an official symposium their concern about the global deterioration of the environment and how it was negatively affecting women's everyday life worldwide.

The years between 1976 and 1985 had been declared by the UN as the Decade for Women, and efforts had been concentrated on examining the status of women's rights and promoting women's political participation. The Nairobi's conference was an assessment of the decade and as a result adopted the Nairobi's Forward-looking Strategies for the Advancement of Women, to be implemented by the year 2000.

Women's lobbying at the UN Nairobi's conference was one fundamental force for the development of studies on the state of the environment promoted by the United Nations and carried out by the Brundtland Commission, which recommended the celebration of an intergovernmental conference that should result in governments around the world working together to tackle the environmental crisis (WEDO, 2001).

In 1990, the American feminists Bella Abzug and Mim Kelber convoked 50 female parliamentarians, activists and scholars from 31 countries and created the Women's International Policy Action Committee (IPAC). They also founded the NGO Women's Environment and Development Organisation in 1990, which has the goal of networking women's groups all around the world to take action in the UN and other global policymaking conferences.

IPAC and WEDO organized and led the 1991 First Women's World Congress for a Healthy Planet that took place in Miami, Florida, USA. A main objective of the congress was to join women's opinions on the environmental crisis. 1,500 women from 83 countries, who represented UN agencies, governments, environmental, religious and women's organizations, grassroots organizations, universities, foundations and the media attended the conference. 15 experts that had collected gender-related information about the environmental crisis all over the world brought their testimony to a panel of 5 women judges (from Australia, Guyana, India, Kenya and Sweden). The result of the consultation and discussion process was the Women's Action Agenda 21 that was presented to the Earth Summit one year later.

In 1992, during the Earth Summit, women's lobbying helped to highlight the relevance of gender equality for sustainable development. As a result, women's key role in the management of the environment was included in Principle 20 of the Rio Declaration on Environment and Development, and women's issues were considered in the main topics dealt with by the programme of action of Agenda 21, in addition to one chapter entirely dedicated to gender entitled "Global Action for Women Towards Sustainable and Equitable Development" (UN, 1992).

Agenda 21 was an important milestone for the public recognition of the claims of women's groups. However, a comparison between the women's agenda and that of the Earth Summit shows that women's voices had to adapt to the environmental hegemonic perspective and renounce the fundamental arguments of their critiques. Thus, whereas women's critical appraisal of the global environmental crisis calls for a revolutionary transformation of the development model, the UN agenda basically constitutes a readjustment of the economic model of growth to environmentally based criteria. In addition, women's denouncing the patriarchal order that underlies the current unsustainable economic model that causes inequalities between the genders and between countries and cultures is absent from the Rio document (Bru-Bistuer and Agüera-Cabo 2004).

Women's Action Agenda 21 and the official Agenda 21 show very different view when assessing the geopolitical status of the environment. For instance, Agenda 21

highlights the benefits of technological development and advocates knowledge transfer to developing countries. Instead, the women's agenda points to the negative side effects of technological development for women, and denounces the power-linked dimension of technological control in the hands of high technological and industrialized countries and the way it helps to heighten economic disparities between rich and poor (Brú-Bistuer and Agüera-Cabo 2004).

Yet the biggest gap between the two agendas is regarding their view on the topic of population. Birth rates are identified as a main reason for unsustainability by Agenda 21. A set of measures is advocated to control population growth that include family planning and female-oriented economic and educational strategies, among others. By contrast, women's groups argue female fertility rates are not the main cause of unsustainable development, and they point to military conflicts, industrial pollution and the capitalist economic system (mainly the consumption lifestyle model) as the main reasons for environmental degradation (Bru-Bistuer and Agüera-Cabo 2004).

The environment was again a topic of discussion at the UN Fourth World Congress on Women that took place in 1995 in Beijing, China. The congress was seen as a milestone for the advancement of gender politics. Approximately 50,000 government delegates, UN Representatives, NGOs and members of the media attended the conference. The result was the Beijing Declaration and the Beijing Platform for Action (PFA), which proposed an agenda for empowering women and accelerating implementation of the 1985 NFLS. As a result, several governments worldwide introduced gender quotas in their political systems, which has been a fundamental factor for women's political advancement in the last two decades.

The PFA was conceived with the purpose of accelerating the implementation of Nairobi Forward-looking strategies and it focused on recommendations to empower women. The mission statement of the document asserts that "the equality between men and women is a condition for people-centred sustainable development" (UN, 1995). Women are seen as essential in the search for an alternative model of growth and the specific impact of environmental degradation on women is acknowledged. As a general assessment, the PFA recommends combating gender inequalities in natural resource management and in the protection of the environment (UN, 1995).

The first review of the progress made since the Beijing conference took place in New York in 2000 with the participation of more than 4,000 government delegates and NGOs' representatives, among others. Governments that met at the UN

Beijing+5 Review Session reaffirmed their commitment to implement the PFA, and further actions and initiatives were proposed.

Also in 2000, the UN Millennium Summit focused the attention on gender and the environment. Its main goal was the promotion of peace, justice and development in the world. The resulting document, the Millennium Development Goals (MDGs), was signed by 191 governments. Gender equality and the empowerment of women were mentioned as relevant for ensuring truly sustainable development and the commitment of governments to the protection of the environment was reaffirmed, mentioning specifically their support for the principles of Agenda 21. Besides, the MDGs included 48 indicators for assessing development worldwide. From those, 4 referred to gender equality and sustainable development (UN, 2000).

In 2002, the Johannesburg Rio+10 took place, which had the purpose of assessing the progress made since the 1992 Earth Summit. Women's groups started to work two years in advance under the umbrella of the Women's Caucus—which had been born after the Rio Summit—led by the WEDO. Commitments given in the Women's Action Agenda 21 were revitalized and updated, with the resulting document entitled Women's Action Agenda for a Peaceful and Healthy Planet 2015. The new women's agenda listed critical arguments and proposals on the environmental crisis, divided into five chapters: peace and human rights, globalization and sustainability, access to and control of resources, environmental security and health, and governance for sustainable development. The assessment of the general rise of militarism and armed conflicts during the previous decade led women to advocate peace and respect for human rights to ensure sustainable development. Particular attention was also paid to the gender bias of governance. Women denounced the concentration of power in the hands of males from Western countries, and the low female participation in policy making bodies all over the world (WEDO, 2002).

In contrast to the Earth Summit of Rio de Janeiro, women's groups found little room for bringing their concerns and views to Johannesburg. According to WEDO's assessment, women encountered a strong conservative opposition that forced them to focus on fighting for maintaining women's advancements in the 1992 Agenda 21, and it was not possible to include new demands in the agreements. As a result, in the final official document the issues of globalization, energy, capacity-building and science and technology avoided any reference to gender, and only education and health chapters mentioned women-related topics (Grossman, 2002; Pearl, 2002).

As well as this, the Johannesburg Summit failed to draft a document that could work as a plan for action like Agenda 21. The World Summit on Sustainable Development (WSSD) Plan of Implementation was premised only on the basis of voluntary action, and it did not specify any responsibility or targets. In addition, whereas the document advocated promoting female participation in decision-making structures, it did not mention any specific action to implement or assess the progress of this goal (Dankelman and Pearl, 2002).

In preparation for the upcoming UN Beijing+10, the five-year view of the MDGs and the 13th session of the UN Commission on Sustainable Development (CSD-13), the UN Environment Programme (UNEP) organized the Global Women's Assembly on Environment: Women as the Voice for the Environment (WAVE) in Nairobi, Kenya, in 2004. The symposium was attended by 150 participants from 60 countries, and the result was a WAVE manifesto, recommendations and project ideas.

Finally, the UN Beijing+10 Forty-Ninth session of the Commission on the Status of Women was held in New York in 2005. Governments publicly declared the challenges and obstacles that had been encountered in the implementation of the PFA and reaffirmed their commitments to it. Besides, gender mainstreaming was advocated as a strategy for the implementation of the PFA (UN, 2005).

Women's groups assessed the progress made in gender-equity since Beijing 1995 through the "Beijing Betrayed" report, led by WEDO, which aimed at being an advocacy tool for governments. The documented collected the testimony of women from 150 countries, and denounced that "governments worldwide have adopted a piecemeal and incremental approach to implementation that cannot achieve the economic, social and political transformation underlying the promises and visions of Beijing" (WEDO, 2005: 10). Women pointed to the expansion and deepening of the environment and development crisis although it had already been reported in previous conferences, and as a general assessment expressed that "governments have betrayed the promises they made in Beijing" (WEDO, 2005: 7).

2.5. Local governance: participation processes and the consideration of gender

The application of governance practices at the local scale has been firmly based on the practice of participation processes.

There are different types of participation processes according to their political ends. Font (2003) points out that there are policy-making participatory processes in which participation is developed over a long period of time and in which expert

knowledge is also involved (for example, Citizens Juries or Strategic Plans). He distinguishes them from participation mechanisms appointed for a specific policy debate at a specific moment (for instance, deliberative opinion pools). We should also distinguish such participation mechanisms from public consultations that democratic governments have traditionally organized.

In the case of environmental management and decision-making, previous sections have shown that at the international level the participation of civil society has been advocated as a way to deal with sustainable development at the Earth Summit of Rio de Janeiro 1992, and again at Johannesburg 2002.

Local Agenda 21 has been instrumental for promoting participatory decision making processes that involve social actors in defining and establishing the strategy for sustainable development at the local level. In those processes scientific information plays a fundamental role, for which it pertains to the first type of Font's classification.

The experience of Local Agenda 21 (LA21) shows that the implementation of governance is very challenging and controversial (Buckingham-Hatfield 1998, 1999; Evans and Percy, 1999). Many different meanings may be attributed to the concept of "sustainable development", which include not only scientific and technical-related considerations, but diverse value-systems and ideological standpoints. The practice of governance through participation processes opens the way for the interaction among policy makers, scientists, stakeholders and citizens in defining a plural understanding of sustainability. However, conceptual and methodological questions also arise in relation to the different relevant views on the environment, and how to provide them with sufficient support to make contributions from all parts involved meaningful in the participatory processes.

We saw in the previous section that gender equality was asserted as a fundamental aspect of sustainable development by the Agenda 21 document that came out of Rio 1992. The issue was discussed in depth in chapter 24, "Global Action For Women Towards Sustainable and Equitable Development" (UNEP, 1992). Governments were encouraged to advance the position of women in decision-making and techno-scientific structures and to support women's work in civil organizations committed to sustainability. They were requested to mobilize educational, social and economic resources for fighting female-related discrimination and poverty. The report also encouraged governments to address gender issues in research and policy making towards sustainability, in terms of "gender-sensitive databases, information systems and participatory action-oriented research and policy analyses" (UNEP, 1992).

However, in practice LA21 has remained relatively immune to the gender approach advocated by Agenda 21. In the following section, I will describe the consideration of gender in the participatory process of Agenda 21 initiated in Catalonia. The case will show the gender blindness of LA21 regarding the selection of participants and in the consideration of relevant policy issues to advance towards sustainable development.

2.5.1. Women's underrepresentation in Local Agenda 21

The commitments proposed by the framework document of Agenda 21 to promote gender equality contrasts with the scant attention paid to gender in Local Agenda 21 (LA21) in practice. A survey carried out by the International Council for Local Environmental Initiatives (ICLEI) in 2002 indicated that Europe was the continent in which the most LA21 initiatives had been started (5,292 LA21 in 36 countries). The analysis of the survey revealed that local authorities had improved public participation and that they had been able to reach out to their communities. Yet it also pointed to "the need to continually encourage explicit inclusion of particularly under-represented groups such as women, ethnic groups and youth" (ICLEI, 2002).

A major consequence of the gender-blindness of LA21 is the much higher presence of male politicians and government officers, experts, stakeholders and citizens in the whole process.

This situation is well illustrated by the participatory activities of the LA21 of Catalonia (Spain).⁵ The Catalan LA 21 started in 1998, and the participatory activities took place in 2001. Women were a minority among the agents involved throughout the whole process.

The Consultative Forum of the LA21 of Catalonia was the first working group created for assessing the development of the agenda. It was composed of 89 experts, of which only 13 were women.⁶

Informative sessions of the Catalan LA21 were organized for engaging stakeholders and citizens. Each one included oral presentations by experts from the Consultative Forum, politicians and government technical officers. In all, seven sessions took

⁵ The analysis has been elaborated from information provided in the official webpage of the Generalitat de Catalunya (http://www6.gencat.net/a21cat/).

⁶ Source: author's processing of the information provided at http://www6.gencat.net/a21cat/cami/forum.htm, available on 15 September 2004).

place and 37 people were invited to give a speech. From those, 31 were men and 6 were women. There were four sessions with no female speakers, and one session with 4 men and 1 woman. Only 2 sessions had a balance of 3 men and 2 women.⁷

The Catalan LA21 promoted the active participation of stakeholders and citizens through issue-based and regional meetings. Discussion groups and meetings were organized for each issue. In the case of regional meetings, each event took place in a diverse region and addressed all the various issues. In both cases, representatives of diverse socio-economic public and private bodies were invited, and the public could participate by showing an interest.

Again, the absence of a gender strategy was clear when inviting participants. Regional meetings were unequal in terms of gender representation. In total, 104 men and 56 women were invited.⁸

By contrast, a global balance between genders (118 men and 100 women) existed in the case of issue-based meetings. However, this was not the case for some specific working groups. For instance, the one on "territory and mobility" which dealt with key issues such as "regional politics", "cities", and "rural and mountainous areas", had significant higher male participation (20 men and 3 women).

⁷ Source: author's processing of the information provided at the "Consell Assessor per al Desenvolupament Sostenible, 2001. Aportacions a l'Agenda 21 de Catalunya. El compromís de Catalunya per a un futur sostenible. Fase d'informació (Febrer-juny 2001)." Generalitat de Catalunya. ⁸ Source: author's processing of the information provided at http://www6.gencat.net/a21cat/home.htm.

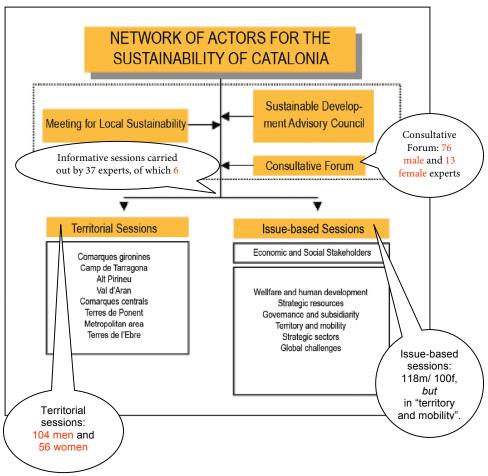


Figure 2.1. Female and male representation in the Catalan Local Agenda 21 participatory process

Source: Elaborated by the author from information from the official webpage of the Generalitat de Catalunya (http://www6.gencat.net/a21cat/).

The male predominance in political, scientific and technical arenas of environmental planning in Spain (Durán and Hernández-Pezzi, 1998; Colectivo de Mujeres Urbanistas, 1998) helps explain, at least in part, the gender imbalance in participatory governance practices. Hardly any gender sensitive data is available for the Catalan case, but some general statistics may be illustrative of this situation.

When the participatory process of the Catalan LA21 took place (1999-2003 legislature), only 27.4% of members of the Catalan Parliament, 6.9% of mayors and 17.7% of council members were female (Institut Català de les Dones, 2005a). In addition, whereas increasingly more women enter the scientific arena, university degree courses still have a higher male representation. In 2001, women represented only 26.3% of the graduates in engineering and architecture from Catalan universities (Institut Català de les Dones, 2005b).

The Catalan situation illustrates the urgency of tackling the issue of women's representation in environment-related participatory activities. While the detrimental condition of women in society and knowledge positions is not recognized, the participatory process results are strongly gender biased. Gender balanced participatory activities cannot be based on "openness": in other words the consideration that all possible interests have to be allowed to participate in the process. They should take a step forward and prioritize what Font proposes as "inclusiveness": it "requires a specific effort be made to guarantee the presence of those groups that tend to be systematically underrepresented. The process does not give the same opportunities to everyone, since we know that the unequal distribution of resources can result in members of some groups and classes being underrepresented. Inclusiveness introduces an effort bias to overcome biased representation" (Font, 2003: 19).

2.5.2. Gender biases in environmental knowledge in the Local Agenda 21

However, representation is not the only issue mentioned by Agenda 21 that promotes sustainable development through gender-related politics. The report also encouraged governments to address gender issues in research and policy making on sustainability, in terms of "gender-sensitive databases, information systems and participatory action-oriented research and policy analyses" (UN, 1992).

Again, according to the ICLEI statistics, European LA21 initiatives have addressed gender in the production of knowledge informing the participatory process in a very limited way. A survey of local authorities carried out in 2001 found that out of 127 LA21 only 12 dealt with "women's issues", 10 expressed that it was an activity underway, and the remaining 105 declared they did not address any womenrelated subject. The results revealed that "women's issues" was the third most ignored topic from a list of 26 areas of activity (ICLEI, 2002).

Unfortunately, the ICLEI survey only asked how many LA21 initiatives included the topic "women's issues", but it did not assess how they addressed gender. The point is very relevant, because as the case of the Catalan LA21 illustrates, although in some cases "women's issues" are incorporated into the agenda, very little room is left for applying a gender perspective on environmental topics. I shall set out the argument in more detail later.

The basic document informing the discussion in participatory sessions of LA21 was called "Preliminary Consultative Document of the Agenda 21 of Catalonia". Seven major areas were included: Governance, Economic development and competitiveness, Welfare and human development, Territory and mobility, Strategic sectors, Strategic resources and Global challenges (Generalitat de Catalunya, 2002). Only "Welfare and human development" showed a gender perspective. The following box summarizes how women's and gender-related issues have been introduced in this area:

Table 2.3. Women and gender-related issues addressed by the Preliminary Consultative Document of the Agenda 21 of Catalonia

Women in the labour market:

- Advocacy of measures to enhance equal opportunities in the labour market and to fight the high female unemployment rate and the low status of female-related jobs.
- Promotion of gender equality in the household and recommendation of political actions to make family responsibilities compatible with professional occupation. Gender as a feature of social exclusion:
- Suggestion of political commitment to fight social exclusion linked to geographical, economic, social, cultural, physical, gender, age and educational factors. Gender equal participation in public life:
- Advocacy of measures to ensure gender equality in political, scientific and technological bodies.

Source: Processed by the author from the Preliminary Consultative Document of Agenda 21 of Catalonia (Generalitat de Catalunya, 2002).

The example shows that gender inequality is addressed as a socio-economic problem based on the unequal distribution of labour and income and on the low level of female representation in scientific and political structures. These are important issues for advancing gender justice, but they do not connect gender and

environment-related issues. The Catalan agenda only incorporates mainstream gender politics, instead of seeing gender as a way to fight against the environmental crisis.

This approach to gender and the environment is narrow and reductionist. In addition, it may have the side effect of obscuring the diversity of contributions that could arise from gender studies. As I showed in chapter 1, gender is a crosscutting perspective on diverse environment related issues, which include urban planning and mobility, consumption, contamination, use of resources (such as energy or water) and landscape management. As such, it should assess environmental governance practices and bring proposals to enhance them.

SUMMARY OF CHAPTER 2

While chapter 1 set out the basic theoretical principles of feminism and gender studies in a meaningful way for the present study, this chapter reflected on governance and sustainability discourses and explored the consideration of gender in the practice of environmental governance at an international and local level.

Both governance and sustainability have been described as concepts with strong political ambiguities, which present opportunities but also challenges and risks.

Governance has been described as a transformation in the forms of government in which "new actors" are involved in decision-making processes at different levels. Decision-making participatory processes are one of the most extended practices of governance.

The chapter referred to the opportunities and limitations of governance practices. I pointed to the weakening of the traditional distinction between public and private responsibilities, as not only politicians and scientists, but multiple actors are involved in environmental decision-making. Such new scenarios present opportunities to consider multiple and traditionally disempowered perspectives on environmental management. Nevertheless, the responsibility for decisions is less clear, and there is a weak critical perspective and opposition if consensus does not really exist. In practice, to consider the organization of participation processes is strategic because if traditionally excluded actors or key questions are not addressed, this may lead to social discontent and political distrust.

In the case of sustainability, it has been established as a blurred concept because it presents diverse meanings according to different ideological standpoints. Hegemonic discourses from international scenarios have assumed sustainability as a new form of considering progress, without renouncing growth, but limiting it.

The "technological efficiency model" considers growth to be possible and desirable, and that technological solutions make it possible. The "redistributive environmental justice model" introduces social and ethical reflections. It is based on the principle of equity and involves different

actors in the decision-making responsibility.

Nowadays, the second is the one that has introduced the application of governance processes. Nevertheless, it is also the model presenting the most ambiguities: initially, the ideals of equity and public participation were claimed by social movements, who opposed the belief that growth was still possible. In fact, participation processes have been appropriated by governmental institutions and have taken a strong top-down approach. Multiple agents are invited to the debate, but often there is no interest in discussing basic principles, like the limits to growth or other meanings behind the concept of sustainability. Moreover, when such participation processes are not able to fulfil people's expectations of change, there is an important loss of public confidence in the political institutions applying them, and in politics in general.

Those reflections bring relevant contributions to the second part of the thesis, which develops the empirical analysis. By considering cases of grassroots movements, the interests of citizens in local environmental problems are analyzed. The application of a gender perspective allows the concerns and interests of men and women in the environment to be established. Later, chapter 5 analyzes changes in the level of trust that the interviewed activists display for the different political, scientific, economic and social stakeholders involved in the environmental conflicts, also considering gendered tendencies.

The second part of chapter 2 explored the consideration of gender in environmental governance. First of all, I took a historical look at how gender has been considered in international environmental events that have been influential in the application of sustainability politics at a local level. The analysis has also highlighted the specific perspectives on the environment presented by women-focused international summits.

The most critical aspect is that although gender is considered to a large extend at international events, it is largely ignored when participation processes for sustainable development are applied at the local level, as the ICLEI's report pointed out in the case of Local Agenda 21. Specifically, I described the ignorance of gender in the application of Agenda 21 in Europe, and in the case of Catalonia, through the analysis of actors involved

and issues discussed in A21CAT. The case shows gender inequities globally in relation to the number of female participants in comparison to male ones, the low presence of women as experts in the presentation of the issues of debate, and the ignorance of gender perspectives in the issues under discussion.

The analysis of A21CAT leads to the conclusion that the problem of female underrepresentation is endemic in participatory processes. The discussion at the end of the chapter indicated that the organization of participatory processes must not be based on "openness" (i.e., all actors are invited) but on "inclusiveness", which requires a specific effort to guarantee the presence of those groups that tend to be underrepresented in environmental decision-making. A specific line of reflection is to determine different forms of gender exclusion in participation processes and to systematize mechanisms and good practices to deal with it.

In this line, the empirical analysis of part II will address some key questions in relation to gender biases in representation: what is the specificity of gendered perspectives on, concerns for and interests in the environment? What do women care about? Do they care about different issues or in different ways from men? Are gendered power relations inherent to public life, biasing participatory environments in some way?

PART II: EXPLORING THEORY IN THE FIELD: GENDER, ENVIRONMENTAL CONCERNS, AND WOMEN'S ACTIVISM

Introduction

In part 1 I focused on establishing the basis of the study through the analysis of theoretical contributions from the fields of feminism and governance. In the second part I am going to explore in a practical way the relevance of gender for the environment through various empirical bibliographic sources and case study analysis.

I have already examined the gender blindness of local environmental governance practices. The aim of this part of the study is to show how gender is relevant and why a gender strategy is generally necessary in environmental governance, and particularly in the participatory process, not only for reasons of social justice, but as a way to improve the quality of the decision-making process.

In chapter 1 I described how ecofeminist authors have put forward diverse theories to sustain that women and nature are linked in a specific way. According to essentialist positions female biological processes give women a specific concern for life that makes them "natural" saviours of the environment. On the other hand, constructivist ecofeminists argue that the socially and politically deprived position of women coupled with traditional female roles as carers of the family and the community mean that environmental degradation has a specific impact on them. This would explain a supposed gender bias present in their responsibilities and concerns for the environment.

However, ecofeminists have explored these arguments mainly within the context of developing countries where women's responsibilities and the survival of their families depend to a large degree on the natural environment, and where in many cases women are effectively engaged in the use and conservation of resources at a local level (e.g. water and wood provision) or in agricultural production for their own consumption. In the case of Western countries contributions are more scattered and those that exist focus mainly on the issue of toxic waste.

Within this context, if we focus on northern countries, are we able to sustain that there really is a specific female concern for the environment? And if the answer is yes, then what exactly is this concern or concerns? And, finally, are those gendered concerns already addressed in current environmental management and decision-making practices? The aim of the second part of this study is to provide enough empirical evidence to answer these questions.

Gender is a category that cuts across the diverse social groups that are potentially involved in environmental governance – political representatives, scientific experts, stakeholders and citizens. The analysis of these practices is relevant to a gender perspective on environmental governance as they may all be biased by gender. However, gender differences become clearer among citizens as they often emerge in relation to personal views and experiences.

In line with this argument, the empirical part of the study focuses on analysing the environmental interest in and values of men and women citizens. Science and politics are also considered to be social institutions with a fundamental role in the management of the environment, and the opinions of citizens about this are also considered relevant.

Chapter 3 analyses the conclusions of quantitative sociological studies that have explored the hypothesis that women show greater concern for the environment, the specific environmental concerns and risk perception of women, and the interpretations of the gendered patterns observed.

Not all but many of the available bibliographic resources are from studies being carried out in North America. Consequently, the second part of chapter 3 focuses on drawing a picture of the situation in Europe. The research considers reports from the European Commission and from the Spanish Foundation of Science and Technology (FECYT), which provide gender-disaggregated data on citizens' perceptions of science, technology and the environment. The last two reports from the FECYT also include a short gender analysis. Using this analysis of the information provided I will argue that there are two biases where gender patterns can be observed. Hypotheses to explain these gender tendencies are also discussed.

In chapter 1 we have already seen that the analysis of women's participation in environment-related grassroots organisations has made a specific contribution to gender studies related to the environment. Departing from the knowledge offered by those studies, the remaining chapters in the second part of the study present the results of a qualitative gender analysis of three grassroots movements active in environmental conflicts taking place in Catalonia, Spain. The aim is to use qualitative methods to explore in detail the relevance of gender in the interests, values and perceptions of citizens in these environmental conflicts and in the power struggles taking place in the citizen's groups. Specific attention is paid to the opinions of women because the study aims to highlight the exact nature of their concerns and their roles as activists.

Chapter 4 examines the sociological profile of the three grassroots movements and the diverse opinions of both men and women about the environmental conflicts. Through conclusions drawn from in-depth questionnaires and interviews, the study identifies health, local identity, quality of life and the environmental heritage left to future generations as concerns for the environment that are specifically meaningful for gender analysis.

While constructivist ecofeminists suggest that female concerns about the environment depend on women's position in the social structure, some sociologists have suggested that this same social position also defines "one's degree of trust in social institutions which currently make decisions about these questions on others' behalf' (Irwin, 1995:45). Following that argument, chapter 5 analyses data from the case studies that show gendered patterns in the confidence of grassroots activists in policy, science and society. The cases show different effects of the conflicts on the confidence in the institutions involved of activists of both sexes. Such results point to the relevance of gender to create a more complex picture of the problem of expert knowledge and political mistrust, which is a fundamental aspect of governance processes.

Finally, chapter 6 focuses on the analysis of gender power relations inside the grassroots movements. Grassroots groups offer an opportunity to observe and analyse a form of public participation where women are involved in high numbers compared with other political or ecological groups or events. In this way, the analysis of female participation in grassroots movements becomes a kind of laboratory where challenges to and opportunities for gender insight into participatory processes can be analysed.

Interestingly, the study of power relations inside citizens' groups shows that these organisations tend to reproduce gender-unequal patterns in the distribution of leading and support activities, and that ethno-androcentric attitudes and norms characteristic of public environments are transferred to organisations, bias the discussion and reduce opportunities to influence decision-making. As I will argue in detail, the case demonstrates how the contribution of women may be disempowered by participatory activities that lack a gender strategy. However, grassroots activism also puts alternative participation and decision-making mechanisms into practice where the standard distribution of roles and gender assignments is transgressed. In this case they offer interesting material to reflect on possible actions that could reduce gender power inequities in participatory processes.

Chapter 3. Gendered views on the environment, science and technology

3.1. Gender differences in environmental concerns and technological risks: a bibliographical analysis

The fact that men and women show different environmental concerns and risk perceptions has been an issue of sociological enquiry in the Anglo-Saxon academy since the late seventies and eighties (Davidson and Freudenburg, 1996). In the case of Europe, large-scale and statistically-based studies on the subject are less numerous, and, consequently, results are more scattered and do not help to create a complete picture of the situation.

The starting point of field of research in sociology is rather independent of the development of the ecofeminist theory in Europe and North-America. Some sociological studies explicitly point to ecofeminist arguments (e.g., Boetzkes, 1998; Dietz, Kalof and Stern, 2002) or are interested in the links between feminism and environmentalism (Smith, 2001), but most of them do not mention ecofeminism as a source that inspires scientific curiosity or as a hypothetical explanation for the results obtained.

However, the few sociological studies considering ecofeminist theories explicitly support socio-cultural and economic-based hypotheses. Existing results contradict radical ecofeminist interpretations, while biology-inspired arguments have been rather less explored (Somma and Tolleson-Rinehart, 1997).

We should also keep in mind the radical differences between the approach of these sociological studies and ecofeminist contributions. The first type focuses on empirical evidence and tends to ignore theoretical explanations, assuming a strong positivistic approach: gender differences are addressed from a purely quantitative perspective and employ exclusively statistical methods (Gustafson, 1998). The second type concentrates on theoretical explanations and case study approaches use qualitative methodologies with little statistical significance.

Ecofeminist and gender studies have focused on local environmental conflicts and they have not explored their hypotheses in populations not directly affected by environmental degradation conflicts. In contrast, a large-scale focus is provided by sociological approaches which help us to discuss some of the theoretical arguments of gender and feminist approaches to the environment through statistically-relevant evidence. Furthermore, the results show that ignoring feminist

and gender contributions is a serious weakness of these studies, as it prevents them from deepening their insights and from supporting them within a solid theoretical framework.

The sociological studies on gender differences regarding environmental concerns that I have considered were published between 1983 and 2004. They were obtained through systematic enquiry on the Internet and through consulting the British library catalogue in the first semester of 2005. Obviously, the sources of the bibliographical research have biased results that prioritise Anglo-Saxon research circles. However, this is also the geographical context within which most research on gender and the environment has been carried out. Therefore, the results obtained are a good sample of current applied sociological research on the subject.

All the articles considered in the bibliographical research use general population opinion polls, surveys, questionnaires and other large-scale data sources, and most of them focus on the American population, although some European research is also mentioned. In total I have considered 19 studies, of which 13 analyse the US population, 2 analyse European countries (Germany and the Netherlands) are 4 are cross-national.

The following table is a summary of the objective, data and main conclusions reached by each study. The rest of the section uses these studies to provide a global and more detailed picture of the findings on gender differences in environmental concerns and risk perceptions. I will also refer to the conclusions provided by two other studies in which quantitative and qualitative studies are considered by assessing the bibliographical sources available. Gustafson (1998) reviews results on gender differences in risk perceptions using studies from the USA; Caiazza and Barret (2003) analyse key research findings from diverse studies on women's attitudes towards the environment and their activism on environmental issues also related to the USA.

Table 3.1 Large-scale and quantitative studies on gender differences in environmental concerns considered in the comparison of bibliographical results

Reference	Objective	Data	Main conclusions
Barke et al., 1997	To analyse differences in the ways that men and women scientists perceive nuclear risk	In summer 1990 a mail survey was sent to a sample of 1,011 randomly selected members of the biological and physical science sections of the American Association for the Advancement of Science in Colorado and New Mexico	Men scientists tend to see substantially less risk from nuclear technology than do women scientists, but this difference is not a manifestation of different levels of scientific training or attitudes toward nature, technology or normative aspects of risk. Gender differences and fields of research have an additional effect on risk perception with women scientists and life scientists perceiving greater risks.
Blocker & Eckberg, 1989	To analyse gender differences in concern towards general and local environmental issues.	Late spring of 1985. Telephone survey of the Tulsa, Oklahoma, metropolitan area. 300 households: 157 men and 143 women.	Women are not more concerned than men about global environmental issues, but they are about local ones
Blocker & Eckberg, 1997	To test the hypothesis that women are more concerned about the environment than men because of their socialisation in the caregiver role and because	Data from the USA 1993 General Social Survey. Sample of 1.557 respondents.	While women do tend to show somewhat more personal concern than men, they are no more likely to engage in environmental action than are men.

	their structural positioning is relatively outside the labour market and in the home.		
Bord & O'Connor, 1997	To explore whether differences in perceived vulnerability to risk explain gender differences in risk perceptions	Data gathered in 1991 through two independent USA national telephone surveys asking a battery of questions about one environmental problem, either a hazardous chemical waste site or global warming	Women express stronger concern for specific risk perceptions, but the gender difference is due to health-risk perceptions. Environmental and other gender gaps in surveys are primarily a function of perceived vulnerability to risk.
Davidson & Freudenburg, 1996	To assess conclusions from all bibliography available regarding gender differences in technological risk concerns.	1991-1994. Systematic research of studies that analyse representative samples of general population groups in the United States of America	Gender differences in environmental concerns between women and men are modest. However, attitudes towards more specific forms of environmental and technological risks show more clearcut differences.
			The consistent finding is that women express higher levels of concern not because they know less, but because they care more.
Dietz and Kalof, 2002	To examine gender differences in value structure (meaning) and value priorities	Data collected in June 1994 from 345 respondents (145 men and 200 women) throughout the United	Men and women attribute the same meaning to values, but there are gender differences in value priorities and how different values are ranked as guiding
	(importance)	States using computer- assisted telephone	principles. Gender differences are particularly relevant to values related to

		interviewing.	environmentalism.
Dietz, Kalof & Stern, 2002	To explore the links between race, gender and environmentalism by examining differences in values and pro environmental beliefs	A pooled national survey of US residents interviewed by telephone in 1994 (420) and 1996 (302) by the George Mason University's Northern Virginia Survey Research Laboratory.	Significant differences existed between whites, blacks and Hispanics, but gender differences existed only for whites. In such a context, the attitudes of white males are anomalous.
Finucane et al., 2000	To further explore the relationship between race, gender and risk perceptions.	From 1997 to 1998. Telephone survey of a US sample of 1,204 citizens.	Non white females often gave the highest risk perception ratings. The group that consistently displayed lowest risk perceptions about a range of hazards was white males.
			Compared with the rest of the sample, white males were more sympathetic to hierarchical, individualistic and antiegalitarian views, more trusting of technology managers, less trusting of governments, and less sensitive to potential stigmatisations of communities from hazards. These positions suggest greater confidence in experts and less confidence in public-dominated social processes. Compared with white males, many
			females and non white males tend to be in positions of less power and control, benefit less from technology and

			institutions, are more vulnerable to discrimination and therefore see the world as more dangerous.
Flynn, Slovic & Mertz, 1994	To explore the relationship between race, gender and risk perceptions.	US national survey of a random sample of 1,512 English-speaking citizens (1,275 white and 214 non white people). The interviews where conducted in 1992 and 1993	White women perceived risks to be much greater than did white men. Gender difference was not applicable to non white women and men. White males tended to differ from everyone else in their attitudes and perceptions –on average they perceived risks to be much smaller and much more acceptable than did other people. The results suggest that socio-political factors such as power, status, alienation and trust are stronger determiners of people's perception and acceptance of risks.
Gutteling & Wiegman 1993	To assess gender differences in appraisal, feelings of insecurity and ways of coping with environmental hazards.	A random sample of 513 Dutch men and women were asked to complete a mailed questionnaire that confronted them with the hypothetical situations of living in a state with soil pollution, near a chemical plant or in the vicinity of a planned site for the storage of radioactive waste.	Women see the hazards as more unacceptable and threatening and report more feelings of insecurity than men.

Hayes & Tariq, 2000	To explore the hypothesis that anti-scientific attitudes among women is due to their greater disinterest and ignorance of scientific developments.	Data of a random sample of citizens from the United States (1,577), Canada (1,467), Great Britain (1,261) and New Zealand (1,271), obtained from the 1993 International Survey Programme, Environment Survey.	In all countries, except for the USA, gender differences in scientific attitudes are due to male-female disparities in educational background and religious beliefs, not to variations in scientific knowledge. In the US case, differences in levels of scientific knowledge explain variations in attitudes toward science.
Hunter, Hatch and Johnson, 2004	To examine cross- nationality gender variations in environmental behaviours	Data from the 1993 International Social Survey involving 22 countries	Women tend to engage in more pro- environmental behaviours than men in many countries, particularly wealthier ones. Both men and women tend to engage in more private environmental behaviours than in public ones.
McStay & Dunlap, 1983	To test the hypothesis that females are significantly more concerned about environmental quality than are males.	Data collected in 1976 using e-mail survey techniques. Samples: 806 residents of Washington State 407 members of a state-wide environmental organisation in Washington State.	The study lends modest support to the hypothesis that women are more concerned about environmental quality than men. However, that modest correlation was found both within the general public and in the environmental sample.
Mohai, 1997	To examine gender differences in environmental concern and	Data obtained in 1980 from a national survey from the U.S. Department of	Results indicate modest differences pointing to women being more concerned about the environment than

	activism.	Agriculture (Survey of the public's attitude towards soil, water and renewable Resources Conservation Policy). 7010 face-to-face interviews: 3255 men and 3755 women. 30 items related to general environmental concerns	men. However, women are less likely to be environmentally active. In addition, women are less engaged in environmental activism than in general political activity. One explanation may be that women as a group face more issues (e.g., social, economic, political equality) than men as a group, and therefore their political activism is more scattered among diverse interests.
Satterfield, Mertz & Slovic, 2004	To explore the linked possibility that the demographic pattern indicating that white males are the group which display less risk perceptions is driven not simply by the social advantages or disadvantages embodied in race and gender, but by the subjective experience of vulnerability and by sociopolitical evaluations pertaining to environmental justice	A US national telephone survey from 1997 to 1998. Random sample of 1,192 citizens	Those who regarded themselves as vulnerable and supported belief statements consistent with the environmental justice thesis offered higher risk ratings across a range of hazards. However, gender remains a robust predictor of risk as does –to a lesser extent- race.
Schahn & Holzer, 1990		Study conducted in 1987 in the Heidelberg region. Sample of 167 German	In the case of citizens, women display higher values in environmental attitudes and behaviour, but know less about environmental problems than men. This

		adults Sample of 105 people active in environmental groups	tendency was not as clear for environmental groups. For both samples women were more environmentally concerned in the areas related to household behaviour, while men knew more about environmental problems.
Smith, 2001	To examine the interconnections between gender, feminism and environmentalism	Self-administered questionnaire involving a sample of 393 college students (Western Kentucky University): 254 female and 139 male	There exists a significant positive relationship between feminism and environmentalism and between gender and politically and politically active environmentalism mediated by feminism.
Somma & Tolleson- Rinehart, 1997	To test ecofeminist arguments. To determine whether any degree of sympathy with feminism and its goals influences proenvironmental attitudes, and if this influence is stronger among women than among men.	Results from 1992 Eurobarometer 1992 American Nation Election Survey 1990-1993 World Values Study	The ecofeminist theory that environmental concerns are biologically determined and that women's childbearing and nurturing roles impel them towards environmentalism is not sustained. But there is support for the ecofeminist claim that feminism exposes one to an alternative analysis of environmental problems.
Zelezny, Poh-Pheng & Aldrich, 2000	To review the results of research on environmental attitudes and behaviour	Analysis of 32 studies on environmental attitudes and behaviour published	Women report stronger environmental attitudes and behaviours than men across different age ranges and in all 14

	between 1988 and 1998	countries considered.
To explore gender differences in environmental attitudes, value-based environmental attitudes and pro environmental behaviours.	Study of a sample of 2,160 people (781 males and 1379 females) including English and Spanish speaking students from Europe, Latin America and the Unites States contacted via professors and administrators from universities throughout the world.	The effect of gender on pro environmental behaviour was consistently stronger than on environmental attitudes. Women had higher levels of socialisation to be other oriented and socially responsible.

The table above is a summary of the specific contributions of each study. The conclusions from these studies will now be organised according to two themes.

The first subsection refers to contributions pointing to gender differences in environmental concerns. Some studies relate to gender differences in degrees of environmental concern. Others point to gender differences in giving priority and framing risks and concerns. Finally, gender differences have also been identified in relation to pro-environmental attitudes and behaviour. All these arguments will be explored in detail.

In addition, I will also pay specific attention to the results that point to an "anomalous" pattern in white males' perception of risk. Interestingly, this is a group of studies that have crossed gender and race as variables of analysis.

The second subsection explores the interpretations of the findings that have been tested statistically. The discussion will develop according to the hypotheses considered:

- Low education level and technical knowledge
- Power inequalities
- Confidence in political and scientific institutions
- Gendered values and beliefs
- Full-time workers and breadwinners versus housewives
- Maternal thinking
- Female caring

The section ends with a table that systematises the discussion and lists the main findings and interpretative hypothesis.

3.1.1. Findings

Finding 1. Degrees of concern

Most of the studies indicate that women tend to be more concerned about environmental issues and technological risks than men (Gutteling and Wiegman 1993; Flynn et al. 1994; Boetzkes, 1998; Finucane et al., 2000; Dietz et al., 2002; Satterfield et al., 2004; Zelezny, Poh-Pheng and Aldrich, 2000). However, while some studies conclude that these differences are moderate (Davidson and Freudenburg, 1996; McStay and Dunlap, 1983; Mohai, 1997) with regards to global environmental concerns and risks, all the studies agree that gender differences are

clear with regards to specific concerns and risks (Blocker and Eckberg, 1989; Bord and O'Connor, 1997). Women's greater environmental concern is also confirmed in the case of participants in environmental groups (McStay and Dunlap, 1983).

Most studies compare men's and women's grades of perception for the same risks. Nevertheless, the hypothesis that gender differences could mean that men and women perceive risks differently, that they give different meaning to risk, and that they prioritise risk in alternative ways has not received much attention (Gustafson, 1998). At the same time, sociological studies are criticised on the basis that androcentric biases in the definition of risk itself exists.

Finding 2. Giving priority and framing risks and concerns

Few studies have explored the argument that men and women prioritise and frame environment-related issues differently. However, the results affirm that gender is relevant in this sense.

Regarding prioritising problems, a study working with data from the American survey of the public's attitude towards the soil, water and renewable resources conservation policy of 1980, revealed that women more often gave higher scores to issues related to environmental problems such as 'how serious a problem is' (e.g. the presence of chemicals in food or a shortage of fresh water) and 'how likely in the future are shortage of... scenic landscapes, lakes and rivers suitable for recreation or unspoiled places for fish and wildlife'. On the other hand, men gave higher scores in questions related to the allocation of resources (Mohai, 1997).

Men more than women accepted potential health risks if financial incentives existed (Boetzkes, 1998), and they were also more likely to think that the protection of the environment could have negative effects on the economy (Caiazza and Barret, 2003).

In relation to the influence of gender on framing problems, Davidson and Freudenburg (1996) noted that while women perceived nuclear power mainly as an environmental issue, men were more likely to think of it as a technical and scientific matter.

Finally, Gustafson (1998) examines a study carried out in Sweden and published in 1996 that investigated risk perceptions through qualitative techniques. The study concluded that female perceptions of risk were more oriented towards the family, and that they were mainly concerned with how risks could negatively affect people close to them. On the other hand, men's concerns were more often linked to their

working life (e.g. the risk of unemployment). They also did not show the same concern for others regarding the possibility of accidents or other physical risks.

Finding 3. Gender differences in pro-environmental attitudes and behaviour

Gender is also relevant when considering the environment-friendly practices of citizens. A study comparing publications from 1988 to 1998 concluded that women show more pro-environmental behaviour than men in most cases (Zelezny, Poh-Pheng and Aldrich, 2000). Women also tend to apply pro-environmental behaviour at home and with the family, while men are more likely to engage in public actions, like signing a petition (Blocker and Eckberg, 1997; McStay, Ridley and Dunlap, 1983).

However, the behavioural tendencies observed for the American population were not fully confirmed in a cross-national examination of twenty-two world nations¹. Women usually engage more easily in environmentally friendly practices than men, particularly in wealthier nations. However, both men and women demonstrated low participation in public activities in general and preferred private actions (Hunter, Hatch and Johnson, 2004). The authors did not explain if there were any differences in the type of private action that each gender engages in.

Interestingly, other studies suggest that women are more likely to adopt strategies related to everyday decisions concerning personal choices (e.g. whether to avoid using the car for small distances), while men are usually more interested in actions that have an impact on other's decisions (e.g. socio-political action) (McStay, Ridley and Dunlap, 1983).

Finding 4. White male's views are "anomalous"

While most studies concentrate on highlighting the differences between men and women in risk perceptions or on the specificity of women's views, very relevant results have also emerged when combining gender and ethnicity (Satterfield, Mertz and Slovic, 2004; Dietz, Kalof and Stern, 2002; Finucane et al., 2000; Flynn, Slovic and Mertz, 1994). Interestingly, white males appear to be the anomalous social group, as white women, and both men and women from marginal ethnic communities, such as blacks and Hispanics, show similar high perceptions of risk.

¹ Countries included in the study were Japan, Norway, the USA, Northern Ireland, Great Britain, the Netherlands, West Germany, East Germany, Ireland, Canada, Australia, Italy, Israel, Spain, New Zealand, Slovenia, the Czech Republic, Hungary, Poland, Russia, Bulgaria and the Philippines.

Overall, non white women are the social group that shows higher risk perception (Finucane et al., 2000). White males trust technology managers more, trust the government less and are less sensitive to the problems that hazards may cause local communities. They also show strong confidence in experts and low acceptance of decisions influenced by the public (Finucane et al., 2000). In consequence, authors of these studies argue that we should stop asking why women show higher environmental concerns and start exploring why white men show such low perceptions of risk (Dietz, Kalof and Stern, 2002).

With the aim furthering the reconstruction of the sociological profile of the anomalous white male group, a study based on diverse US population samples pointed to factors such as the benefit of high household incomes, high education level and conservative political beliefs (Finucane et al., 2000; Flynn, Slovic and Mertz, 1994).

3.1.2. Interpretative hypothesis

Hypothesis 1. Low education level and technical knowledge

Techno-scientific views that affect policy-making on risk issues used to assume that a low educational level and little knowledge about technological and environmental problems are the reasons for the high rates of risk perception as generally women have lower education levels and less technical knowledge than men.

Most studies confirm that generally women show less scientific, political (Hayes and Tariq, 2000; Caiazza and Barret, 2003) and technical knowledge (Davidson and Freudenburg, 1996), but there is no agreement about the supposed cause-effect relationship between education and risk perception: women tend to show higher perceptions of risk irrespective of whether they are poorly or well educated.

A study comparing four Anglo-American nations (the USA, Canada, the UK and New Zealand) showed that women dispose of less knowledge about scientific issues in general. However, the study also demonstrated that scientific knowledge is related to different interests in scientific information. Women are more informed about health issues, while men are better informed about space exploration and new inventions and technology. The authors of the study concluded that high risk perception is most common among people with a low education level combined

with strong religious convictions, a profile which used to include more women than men (Hayes and Tariq, 2000).

With a slightly different aim, a study carried out in Heidelberg in Germany examined gender trends in pro-environmental attitudes and knowledge by comparing lay citizens with environmental activists. The main findings were that women showed more pro-environmental attitudes but at the same time they had lower environmental knowledge. Women were also shown to demonstrate more pro-environmental attitudes in everyday activities. However, the study concluded that gender was insignificant in the case of environmental activists (Schahn and Holzer, 1990).

A study carried out in the Netherlands focused on the feelings of security and ways of coping with risks of men and women with diverse education levels. The study presented three hypothetical scenarios: living in a state with soil pollution, near a chemical plant and close to a radioactive waste dump. As in the US case study, women displayed higher perceptions of risk. The study analysed the hypothesis that a low education level is a feasible explanation for high risk perception. However, it concluded that no empirical evidence could support that premise. Women self-reported their intention to become better informed about specific risks more easily than did men. The authors suggested gender socialisation as a possible explanation for risks concerns: women learn to have more dependent relationships and to express their fears freely, while men are expected to be independent, strong and deny or minimize their anxiety and feelings of threat (Gutteling and Wiegman, 1993).

While in previous studies authors have reached different conclusions regarding whether a low education level explains female perceptions of risk, a study focusing on scientific communities puts this dominant assumption in serious doubt.

A study that compared risk perceptions of male and female physicians and life scientists from Colorado and New Mexico concluded that differences between genders were very marked among physicians, while life scientists of both genders showed high risk concerns.

In general, women and life scientists of both genders tended to have a stronger perception of the negative effects of nuclear risks than male physicians. These differences were also apparent in relation to feelings of confidence that technology would reduce risks of nuclear waste to acceptable levels. Women scientists from the two scientific communities were more reluctant than men to agree to the idea that risks had to be imposed, regardless of the benefits to society, individual

compensation and magnitude of the risk. Again, physicians were more likely to agree to the imposition of risks when comparing men from the two communities (Barke et al., 1997).

Another significant argument that poses problems for the low education and technical knowledge hypothesis develops from analysing risk conflicts. Technoscientific world views that predominate in policy-making usually assume that better knowledge of specific technology will automatically mean lower perception of the risks this may entail. In other words, they suppose that a citizens' risk concern is a direct consequence of ignorance about that technology. Consequently, it is assumed that if citizens are properly informed risk perception will automatically reduce. However, people who show the highest levels of risk perception of specific technology (like environmental activists) also usually display a high level of knowledge about it and they also use diverse sources of information (Davidson and Freudenburg, 1996).

Moreover, it has been demonstrated that offering more information about technology does not always help to calm the anxiety of affected populations. This is mainly because scientific and technological applications are used to dealing with uncertainties about their secondary effects and the technical information needed to deal with this controversial situation does not exist (this idea is explored further in chapter 4).

Hypothesis 2. Power inequalities

While most studies have concentrated on explaining women's trends in risk perceptions, others have focused on interpreting the anomalous results observed for white males. The so-called 'white male effect' has been explained by pointing to the privileged power position of that social group (Dietz, Kalof and Stern, 2002). In this hypothesis risk perception is related to different levels of decision power. As white males are more involved in creating, managing and benefiting from technology they would probably feel that it is less dangerous. On the other hand, people defending social equity and community-based decisions would see higher risks related to technological development (Finucane et al., 2000; Flynn, Slovic Mertz, 1994).

Vulnerability and discrimination have also been highlighted as predictors of high risk concerns. However, while these two conditions explain high risk perceptions in the case of ethnic groups, results indicate that they cannot be used to interpret gender tendencies (Satterfield, Mertz and Slovic, 2004).

A complementary interpretation sustains that the marginal position that women and ethnic groups occupy in society lead to a specific world view based on everyday survival, more confidence in common resources and greater mistrust of the benefits of the market. In contrast, white males tend to perceive lower risks because of their powerful position. Even in the case of white men who are affected by economic disadvantages or exposed to risky hazards, their greater identification with the dominant ideology would mean that they have a higher acceptance of risk (Dietz, Kalof and Stern, 2002).

Hypothesis 3. Confidence in institutions

Gender tendencies in environmental concerns have also been explained by different levels of trust in institutions. Generally, it is assumed that little confidence in institutions leads to a higher perception of the risks associated with technological and industrial development.

Although in a German study women were found to have more confidence in science and technology than men (Gutteling and Wiegman, 1993), generally women tend to display a more sceptical attitude towards government, science and technological institutions. Therefore, this hypothesis has been significantly supported by empirical studies (Davidson and Freudenburg, 1996). Similarly, women's stronger mistrust of science and technology combined with higher perceptions of risk, have been pointed to as hypotheses of the conditions that inspire women to engage in environmental activism (Caiazza and Barret, 2003).

Nevertheless, the 'trust in institutions' hypothesis sheds little light on the issue. Indeed, it does not explain why men and women show different tendencies in risk perceptions and environmental concerns. In a practical sense, the institutional mistrust hypothesis leads us to question why women have less confidence in formal representative powers. It also suggests that mistrust could be linked to the power inequities hypothesis mentioned above.

Hypothesis 4. Gendered values and beliefs

Following the argument that low risk perceptions is associated with the world view of a privileged social group, some studies have focused on identifying the values and beliefs that predominate among white males.

Empirical evidence has shown that in America white males give less importance to altruism, openness to change, traditionalism and self-interest than other less

powerful social groups (white women, and Hispanic and black men and women) (Dietz, Kalof and Stern, 2002). They have also shown that white men tend to agree more with hierarchic, individualistic and anti-egalitarian views (Finucane et al., 2000).

In contrast, women show higher 'altruistic' values than men regarding the negative impact of poor conditions on themselves, their families and other people as well as on ecosystems and human-life. This explains certain tendencies in women's environmental concerns (Stern and Dietz, 1994; Dietz, Kalof and Stern, 2002).

Similarly, a study carried out on a random sample of white adults in the USA concluded that women see values such as universalism, concern for others and security as fundamental in their lives. These values were identified by asking about items strongly linked with pro-environmental attitudes, such as preventing pollution, unity with nature, respecting the earth, equality, social justice, family security and sense of belonging (Dietz and Kalof, 2002).

Significantly, more nuanced results have emerged as a result of further investigation into the hypothesis of a female value system. Women, who are generally more concerned with peace, gender and racial equality, and quality of life, tend to display pro-environmental beliefs. They are also more likely to be involved in environmental groups. In addition, although female environmental activists tend to neither identify themselves as feminists nor link their environmental concerns with feminism, women who identify with feminism are much more likely to support pro-environmental movements (Caiazza and Barret, 2003; Smith, 2001; Somma and Tolleson-Rinehart, 1997).

Hypothesis 5. Full-time workers and breadwinners versus housewives

Other studies have focused on whether men and women in full-time paid work, and who are therefore more involved in economic activities, place more importance on the economy than the environment. This hypothesis is not confirmed (Davidson and Freudenburg, 1996).

A variation of this hypothesis proposes that the homemaker status of women means that they are more concerned with issues related to health and security and that men's role as breadwinners explains why they give more importance to economy related issues. This hypothesis has no empirical support (Mohai, 1997), although results are mixed (Boetzkes, 1998; Caiazza and Barret, 2003).

Some results suggest that mothers and housewives do not display any specific proenvironmental attitudes. It has also been found that women's full-time employment in the workforce is a stronger predictor of pro-environmental attitudes than women's commitment to home-making. These findings have also helped to discard the 'maternal thinking' hypothesis explained below (Blocker and Eckberg, 1989; Caiazza and Barret, 2003).

Hypothesis 6. The 'maternal thinking' hypothesis

Some sociological studies point to the maternal thinking hypothesis as a way to explain women's environmental concerns. This hypothesis claims that the caring role developed by mothers mean that women are more concerned about the negative consequences of environmental degradation.

Positivistic studies do not reach a consensus regarding this hypothesis. They assume that "maternal thinking" would involve women (and men) with children showing more concern for the environment than those without children, and that housewives would be more sensitive to environmental problems than women working in public domains. However, studies that have analysed whether maternity and paternity are variables correlated with high perceptions of risk show contradictory results (Mohai, 1997; Caiazza and Barret, 2003). The focus of the hypothesis is probably rather erroneous.

On the one hand, results of this hypothesis are probably radically different when studying patterns of population in general or when focusing on local environmental conflicts. Indeed, a study comparing diverse bibliography concluded that there is no direct relationship between maternity and environmental concern, except in the case of local environmental hazards where women with young children show the highest perceptions of risk (Davidson and Freudenburg, 1996)

On the other hand, the positivistic approach is rather reductionist and misunderstands the complexity of caring roles in women's identities. It ignores the relevant distinction between motherhood and mothering. The former concerns the practical work of bearing children. Many but not all women become mothers and furthermore they are more involved in this role during a specific period of their life which coincides with when their children are young. The latter, however, refers to the social and cultural role of taking care of others, which is strongly embedded in the traditional identity of femininity shaping the experiences of most women throughout their lives, but mainly during adulthood, as "sisters, wives, mothers,

and daughters of" (this argument will be explored again in chapter 7). In line with the second interpretation gender differences in risk perceptions should be investigated by considering caring as a fundamental aspect of the female identity, and should involve women in diverse social, familiar, professional and economic circumstances, as the following hypothesis suggests.

Hypothesis 7. Female caring

The caring hypothesis differs from the maternal thinking hypothesis in that it is based on gender ideology rather than on the gender specific role of motherhood. It considers that women display stronger environmental concerns because of their social and cultural premises and roles as carers, and not because they have children or not. In this hypothesis the environmental concerns of women are shaped by the more specific concerns of health and safety.

Significantly, a research project that compared different publications about hypotheses concerning gender differences in risk perceptions concluded that the "carer" hypothesis was confirmed by all of the studies considered. The authors also concluded that this hypothesis was the most important one of all: «In a broad range of studies, using a broad range of measurement techniques, the consistent finding has been that women do indeed express higher levels of concerns than do men, not because they know less but because they care more» (Davidson and Freudenburg, 1996: 328).

Non-tested hypothesis

Other arguments have been raised at a theoretical level but they have not been tested in empirical studies.

One hypothesis argues that our dominant culture tends to attach an instrumental value to the environment. However, women's values, roles and life experiences tend to resist that logic of appropriation. According to this value system, women are more likely to emphasize the intrinsic value of nature and to avoid its commodification (Boetzkes, 1998).

Interestingly, another argument has suggested that people, particularly women, do not tend to follow the cost-benefit reasoning that is used in traditional decision-making when evaluating a risk. Their specific mechanism to evaluate risk inevitably means that they place more importance on the consequences than on the possibility of the risk happening.

In a series of studies about how women make reproductive decisions under the risk of a genetic anomaly, Lippman-Hand and Fraser (1979) found that women approach their decisions bivalently, that is, saying "Either my child will be anomalous or not" rather than focus on the probability of a negative outcome, asking themselves such questions as "How will I cope with a challenged infant?", "How do other women manage?", and "Am I a good enough mother to raise a child with a genetic disorder?" as they sought out the narratives of other women who had made such decisions. Narratives, moral imagination, and scenarios were essential to their decision-making and probabilities seemed irrelevant (Boetzkes, 1998: 165).

The disclosing of different rationalities to evaluate risk emphasises the partial view intrinsic to dominant technical approaches. This suggestion is further developed in the conclusion.

Table 3.2. Synthesis of findings of gender differences in risk perceptions and environmental concerns in American sociological studies

Findings	Conclusions
1. Degrees of concern	Women tend to be more concerned about environmental issues and technological risks than men (Gutteling and Wiegman 1993; Flynn et al. 1994; Davison and Freudenburg, 1996; Boetzkes, 1998; Finucane et al., 2000; Dietz et al., 2002; Satterfield et al., 2004; Zelezny, Poh-Pheng and Aldrich, 2000) Women's greater environmental concerns are also confirmed in the case of participants in environmental groups (McStay and Dunlap, 1983)
2. Prioritisation and framing of risks and concerns	Women tend to give higher scores to issues related to 'how serious a problem is' and 'how likely in the future are shortage of scenic landscapes, lakes and rivers suitable for recreation or unspoiled places for fish and wildlife', while men show higher scores in questions related to the allocation of resources (Mohai, 1997) Men accept potential health risks if there are financial incentives to a significantly greater degree than women. Men tend to perceive that the protection of the environment may have negative effects on the economy (Boetzkes, 1998; Caiazza and Barret, 2003) Nuclear power is perceived by women mainly as an environmental issue, while men are more likely to see it as a technical and scientific matter (Davidson and Freudenburg, 1996)
4. Confidence in governments, business, science and technology	Women tend to have less confidence in governments, business, science and technology and are more critical of their roles in protecting the environment, especially in the case of environmental activists (Caiazza and Barret, 2003; Davidson and Freudenburg, 1996) Women associate more risk and less benefit with scientific development (Davidson and Freudenburg, 1996)

4. Pro- environmental attitudes and behaviour	Women show more pro-environmental behaviour than men (Zelezny, Poh-Pheng and Aldrich, 2000). Women tend to apply pro-environmental behaviour at home and with the family, while men tend to engage in public actions like signing a petition (Bloker and Eckberg, 1997; McStay and Dunlap) In political terms both men and women tend to prefer private actions and both genders show low participation in public activities in general (Hunter, Hatch and Johnson, 2004). Women are more likely to adopt strategies related to everyday decisions to do with personal choices (e.g. to avoid using the car for small distances), while men tend to be more interested in actions that affect other's decisions (e.g. socio-political action) (McStay and Dunlap, 1983).
5. White male's views are "anomalous"	White males display lower risk perception compared to white women, and men and women from ethnic marginal communities such as blacks and Hispanic (Satterfield, Mertz and Slovic, 2004; Dietz, Kalof and Stern, 2002; Finucane et al., 2000; Flynn, Slovic and Mertz, 1994) White males trust technology managers more, mistrust the government, and are less sensitive to the problems hazards may cause to local communities. They also have strong confidence in experts and low acceptance of decisions influenced by the public (Finucane et al., 2000) White males showing low risk perception rates are characterised by having high incomes, being well educated and having conservative political beliefs (Finucane et al., 2000; Flynn, Slovic and Mertz, 1994)

Table 3.3. Synthesis of results of testing diverse interpretative hypothesis about risk perceptions and environmental

concerns in American sociological studies

Hypot hesis	Confirm ed?	Findings
1. Low educati on level	No	Generally, women display less scientific, political, and technical knowledge than men (Caiazza and Barret, 2003; Davidson and Freudenburg, 1996) Scientific knowledge is related to different interests in information (women - health issues / men - space exploration, new inventions and technology). A sociological background combining low education level and strong religious beliefs could explain high rates of risk perception (Hayes and Tariq, 2000) Low education level does not explain women's higher perceptions of risk. Among well educated people (physicians and life scientists) gender continues to be a predictor of high risk perception (Barke et al., 1997; Davidson and Freudenburg, 1996; Flynn, Slovic and Mertz, 1994)
2. Low technol ogical knowle dge	No	A high degree of knowledge about technology is sometimes related to high levels of perception of the risks associated with it (e.g. the case of environmental activists) (Davidson and Freudenburg, 1996)

3. Power inequal ities	Yes	Because white males are more involved in creating, managing and benefiting from technology they feel technology is less dangerous. People defending social equity and community-based decisions see higher risks related to technological development. (Finucane et al., 2000; Flynn, Slovic and Mertz, 1994) Vulnerability and discrimination are predictors of high risk concerns but they do not explain tendencies in women's opinions (Satterfield, Mertz and Slovic, 2004) Women and ethnic groups have a perspective that is based on everyday survival, a higher degree of confidence in common resources and greater mistrust of the benefits of the market. White men are less critical about current developmental trends because of their privileged power position. White men who are affected by economic disadvantages or exposed to risky hazards also strongly identify with the dominant ideology and display lower perceptions of risk. (Dietz, Kalof and Stern, 2002)
4. Trust in institut ions	Yes	Women trust the government, science and technological institutions less than men. (Davidson and Freudenburg, 1996; Hayes and Tariq, 2000)) Women's greater mistrust of science and technology together with high perceptions of risk may explain why women engage in environmental activism. (Caiazza and Barret, 2003)

5. Gender ed values and beliefs	Yes	White males tend to place less importance on altruism, openness to change, traditionalism and self-interest. (Dietz, Kalof and Stern, 2002) White males agree more readily with hierarchic, individualistic and anti-egalitarian views. (Finucane et al., 2000) Women have higher 'altruistic' values than men regarding the negative effects of poor conditions on themselves, their families and other people as well as on ecosystems and human-life. (Stern and Dietz, 1994; Dietz, Kalof and Stern, 2002) Women's values are characterised by universalism, concern for others and security. These values are fundamental in their lives and in their concern for the environment. (Dietz and Kalof, 2002) Women concerned about peace, gender and racial equality, and quality of life, tend to more readily hold pro-environmental beliefs and are more likely to engage in environmental groups (Caiazza and Barret, 2003). Women who identify with feminism are much more likely to support pro-environmental movements (Somma and Tolleson-Rinehart, 1997; Smith, 2001)
6. Full- time worker s and breadw inners versus housew ives	No	The hypothesis that the homemaker status of women mean that they are more concerned with issues related to health and security, while men's roles as breadwinners explain why they place more importance on economy-related issues is also not confirmed (Mohai, 1997, Boetzkes, 1998; Caiazza and Barret, 2003) Mothers and housewives do not show any specific pro-environmental attitudes. Women's full-time employment in the labour force is a stronger predictor of pro-environmental attitudes than women's full-time commitment to home-making (Blocker and Eckberg, 1989; Caiazza and Barret, 2003)

7. The matern al thinkin g hypoth esis	Disagree ment	The hypothesis that maternity and paternity are variables correlated with high perceptions of risk shows contradictory results (Mohai, 1997; Caiazza and Barret, 2003) There is no direct relationship between maternity and environmental concern, except in the case of local environmental hazards where women with young children display the highest perceptions of risk (Davidson and Freudenburg, 1996)	
8.	Yes	- The "carer" hypothesis, which assumes that health and safety are salient concerns for women, is the most	
Female		robust of all (Davidson and Freudenburg, 1996)	
caring			
Non-	Our dominant culture tends to attach an instrumental value to the environment. However, women's values, roles and		
tested	life spaces resist that logic of appropriation. They are more likely to emphasize the intrinsic value of nature and to avoid		
hypoth	its commodification. (Boetzkes, 1998)		
esis			
	People, par	ticularly women, approach decisions bivalently rather than probabilistically as traditional decision-making	
	does. This specific mechanism to evaluate risk inevitably means that the risk is perceived as being higher than in		
	technical-inspired decision-making. (Boetzkes, 1998)		

3.2. Male and female views on the environment, science and technology in Europe

I have already mentioned that few studies have focused on gender differences in risk perceptions and environmental concerns in Europe. For this reason I consider it relevant to examine other sources of information to help construct a better picture of the issue. In particular, in this section we will explore documents published by Spanish and European governmental institutions about citizen's opinions of science and technology, focusing on information related to gender and relevant to environmental topics.

In the case of Spain the information comes from the Spanish Foundation of Science and Technology (FECYT). Conclusions of three national surveys carried out in 2002, 2004 and 2006 are published. However, gender segregation in the collective and classification of data was almost absent in the 2002 survey (Pérez-Sedeño, 2002), which limits the possibility of using the first pool for comparing results.

For Europe, we consider two reports published by the European Commission: the reports on "Science, Technology & Social Values" and "Europeans, Science and Technology", both from the 2005 Eurobarometer.

From January to February 2005 the opinions of citizens from the twenty-five member states, together with the 4 candidate countries (Bulgaria, Romania, Croatia and Turkey) and the 3 EFTA countries (Iceland, Norway and Switzerland), were collected. The questions were related to the social impact of science and technology. The information was processed and the data separated according to sexes.

Nevertheless, gender was not integrated into the design of the survey in either the Spanish or the European information sources. Consequently, although the information obtained provides a relevant picture of the influence of gender on the opinions of citizens we should bear in mind that more significant and precise information would be obtained if gender was a driver of some of the questions included in the questionnaires.

However, the information obtained from both geographical contexts suggests that there are two different gendered biases concerning environmental issues and the social role of science and technology. This hypothesis is examined below.

3.2.1. Confronting (gendered) biases: science and technology versus ethics and society

Even though the 2002 report compiled by the FECYT did not consider the gender dimension, it concluded that more women than men were included in the segment of population classified as the "enthusiastic pro-scientific or pro-technological group". This group included citizens with low levels of scientific and technological knowledge who were uncritical about information provided by the mass media. They also had higher expectations of the contributions science and technology could bring to society in the future, especially in relation to medicine and health (Pérez-Sedeño, 2002).

However, the study carried out in 2004, which addressed the issue of gender more directly, highlighted the fact that in relation to the perception of the benefits that science and technology could bring to social progress and welfare, "although all enquired showed more a positive than negative view, women were less optimistic (or at least more sceptic)" than men (Pérez-Sedeño, 2005: 201)³. The results of the 2006 survey were very similar for men and women: slightly more men (46.6%) than women (43.2%) considered that the benefits obtained from science and technology outweighed the harmful effects (Radl, 2007).

The results of the 2004 Spanish report are similar to the opinions that both men and women expressed in the two Eurobarometers of 2005.

The results of the report on "Europeans, science and technology" show that European women are no more critical of science and technology than men; however, they are more sceptical.

Table 3.4. Views of science and technology: hopes, expectations and confidence

Statement	Answer	Women	Men
1. Science and technology make our lives	Agree	75%	81%
healthier, easier and more comfortable	Disagree	8%	5%

² Author's translation of Pérez-Sedeño (2005: 201).

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³ 44.4% of women and 49.5% of men think that the benefits from science and technology outweigh any harmful effects; 34.2% of women and 32.4% of men believe that the benefits and the harmful effects are the same, and 12.2% of women and 12% of men think that the harmful effects outweigh the benefits (Pérez-Sedeño, 2005).

2. Thanks to scientific and technological advances, the Earth's natural resources will	Agree	19%	24%
be inexhaustible	Disagree	60%	55%
3. Science and technology cannot really play a	Agree	29%	27%
role in improving the environment	Disagree	46%	54%
4. Science and technology can sort out any	Agree	22%	23%
problem	Disagree	51%	55%
5. New inventions will always be found to counteract any harmful effects of scientific	Agree	56%	59%
and technological development	Disagree	18%	12%
6. Scientific and technological progress will help to cure illnesses such as AIDS, cancer,	Agree	87%	89%
etc.	Disagree	4%	3%
7. Science and technology will help eliminate poverty and hunger around the world	Agree	35%	42%
	Disagree	40%	34%
8. One day science will be able to give a complete picture of how nature and the	Agree	47%	53%
universe work	Disagree	27%	25%

Source: Author's processing of "Eurobarometer special n° 224. Europeans, science and technology" (January 2005)

The eight statements examined in the table refer to citizen's views of the role of science and technology today and their confidence in science to face the main challenges of contemporary society. In general, the results suggest that European citizens have a positive view of the role of science, but they also see clear limits to its potential to resolve any kind of problem, particularly in relation to environmental issues (statements 2 and 3) and to global problems with a strong socio-political content (statements 5 and 7). Significantly, the area in which European citizens display a higher degree of confidence in science is in medical sciences. On the other hand, Europeans are less optimistic about the capacity of science to understand the natural world (statement 8).

From a gender point of view differences are not radical, but in most of the statements women express slight more critical views than men. However, for the fourth and sixth statements the results of men and women are very similar.

The highest discrepancy between genders is in statement 3 where women show a more sceptical attitude towards the role of science in improving the environment. Likewise, compared to men fewer women agree and more disagree with the statement that scientific and technological advances will make natural resources inexhaustible. Women also assess the capacity of science and technology to solve the problems of world poverty and hunger-a major social concernmore negatively than men.

Other questions were designed to assess European's perceptions of scientific and technological risks.

Table 3.5. Scientific and technological risks

Statement	Answer	Women	Men
9. The benefits of science are greater than any harmful effects it may have	Agree	49%	56%
	Disagree	14%	14%
10. Science and technology are responsible for most of the environmental problems we have today	Agree	57%	57%
	Disagree	18%	22%
11. Food made from genetically modified organisms is	Agree	59%	48%
dangerous	Disagree	11%	17%

Source: Author's processing of "Eurobarometer special nº 224. Europeans, science and technology" (January 2005)

Most citizens displayed a high perception of risks in matters related to science and technology (statements 10 and 11), although globally a small majority also assessed science and technology as providing more benefits than harmful effects, while a small percentage stated the opposite.

The slight critical attitude of women was again apparent. Women were more concerned about the negative consequences of science and technology than men,

and women also displayed clear opposition to Genetically Modified Organisms (GMOs).

Other questions included in the survey were related to ethical considerations and scientific responsibility.

Table 3.6. Ethical considerations and scientific responsibility

Statement	Answer	Women	Men
12. Scientists should be allowed to experiment on animals like dogs and monkeys if this can help resolve human	Agree	39%	52%
health problems	Disagree	38%	28%
13. Because of their knowledge, scientists have a power	Agree	58%	59%
that makes them dangerous	Disagree	20%	22%
14. Research conducted by industry is well controlled and	Agree	34%	38%
regulated	Disagree	30%	34%
15. The authorities should formally oblige scientists to	Agree	79%	78%
respect ethical standards	Disagree	6%	7%
16. Scientists should be free to carry out the research they	Agree	71%	73%
wish provided they respect ethical standards	Disagree	11%	10%
17. There should be no limit to what science is allowed to	Agree	32%	41%
research	Disagree	47%	39%
18. If new technology poses a risk that is not fully understood, the development of this technology should be	Agree	53%	49%
stopped even if it offers clear benefits	Disagree	18%	25%
19. Europeans should be less concerned about ethical	Agree	29%	34%
issues related to modern science and technology	Disagree	40%	39%

Source: Author's processing of "Eurobarometer special nº 224. Europeans, science and technology" (January 2005)

Generally, results again show that Europeans consider that ethical issues related to science and technology are relevant, while women express stronger support in this sense.

Interestingly, while both genders agree that ethical considerations should guide scientific activity (statement 16), and both recognise the power held in scientific hands (statement 13), it is women who are more in favour of introducing restrictions to scientific activity (statements 17 and 18) and who attach more relevance to ethical issues (statement 19).

However, the largest discrepancy between the views of men and women is in relation to using animals in laboratories; a significant number of men are in favour of this practice, while women are in similar numbers in favour and in opposition.

The results of statement 18 also show that women tend to agree more with the precautionary principle than men. This input is relevant to addressing decision making in situations of high scientific uncertainty.

Other questions related to science and society communication and to the role of diverse agents in the decision-making process illustrate the opinion of European citizens as to the involvement of society in environmental governance.

Table 3.7. Science-society communication and political decision-making

Statement	Answer	Women	Men
20. In my daily life it is not important to know about	Agree	40%	34%
science	Disagree	42%	50%
21. For people like me it is not important to be involved in	Agree	40%	38%
decisions about science and technology	Disagree	39%	42%
22. The public is sufficiently involved in decisions about science and technology	Agree	19%	21%
	Disagree	57%	59%
23. Scientists put too little effort into informing the public	Agree	58%	59%
about what their work entails	Disagree	16%	17%
24. Politicians should rely more on the advice of expert	Agree	71%	75%
scientists	Disagree	7%	7%

Source: Author's processing of "Eurobarometer special n° 224. Europeans, science and technology" (January 2005)

On the one hand, women show that they feel more distanced from science than men in their everyday life. However, both men and women in similar numbers consider that they should be involved in decision-making about science and technology, although the same number of men and women state the contrary (statement 21). Likewise, both genders consider science communication with society to be insufficient (statement 23), and both think that expert advice is relevant to the decision making process (statement 24).

Finally, some questions were related to topics that revealed the opinions of Europeans about a social development model based firmly on science and technology.

Table 3.8. Conformity with the development model

Statement	Answer	Females	Males
25. Only by applying the most advanced technology can	Agree	59%	69%
our economy become more competitive	Disagree	14%	13%
26. We depend too much on science and not enough on faith	Agree	42%	37%
	Disagree	27%	32%
27. Science makes our way of life change too fast	Agree	62%	57%
, , , , ,	Disagree	19%	22%
28. If we attach too much importance to risks that are not yet fully understood we will miss out on technological	Agree	49%	53%
progress	Disagree	18%	19%

Source: Author's processing of "Eurobarometer special nº 224. Europeans, science and technology" (January 2005)

These results indicate that the prevalent role given to science in current society is not fully shared by many women. Women agree in higher numbers than men that our society relies too much on science and too little in faith (statement 26). The results that are going to be presented later also indicate that women are more religious and spiritual than men.

Women also consider a little more often than men that society changes too fast due to scientific advancements(statement 27). In addition, although in all European countries most citizens consider that technology is essential for economic development, women clearly show less support for this statement (25) than men.

These opinions prompt interesting questions in relation to the issues that European women would give priority if asked what the most relevant aspects of the model of development guiding our society should be.

The tendencies observed in the "Europeans, science and technology" report are complemented by the results published by the survey on "Science, technology and social values". In this study some of the same topics are addressed again, while some new questions enable us to get a more complete picture of European's views.

Table 3.9. Gender tendencies in the views of European citizens about ethical and decision matters related to the environment, science and technology (Eurobarometer 2005)

Women and men's opinions	Issues	Women	Men
Women were more likely to agree with the following statements	Decisions about science and technology should be primarily based on the moral and ethical issues involved	34%	31%
	Do not approve under any circumstances of cloning animals for research into human diseases	37%	25%
	Disapproval of growing meat from cell culture so that we do not have to slaughter farm animals	57%	52%
	Disapproval of developing genetically modified crops to increase the variety of regionally grown food	41%	33%
	We have a right to exploit nature	40%	47%
	Exploiting nature may be inevitable if humankind is to progress	48%	53%
Men were more likely to agree with the	Science and technology decisions should be based primarily on a risk-benefit analysis	49%	58%
following statements	Decisions about science and technology should be primarily based on the analysis of the risks and benefits involved	49%	58%

Science and technology decision- making should be primarily based on the advice of experts about the risks and benefits involved	63%	69%
Advances in biotechnology and genetic engineering will have a positive effect on our way of life in 20 years' time	62%	69%
High-tech agriculture will have a positive effect on our way of life in the next 20 years	63%	70%
Nuclear energy for electricity production will have a positive effect on our way of life in 20 years' time	49%	55%
Accept cloning animals for research into human diseases only if it is highly regulated and controlled	31%	39%

Women and men's opinions	Women	Men
Cloning human beings and cloning human stem cells	Are more likely to oppose	Are more likely to be in favour
Various uses of genetics ⁴	Are more likely to oppose	Are more likely to be in favour

Source: Author's processing of information provided by EUROSTAT, Eurobarometer 2005: Social Values, Science and Technology

[http://ec.europa.eu/public_opinion/archives/ebs/ebs_225_report_en.pdf]

Table 3.9 shows that in a number of cases the gap between the opinions of the two sexes is relevant: more women compared to men "do not approve under any circumstances of cloning animals for research into human diseases" (12 points difference) and also disapprove "developing genetically modified crops to increase the

caught more easily; storing all the genetic data of our population in data banks in order to study the

genetic causes of human diseases (Eurobarometer, 2005: 90)

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⁴ Developing a development test for children that would identify their talents and weaknesses; developing genetic treatment that would prolong our life expectancy by 25 years; developing a genetic test for everybody that would tell us which diseases we might get, even if we cannot do anything about them; developing genetic treatment to stop people's bad habits like smoking or alcoholism; using genetic testing to create a child that could act as a bone-marrow donor for a brother or sister who has a life threatening disease; storing everyone's genetic data so that criminals can be

variety of regionally grown food" (8 points difference) and are less in favour with the statement "We have a right to exploit nature" (7 points difference).

Gendered tendencies are also significant in relation to how decisions should be taken: men are more often than women in favour that decisions should be taken primarily on a risk-benefit analysis (9 points difference) and on the advice of experts (6 point difference). Men are also more likely to believe on the positive effect in our societies of advances in biotechnology and genetic engineering (7 points difference), high-tech agriculture (7 points difference) and nuclear energy for electricity (6 point difference).

Women also appear more likely to oppose "cloning human beings and cloning human stem cells" and the "various uses of genetics".

Although these results have shown that the differences between the opinions of men and women are not radical, if we consider the coherence of the specific results for the answers of men and women we can point to two biases.

We can identify a *scientific and economy bias* to which men are more likely than women to attach. People included in this bias would:

- (1) Put a stronger emphasis on economic and technological development than on the environment
- (2) Be more readily in favour of expert sounded decisions legitimised by scientific methods
- (3) Have more confidence in the benefits that technological development may bring to society, and tend to under-value the possible risks they carry
- (4) Tend to see technological progress as a natural destination of society (scientific and technological development is seen as synonymous with social development)

Alternatively, an *ethical and social bias* tends to be more often appealing to women than to men. People in this bias would:

- (1) Tend to show great concern about health issues
- (2) Have more doubts about the social legitimacy of environmental exploitation
- (3) Place more emphasis on moral and ethical issues as relevant aspects of decision making about science and technology

- (4) Tend to disapprove of various technological applications because of their ethical and social implications (such as animal cloning, genetics, growing meat from cell culture or genetically modified crops)
- (5) Be more sceptical about the social benefits of scientific and technological development

Interestingly, other results presented in the Spanish and the European surveys allow us to discuss interpretations about the differences between these two biases, and to present a more detailed picture of the interests and values that prevail behind them.

3.2.2. Interpretations of gender tendencies in the two suggested biases

We have already highlighted diverse interpretations to explain gender tendencies in environmental concerns and risk perception from the Anglo-Saxon bibliography. Similarly, we will now examine the results obtained by the Spanish and European surveys that enable further discussion about the two biases mentioned above and their gender significance:

- Gender tendencies in interests in technological and scientific information
- Gender biases in scientific knowledge
- Women's religious, philosophical and social motivations

Gender tendencies in interests in technological and scientific information

The results of the report on "Europeans, science and technology" suggest that generally women have less interest in science and technology and in new scientific discoveries. Women show less concern about new inventions and technology. The main reasons for this disinterest are that they do not understand and do not worry much about these issues. However, women show a very string interest for medicine. They are also quite interested in the environment, as men also do.

Table 3.10. Women and men's feeling of engagement in science and policy (Eurobarometer 2005)

Issues	Females	Males
Very interested in new inventions and technology	21%	40%
Very interested in new scientific discoveries	25%	36%
Reasons for disinterest in science and technology	Females	Males
Have no time	10%	14%
Do not understand it	34%	30%
Do not care about it	30%	34%
Interests in science and technological developments	Females	Males
Medicine	73%	50%
The internet	22%	36%
The environment	50%	45%
Astronomy and space	16%	30%
Genetics	28%	18%
Nano-technologies	4%	12%
Economic and social sciences	22%	25%
Humanities	34%	26%

Source: Author's processing of information provided by EUROSTAT, Eurobarometer 2005:

Europeans, Science and Technology

[http://ec.europa.eu/public_opinion/archives/ebs/ebs_224_report_en.pdf]

More results point to the lower level of interest and awareness of science and technology of European women compared to men. Women self-report to be less informed about science and technology than men:

Table 3.11. Scientific awareness by gender (Eurobarometer 2005)

Issues		
Informed about new inventions and technology	Women	Men
Very well informed	7%	16%
Moderately well informed	50%	56%
Poorly informed	41%	27%
Informed about new scientific discoveries	Women	Men
Very well informed	7%	13%
Moderately well informed	49%	53%
Poorly informed	42%	33%

Source: Author's processing of information provided by EUROSTAT, Eurobarometer 2005: Europeans, Science and Technology [http://ec.europa.eu/public_opinion/archives/ebs/ebs_224_report_en.pdf]

At first glance the European survey suggests that women's low interest and lack of scientific and technical knowledge explain why they are less likely to support the 'scientific and technology guided' bias. Their ignorance about how science and technology works could lead them to be highly concerned about the potential degradation of nature and the negative effects of technological risks. However, other observations provide an alternative and more nuanced view.

Table 3.10 shows that the low interest level that European women have in science and technology is not true with regards to medicine (73% of women and 50% of men express concern about this issue) and the environment (50% of women and 45% of men expresses interest in this).

The 2004 Spanish survey shows complementary results. When the survey asked about the interest in science and technology, women were significantly less interested than men. However, both sexes were also not very interested in environmental and ecology-related information.

Table 3.12. Gender differences in interests in information for the Spanish population (2004)

Item	Women	Men
Are interested in information related to the environment and ecology	10.4%	11.03%
Are interested in information related to science and technology	4.6%	9.4%
Consult popular scientific magazines and books on science and technology	5.8%	8.5%
Like to read books on ecology and the environment	3.1%	3.3%

Source: Author's processing of information provided by Pérez-Sedeño (2005).

Nevertheless, the surveys also reveal specific female interests in scientific information, similar to the European results. When Spanish citizens were asked about their interest in general information a significant gender gap emerged. Sport was the first and main interest for Spanish men, followed by culture. Female interests were mainly focused on medicine and health, and balanced between food and consumption and culture (Pérez-Sedeño, 2005). The importance that women attach to medicine and health had already been observed in the 2002 survey (Pérez-Sedeño, 2002).

Table 3.13. Gender differences in main interests in general information for the Spanish population (2004)

Women	Men
1. Medicine and health - 29.5% 2. Food and consumption - 20.2% 3. Culture - 18.8%	1. Sport – 50% 2. Culture – 18.4%

Source: Author's processing of information provided by Pérez-Sedeño (2005).

Results from the Spanish 2006 survey indicate similar results: women are mainly interested in medicine and health, and food and consumption. However, their

interest in scientific and technological information is clearly low. On the contrary, men's interest in health and medicine and in food and consumption is just under half that of women. Men show much more interest in science and technology than women, although general percentages for these are still rather low. Significantly, the gender gap regarding interest in education is also quite relevant, as women put that item in fourth place, while it is in tenth position in men's interests.

Table 3.14. Gender differences in main interests in general information for the Spanish population (2006)

Women	Men		
1. Medicine and health – 34.2%	1. Sport – 50.7%		
2. Food and consumption - 26.1%	2. Cinema and shows - 19.2%		
3. Cinema and shows - 20.9%	3. Politics – 18.5%		
4. Education – 19.8%	4. Medicine and health – 18.1%		
5. Art and culture - 18%	5. Accident and crime reports – 15.3%		
6. Accident and crime reports - 16.7%	6. Art and culture – 15%		
7. Environment and ecology - 12,5%	7. Environment and ecology - 13,5%		
8. Travel and tourism - 12%	8. Science and technology - 13.3%		
9. Sport – 10.4%	9. Food and consumption – 12,2%		
10. Terrorism – 9.7%	10. Education – 10.9%		
11. Politics – 8.7%	11. Travel and tourism - 10.1%		
12. Celebrities – 8.6%	12. Terrorism – 9.9%		
13. Science and technology – 6.1%	13. Celebrities – 1.5%		

Source: Author's processing of information provided by Radl (2007).

Interestingly, the two items ranked as the most relevant by the majority of Spanish women (medicine and health, and food and consumption) are relevant to the type of environmental and technological controversies that currently affect our societies (for instance, mad cows disease, industrial toxic waste, nuclear power and genetically modified organisms).

However, as in the 2004 survey, the 2006 study also indicates that the level of interest of both men and women in the environment and ecology is rather low. Moreover, women point to "science and technology" as the type of information that they are less interested in. Radl (2007) sees this large female gap as a consequence of presenting the science item together with technology. For the author, this is a biased view on science as it considers it as primarily technical science, which

excludes other forms of knowledge, such as humanities and social sciences, and also medicine, which are sciences that appeal more to women. Indeed, as Radl suggests, if we consider the interest of women in medicine and health, they appear to be very interested in scientific information, but this is not the case if we observe the results for the items "environment and ecology" o "science and technology".

In this sense, we could conclude that women's lack of interest in scientific information is related to the strong focus attached to a technical and "hard" view of science. Moreover, as women are more interested in health and medicine -the type of sciences close to their social roles as carers-, we could conclude that gender differences in interest in science and technology is explained by gendered uses of scientific information.

With regards to environmental information it is relevant to note that this is a discipline in which the technical and natural sciences have taken on a more important role than the social sciences. As a consequence, environmental problems are often presented to citizens as being far removed from their everyday life. Could this strong scientific and technological view on the environment be the reason for the little interest displayed by women (and men) in this issue?

I will develop these suggestions further in the following section as an alternative explanation to the low education hypothesis to explain gender differences in the two biases in science, technology and the environment.

Gender biases in scientific knowledge

Women's lower level of scientific knowledge was convincingly displayed in the results of the quiz published in the 'Europeans, science and technology" report. 62% of women answered the questions correctly (70% in the case of men). However, 22% of women and 20% of men gave incorrect answers. The significant point is that a relevant percentage of women (16%) indicated they did not know the answer.

Table 3.15. Percentage of correct answers given by gender for the quiz for evaluating citizens' scientific knowledge (Europeans, science and technology, Eurobarometre, 2005)

Quiz question	Men	Women
Total:	12003	12892
The Sun goes around the Earth	73%	61%
	(DK: 2%)	(DK: 6%)
The centre of the Earth is very hot	90%	82%

	(DK: 4%)	(DK: 10%)
The oxygen we breathe comes from plants	85%	79%
,	(DK: 3%)	(DK: 5%)
Radioactive milk can be made safe by boiling it	79%	71%
, , ,	(DK: 12%)	(DK: 18%)
Electrons are smaller than atoms	52%	40%
	(DK: 17%)	(DK: 32%)
The continents on which we live have been moving	90%	84%
for millions of years and	(DK: 5%)	(DK: 10%)
will continue to move in the future		
It is the mother's genes that decide whether the baby	63%	65%
is a boy or a girl	(DK: 16%)	(DK: 16%)
The earliest humans lived at the same time as the	68%	64%
dinosaurs	(DK: 9%)	(DK; 14%)
Antibiotics kill viruses as well as bacteria	46%	46%
	(DK: 10%)	(DK: 12%)
Lasers work by focusing sound waves	58%	37%
	(DK: 19%)	(DK: 36%)
All radioactivity is man-made	65%	53%
	(DK: 9%)	(DK: 18%)
Human beings, as we know them today, developed	74%	67%
from earlier species of	(DK: 8%)	(DK: 12%)
Animals		
It takes one month for the Earth to go around the sun	73%	60%
	(DK: 11%)	(DK: 21%)
Average of correct answers	70%	62%
Average of wrong answers	20%	22%
Don't know	10%	16%

Source: Author's processing of information provided in Eurobarometer, 2005b: 40

DK: Don't know

Nevertheless, we should consider that most questions in the quiz were about scientific knowledge far removed from people's everyday lives. It would be naïve to suggest that these questions are more relevant to men than they are to women. However, they are related to science about discoveries and inventions, subjects where the interests of men have been proven to be more common (see table 3.10). It is clear that this type of science is more appealing to men. On the other hand, questions from the quiz that point to the type of scientific issues that interest women (medicine, health, food and consumption) are very few.

Indeed, the only case where women show the same percentage of correct answers as men is a question related to the use of science in everyday life: "Antibiotics kill viruses as well as bacteria". Likewise, the only case where women's correct answers are slightly higher than men's is a question directly connected to female experiences: "It is the mother's genes that decide whether the baby is a boy or a girl". It is true, however, that women again display little knowledge about the subject "Radioactive milk can be made safe by boiling it", which can be related to women's interests in health, which indicates that this argument should be explored further.

Nevertheless, it is relevant to note the question where women show the least knowledge compared to men is one related to physics and therefore clearly removed from women's experiences and interests: "Lasers work by focusing sound waves".

My suggestion is that the quiz itself probably biases the results about the scientific knowledge of men and women by implicitly presenting traditional scientific topics instead of looking at the use of science in daily life and in relation to people's responsibilities and interests.

In support of the proposed interpretation, the 2004 Spanish survey, apart from highlighting women's high level of interest in medicine and health-related information, also revealed that most women –and women more often than menuse scientific information in their everyday activities related to the health and safety of their families:

Table 3.16. Gender differences in the use of information related to health and security in everyday life for the Spanish population (2004)

Item	Women	Mens
Read patient information leaflets	86.6%	78%
Try to be informed when a health alarm occurs	83.5%	75.9%
Usually read food labels	73.9%	60.6%

Source: Author's processing of information provided by Pérez-Sedeño (2005).

Pérez-Sedeño (2002) concluded in the analysis of the results of the 2002 survey that standard science and technological information in Spain is consumed mainly by

middle aged men with high incomes and education level. This information is mainly produced in line with the interests of this sociological group. Results from the 2004 and 2006 Spanish surveys indicate the same. The data in tables 3.15 and 3.16 demonstrate that women's interest in scientific and technological information is related to their everyday gendered responsibilities (as probably happens with men). Accordingly, the lack of interest women display in general scientific and technological information can be understood from the perspective that this information fails to address women's interests.

This alternative interpretation of the results also sheds some doubt on the argument that a low level of scientific and technological knowledge is the reason why more women than men hold to the ethically and socially guided view and are more sceptical about the benefits of science and technology in society.

The gap between scientific information and women's interests may be extended to the analysis of women's (and men's) interest in environmental issues. Disciplinary approaches in the physical sciences have tended towards specialisation and hermetic knowledge, and scientific and humanistic traditions have excluded one another (Meadows, 1998; Mills, 1959). One consequence of this tradition for the young environmental sciences is that, although the social, political and ethical dimensions of environmental problems are increasingly receiving more attention, in practice they are still mainly conceived by a 'hard' scientific and technological knowledge approach and a communication rhetoric that removes them from social contexts (Macnaghten and Urry, 1998; In't Veld and Verheij,, 2000). Therefore, the personal and everyday interest of women in the environment, which is probably the expression of the local concerns of most people, does not fit the mainstream techno-scientific approach (Brú-Bistuer, 1996). Statistics show that both men and women are low consumers of environmental and ecology-related information. This tendency could be inverted, especially for women, if environment and ecology focused on the social and ethical dimensions of environmental problems, like the consequences for local people and their daily life, and on issues related to health, food and consumption problems.

Hypothesis C. Women's religious, philosophical and social motivations

Complementarily, other results of the survey suggest further areas of research into gender tendencies in the two biases described. The gender-disaggregated results from the Eurobarometer on "Social values, science and technology" included information on the social values and beliefs of European men and women:

Table 3.17. Social values and beliefs (Eurobarometer 2005)

Issues	Women	Men
Often think about the meaning of life	78%	69%
Believe that God exists	58%	45%
Thinks a university education is more important for a	15%	19%
boy than for a girl		
Thinks that, on the whole, men make better political	23%	32%
leaders than women		

Source: Author's processing of information provided by EUROSTAT, Eurobarometer 2005: Social Values, Science and Technology

[http://ec.europa.eu/public_opinion/archives/ebs/ebs_225_report_en.pdf]

In line with the first and second results women should show more philosophical and religious attitudes than men. Although this information does not give any conclusive argument, it may suggest that it would be worth exploring if the prevalence women attach to self-transcendence is an attitude that leads to establishing links with ethical and moral considerations about the environment and nature.

The two last opinions in table 3.17 are related to gender equity and are therefore concerned with social values. In both, women show a stronger tendency towards equity and justice than men. This social justice interest suggests another hypothetical explanation for female tendencies in the ethical and social-based bias. It could be argued that as gender equity is an issue which visibly affects women as individuals more than men it is natural that they should express stronger positive attitudes. However, that hypothesis does not invalidate this as a predictor of priority for social justice, which can also be explained by the marginal position of women in society.

Another relevant result in relation to gender obtained from the Eurobarometer relates to the self-reported feeling of engagement in science and policy.

Table 3.18. Feeling of engagement in science and policy (Eurobarometer 2005)

Issues	Women	Men
Have an interest in what is going on in politics and current affairs	61%	73%
Feel well informed about what is going on in politics and current affairs	52%	64%
Knows how to make his/her voice heard when it comes to politics and current affairs	30%	38%

Source: Author's processing of information provided by EUROSTAT, Eurobarometer 2005: Social Values, Science and Technology [http://ec.europa.eu/public_opinion/archives/ebs/ebs_225_report_en.pdf]

Women show less interest in policy making, and they feel also less well informed and less empowered to participate in policy making. These results are especially relevant if we consider that women show a greater tendency than men to support the ethical and social-based bias, which is indeed an alternative to business as usual policy-making related to the environment, science and technology.

Unfortunately, as the Eurobarometer 2005 did not included a gender perspective in the design of the survey, other information that could further our interpretation of the biases described does not exist. In line with sociological research in the USA described at the beginning of this chapter, we should mention exploring the influence of gender roles (e.g. female traditional responsibility for caring), as well as power differences and inequities between genders, as potential complementary explanations.

3.3. Open challenges: Science and citizens in dialogue

Chapter 3 aimed to define gender differences in environmental concerns and risk perception by exploring positivistic sociological studies and quantitative data provided by large-scale polls. The contributions demonstrate that gendered roles, assignments and experiences are relevant for interpreting citizens' interests in the environment, as well as their opinions about the role of the government, science and technology in managing environmental problems.

For the case of Europe, although differences are not extreme, I have described two biases and have examined the gender tendencies in each of them. Men support the

science and technology based bias more often than women. Such results are consistent with US studies that indicate that this sociological group shows the least concern for risks. These studies also point out that men are more likely to show less concern for environmental issues, to frame problems in economic terms, to have confidence in science and technology and to prioritise expert-based decision-making.

We have also given a comprehensive picture of an alternative bias, which is socially and ethically-based. Women are more likely to support this bias than men. Again, the results for the European case are consistent with sociological findings in the US which point to women as having more concerns about the environment, especially if there is a negative effect on the health and security of people. Women also appear to be more sceptical than men about governmental institutions and less optimistic about the benefits that science and technology may bring to society. Their views on some technological developments also appear to be more critical.

Different interpretations have been examined to explain gender tendencies in environmental concerns and risks, using the available information provided by empirical studies and from data from European and Spanish polls. The carer role and the gender power inequities explanations are given most support by sociological studies in the Anglo-Saxon context. Different values in the everyday lives of men and women also seem to be possible interpretations that could further our knowledge of the above-mentioned hypothesis. In the case of Europe, a lack of data hinders the process of exploring this hypothesis. However, various arguments that shed some doubt on the hypothesis that the greater concern for risk and the environment expressed by women is directly related to having less scientific knowledge have been examined. Moreover, this critic has gone beyond testing the abovementioned hypothesis to suggest that currently scientific and technological information does not address women's interests. In fact, I have suggested that if environmental research addressed issues related to the gendered experiences of women -e.g., issues related to health and consumption problems and how they affect the everyday lives of people-, it would be more appealing to women, and probably also to men. In line with this idea, a gender sensitive science is needed to politically empower the particular interests and concerns about the environment and risks that women have shown. We will discuss this idea further in the following chapter

Irwin (1995) noticed that the existence of different worldviews of the environment demonstrate that nature and potential harmful effects on it are a social construction rather than pure physical phenomena. Therefore, the author argues that a science-

centred worldview where progress relies on scientific and technological development will underestimate the consequences of technological hazards, whereas a worldview located within the environmental paradigm will express suspicion about technology before any hazard even occurs. Irwin also points out that these views include different images of nature: the first sees nature as 'flexible and salient', whereas the second sees it as 'delicately balanced' (Irwin 1995).

If, from this discussion, we conclude that any worldview is simply relative we could find ourselves in a sterile debate; I also do not intend to negate the "real" base of natural and technological disasters. The point is that when we maximise the socio-cultural weight of our environmental concerns, we begin to understand the illegitimacy of one standard view of environmental issues and the inaccuracy and inoperability of the traditional science reason/public ignorance dichotomy. Once we accept that values play a fundamental role in environmental conflicts, the debate can be approached in a very different way whereby power relations and legitimacies are open to change.

This argument also ignites the challenges of the dialogue between science and citizens that the political goal of governance assumes. Concerns about legitimate arguments and power inequities should be kept in mind when thinking about the ways in which scientific and lay arguments confront each other.

On the one hand, popular epidemiology studies expose cases where the public appropriates science in response to the continuous de-legitimisation of lay-people's views by public authorities, corporate representatives and science itself (Brown, 1997). Citizens use science not only to find a convincing explanation for their concerns, but as a tool to publicly support their arguments. In these contexts, scientific uncertainty may lead to the partisan appropriation of knowledge (Craye et al. 2005). In addition, the focus on scientific information may conceal the values and interests that are actually central to the discussion (Funtowicz and Ravetz, 2000).

On the other hand, science may simply appropriate lay-people's concerns, codifying them in a language valid to scientific and technical rationality and making them cryptic to citizens. In this case, discussion would be firmly rooted in the scientific realm, and those who do not dominate the appropriate language may be excluded (Pellizzoni, 1999).

An appropriate dialogue between a scientific worldview and citizens' perceptions must be established to create a broader understanding of problems (Krimsky and Plough, 1988), where science has a valuable but limited input rather than the full

expression of the problem which would bias the terms of the dialogue (Funtowicz and Ravetz, 1994). This process should bring to light assumptions about the different worldviews engaged in the debate and the concomitant knowledge and power imbalances associated with them.

I will explore these ideas further in chapter 9.

At this point, my intention is to provide a more in-depth understanding of the gendered perspectives of men and women in the environment. In this sense, the next chapter will focus on exploring this issue using qualitative techniques which introduce new reflexive elements into the discussion.

SUMMARY OF CHAPTER 3

Chapter 3 aimed to define gender differences in environmental concerns and risk perception by exploring positivist sociological studies—mainly from the United States—and quantitative data provided by large-scale polls from Europe and Spain. The results obtained enabled the systematization of conclusions from statistically relevant studies in order to describe a general scenario about the influence of gender on environmental perceptions in Northern countries, for which less information exists.

The contributions analyzed demonstrate that gendered roles, assignments and experiences are relevant for interpreting citizens' interests in the environment, as well as their opinions about the role of government, science and technology in managing environmental problems.

A fundamental contribution of the studies is to assert that gender is relevant in relation to:

- 1) Pro-environmental attitudes,
- 2) the concerns for, perception of, and interests in environmental issues,
- 3) and the perceptions of and ways of framing environmental risks.

Women more often than men tend to engage in pro-environmental actions. Both men and women show low engagement in public actions, but women tend to apply pro-environmental behaviour at home and with the family, and adopt everyday strategies concerning personal choices. Alternatively, men engage more easily in public actions and are more interested in activities that have an impact on other people's decisions.

In the case of environmental interests, conclusions point out that women are more aware of problems affecting their families and people close to them. Therefore, they display a greater concern for local environmental problems. Sociological studies also show relevant conclusions of gender tendencies in environmental risks. Results for the North-American population have indicated that white males are the anomalous group. They show lower perceptions of risks associated with our highly industrialized society, have confidence in technology and experts and think they will bring solutions to environmental problems; they have little confidence in the

government or the decisions influenced by the public. In this sense, conclusions also indicate that the lower risk perception of white males is related to their greater power to influence decision-making. By contrast, non-white males and white and non-white women see higher risks related to technological developments and are more likely to defend social equity and community-based decisions.

For the case of Europe, although marked gendered differences do not exist, I described two biases—a scientific and economy bias and an ethical and social bias—in citizens' opinions; they indicated that men are more likely to support the first one, while women are more likely to support the second. These gendered tendencies are consistent with conclusions from US studies.

Different interpretations were examined to explain gender tendencies in environmental concerns and risks, using the available information provided by empirical studies and from data from European and Spanish polls.

The carer role and the gender power inequities explanations are given most support by sociological studies in the Anglo-Saxon context. This indicates the relevance of considering female caring as a clue to social values attached to women as well as the influence of a lower power position in society as mechanisms that shape alternative perspectives on the environment. Those ideas are going to be explored empirically for the case of local environmental conflicts in Catalonia in chapter 4, and theoretically in chapter 8.

In contrast, I set out various arguments that shed some doubt on the hypothesis that the greater concern for risk and the environment expressed by women is directly related to having less scientific knowledge. Moreover, this critique went beyond testing the abovementioned hypothesis to suggest that currently scientific and technological information does not address women's interests. I suggested that if environmental research addressed issues related to the gendered experiences of women—e.g. issues related to health and consumption problems and how they affect the everyday lives of people—, it would be more appealing to them.

In the next chapter my aim is to provide a more in-depth understanding of gendered tendencies on the environment by exploring local environmental conflicts and qualitative techniques, which introduced new and more nuanced reflexive elements into the analysis of the significance of gender in concerns for, interests in and perspectives on the environment.

Chapter 4. Gender and values in local environmental conflicts¹

In the previous chapter we discussed some limitations of the studies and data used to investigate gender differences in risk and environmental concerns. Bibliographies from sociological studies tend to lack a gender theoretical perspective. Large-scale surveys, such as the study on perceptions of science and technology in Spain or the Eurobarometer, offer sex-disaggregated data, but a gender approach in the design of the survey is given little importance or completely ignored. As a consequence, information that would help us to gain a better picture of how gender shapes citizens' opinions is not available.

We should also consider the limitations implicit in statistically-oriented studies. The quantitative focus on differences between men and women may explain some patterns such as who is more concerned, what men and women's main concerns are and what general explanations can explain gender patterns. However, it is impossible to reach more fine-grained interpretations concerning, for instance, what different meaning men and women give to risk (Gustafson, 1998), their environmental concerns and how they frame problems. Multiple choice questions inevitably filter the assumptions of the researchers that design surveys. Moreover, in the case of quantitative analysis we may fail to explore complex issues that cannot be expressed by simple variables, like the influence of ethno-androcentrism as a gendered ideology that biases dominant perceptions of risk (Gustafson, 1998). Thus, if only quantitative approaches are considered, we may confidently sustain our hypothesis from a statistical point of view, but it still remains weak.

Qualitative studies, however, while they do not provide statistical relevance, do partially solve this problem, as open questions and in-depth interviews give more freedom to nuance answers or reveal unexpected reflections.

¹ Some of the results examined in this chapter have been published in Agüera-Cabo, Mercè, 2006. "Gender, Values and Power in Local Environmental Conflicts. The Case of Grassroots Organisations in North Catalonia". Environmental Values, vol. 15; and others in Agüera Cabo, Mercè, 2008. L'activisme femení en conflictes ambientals. Reflexions en clau feminista i apunts per a la gestió del medi. Documents d'Anàlisi Geogràfica, num. 51, pp. 13-37.

² In the case of the Spanish survey there has been an explicit effort to integrate the gender perspective into the questionnaire, which has notably increased the possibility of obtaining a clearer picture of men's and women's opinions (see differences between the 2002, 2004 and 2006 surveys).

Qualitative approaches to gender studies on local environmental problems have been more prolific in the Anglo-Saxon research environment and the results obtained have been very conclusive in the case of local risks (Mohai, 1997). Gender tendencies emerge very clearly when environmental hazards or problems exist and people are concerned with a specific problem. This is consistent with the argument that we should not measure public attitudes towards risk through hypothetical questions because people show specific behaviour when threatened by a real risk (Krismky and Plough, 1988).

Conclusions from those studies clearly indicate that women display a strong concern for local environmental problems that have negative effects on health and security (Caiazza and Barret 2003, Boetzkes 1998, Mohai 1997, Brown and Ferguson 1997, Blocker and Eckberg 1997, 1989, Davison and Freudenburg 1996).

Prompted by an interest in researching the influence of gender on local environmental conflicts, I conducted a study of three grassroots movements in the north-east of Catalonia, Spain.

Unfortunately, bibliographic references for Catalonia and Spain with this focus are rare. To my knowledge, only two studies have developed a gender perspective on environmental grassroots organisations in this context. The first was conducted by Bru-Bistuer in 1996. It analysed women's activism in waste disposal conflicts in three cities and towns in Spain: Gibraleon (in the province of Huelva, Andalucia), Bilbao (in the Basque region), and three neighbouring villages in Tarragona (Catalonia) (Bru-Bistuer, 1996). The second study, conducted by Alfama and Miró in 2005, consisted of a gender analysis of the struggle against the transfer of water from the Ebro River at the beginning of this decade, a conflict with strong social and political implications for Spain. Throughout this text I will refer to these two studies and discuss the results obtained (Alfama and Miró, 2005).

4.1. Characteristics of the grassroots movements under study

A number of territorial and environmental conflicts have emerged over the last decade in Catalonia. The three grassroots movements³ under study are Coordinadora Antilínia de les Gavarres (case 1), Salvem l'Empordà (case 2) and

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³ In this study the term "grassroots movement" is used to refer to organisations created by citizens as a reaction to a local problem. They differ from other types of citizens' organisations in that they usually focus on a single problem and the movement disappears once the problem is resolved. In Spanish sociological studies citizens' movements of this type have also been referred to as "movimientos problema" (Alonso, 1996).

Salvem les Valls (case 3)⁴. They present some common aspects in their formation and lobbying procedures, some of which have already been reported by Nel·lo (2003) within the context of other territorial conflicts in Catalonia. Some of these characteristics are also common to those reported by Afamara and Miró (2005) for the citizens' platform engaged in the Ebro conflict. Outside Catalonia we can also find some similarities with organisations opposed to toxic waste disposal in the US, as described by Brown (2000).

These common characteristics can be described as follows:

- (1) Citizens organise themselves around a specific, newly created organisation that is independent of institutions, political parties or other pre-existent entities.
- (2) They tend to limit their fight to a specific local problem (although this is not the case with *Salvem l'Empordà*, which opposes several projects that are perceived as being prejudicial to the *Empordà* region).
- (3) The organisation is considered to be apolitical, even though some members may be active in specific political parties and the organisation itself may maintain relationships with political groups.
- (4) Membership is rather diverse in terms of education, class, political tendencies and occupation.
- (5) Participants organise protest actions that often seek to attract the attention of the mass media in order to make their struggle known to the public.
- (6) They count on large-scale support from local residents who may not be actively involved in the organisation but who tend to participate in public actions.
- (7) The groups start legal actions to oppose the projects. While these processes tend to be highly expensive and time consuming for the organisation (they can continue for several years), they give internal robustness and public legitimacy to the organisation's identity.
- (8) Groups may depart from an idea of sustainable development, or they may progressively incorporate it as a relevant argument in their struggle. This concept gives their mobilisation a broader perspective. At the same time, it also gives the movement a scientific and political flavour that helps increase their legitimacy by communicating local concerns in more formal

⁴ For a detailed description of the case studies see the "Methodology" (pages 44-51).

- and technical language. The conceptual framework of sustainable development also stimulates an important learning process for many of the participants.
- (9) They look for support from scientists and other experts who are expected to provide them with legitimate arguments. This expectation can be rather controversial in cases of scientific uncertainty, as in case 1. Reports written by experts are used to publicly legitimise their arguments and to bring their objections to the attention of government authorities.
- (10) In general, the causes of these groups have important consequences for local and regional politics. The organisations lobby parties to take a political stand on the conflict. In many cases partisan interests influence this position, and as these interests may change over the years, strong controversy may ensue. These episodes have obvious negative effects on the public perception of political representatives.

The interest of local citizens' committees in preserving local identity and quality of life, which as I will discuss in this chapter is a fundamental element of all three groups under study, should not be confused with the so-called NIMBY ("not in my back yard") syndrome, which was the focus of much Anglo-Saxon discussion about grassroots movements in the nineteen eighties.

First of all, in most cases it is not easy to state without any doubt that the types of projects opposed by grassroots movements will make a real contribution to the common good. Moreover, these projects are often motivated by partisan economic and/or political interests (Nel·lo, 2003). Indeed, the potential gains for the ruling political party or a specific company become an added argument for the opposition of the grassroots movements, as case 1 will show.

Second, grassroots movements primarily oppose the execution of certain projects in their localities, but they would oppose the same project in any other location where it may have similar negative effects (Nel·lo, 2003). They tend to frame their local struggles under the umbrella of sustainable development. These struggles are seen as supra-local planning strategies that should regulate local intervention aimed at ensuring environmental quality. It is significant that local groups usually contact other similar organisations involved in conflicts in other regions. They then help each other by exchanging knowledge and experiences and may also support each other in public actions.

Last but not least, local movements find support from third parties with interests on a different scale, like opposition political parties and ecological organisations (Nel·lo, 2003).

All these arguments transform the NIMBY syndrome into a more politically and socially robust position. As has already been said, 'NIMBY has become NIABY, "not in anyone's backyard' (Brown and Masterson-Allen, 1994:272).

Without discounting the relevance of this popular position, we should be critical of at least two practical consequences of a NIABY attitude: first, in a globalised and interdependent world we must consider the consequences of opposing undesired projects at a local scale in the industrialised world, as they may then be transferred to developing countries where environmental protection is weaker. And, second, we should also consider the poorly thought out and unrealistic attitudes of citizens from developed countries who increasingly demand (sometimes highly subjective) ideals of environmental quality without considering the technological and/or economic limitations that may be necessary to attain them.

4.2. Hypothesis and assumptions underlying the empirical research⁵

The empirical research has been developed from theoretical approaches to gender theory and ecofeminism, mainly from its socio-political branch. It aims to interpret the way gender socialisation and gendered power inequities play a part in the nature of the lobbying and internal organisation of the citizens' groups. Thus, with regard to the reasons for mobilisation, the study focuses on discovering whether gender assignments, roles, responsibilities and experiences of men and women are relevant in shaping the concerns that impel lay people to become members of an environmental grassroots movement. The departure hypothesis is that gender makes a difference in the opinion of the members, so I focus on making these differences visible rather than looking for common arguments between men and women. The aim was not easy as people tended to express their concerns according to the arguments publicly raised by the group.

The study also departs from some theoretical assumptions discussed in detail in chapter 1. As I stated, the hypothesis that women have a particular concern for nature and the environment, as expressed by ecofeminism, is a complex question. First of all, we should clarify exactly who we are referring to when we talk about

⁵ The methodology used is described in the introductory chapter.

"women" because many different experiences are possible under the feminine identity.

Women's identities are multiple and complex, depending on class, race and ethnicity, as well as socio-cultural conditioners such as geographical location, occupation, family structure and many others. Gender theory, and particularly postmodern feminism, emphasises the diversity of women's experiences, which are plural, local and immanent (Nicholson, 1992).

Nevertheless, masculinity and femininity represent a particular cultural and social dimension of rules and roles that shape the personal and interpersonal experiences of men and women. The socio-cultural dimension of femininity presupposes a set of attitudes and skills commonly linked to being a woman and a set of social responsibilities to be assumed. Similarly, masculinity also implies certain attitudes, skills and responsibilities which are attributed specifically to men. It would be naive to ignore profound transformations in gender relations in western societies over the last few decades that have greatly modified many of these assumptions about masculinity and femininity. However, the education and socialisation of men and women continues to be gender embedded, which unavoidably affects the development of each person's life.

4.3. Life experience versus ideology

The original reason for mobilising and campaigning appears to be decisive for each grassroots movement's orientation. After analysing the three cases and their characteristics, I established two basic orientations in the movements: life experience-based and ideology-based orientations.

By ideology-based organisations I refer to the local civil movements where ideological and political perspectives of the environment and the area's development are at the root of their desire to mobilise and campaign. On the other hand, I talk about life experience-based movements to refer to organisations where personal and collective negative experiences concerning local environmental issues are the motivation for mobilising citizens.

In each type of organisation I observed different tendencies in relation to the gender dimension. In the life experience-based orientation gender was important in identifying different perspectives on the different conflicts. In the ideology-based orientation gender imbalances in the composition of the organisation were relevant.

Case 1, Coordinadora Antilínia de les Gavarres, is an example of the type of organisation that fully illustrates a life experience-based campaign. In the summer of 1997 some inhabitants of the villages of Llagostera and Cassà de la Selva (in the province of Girona, Spain) received legal notification that their land was to be expropriated for the construction of a high tension power line. An initial group started to oppose the line because of the negative effects it would have on the value of their land and on agriculture, and the fragmentation it would cause to an area already overexploited by infrastructures due to its proximity to the tourist area of the Costa Brava.

However, early on another reason for opposing the high tension power line appeared. It would focus the complaints of the citizens' group and be instrumental in gathering strong support from the local population: the potential negative effects of the high tension power line on the health of the people in close proximity to it (Feliu, 2003; Representative of *Coordinadora Antilinia de les Gavarres*, 2003).

A fundamental element of the conflict was the scientific uncertainty about the health risks derived from sustained human exposure to electromagnetic fields. This uncertainty led to scientific knowledge being used politically – a far cry from the value of neutrality dictated by modern epistemology. Different studies offered contradictory interpretations, but they continued to serve as a legitimising tool: each side of the conflict publicly referred to the scientific report that legitimised their argument. As a consequence, scientific knowledge did not help to solve the problem, but instead magnified it, as has been reported in other similar cases (Craye et al., 2005). I will return to this issue in chapter 5.

As the organisation developed over the years it incorporated into the argument other factors of a more ideological and political nature to add to the health risks. The unsustainable nature of the development model also came into focus. The Catalan government had argued that the high tension power line was necessary to meet the greater energy needs of the Costa Brava, but the organisation considered that the area was already over exploited by tourism and was therefore unsustainable.

In addition, the *Coordinadora Antilínia de les Gavarres* publicly denounced the need to change the current production, distribution and energy consumption models. Their argument was helped by a technical study produced by the ecological group *Naturalistes de Girona* who argued that the high tension power line would not be necessary if energy saving strategies were applied (Pardo, 1998). However, this technical argument is not without controversy. More recently, the debate opened by the planned construction of a high tension power line (a project

known as MAT, *Molt Alta Tensió*) in the province of Girona has led some independent scientific experts to affirm that the province of Girona is energetically unsustainable (Folch, 2009, May 22).

Setting aside the complexity of the expert debate and focusing on the sociological interest of the issue, it is noteworthy that the ideological, political and technical arguments taken together allowed the organisation to gain a stronger position in its negotiations with the government. A learning process such as this is one of the positive effects of collective action (Alfama et al., 2007; Ibarra et al., 2002).

However, there were hardly any ideological or political motives involved in the initial mobilisation of the citizens. The infrastructure would put the well-being of the inhabitants of the area at risk, which is essentially a life experience-based argument for opposing the construction of the power line. This argumentation is illustrated by the results presented in table 4.1.

Table 4.1. "I don't know a lot about environmental problems. What worries me most is what happens in my village and how this affects the quality of life of people close to me."

	Case 1 Coordinadora Antilínia de les Gavarres		Case 2 Salvem l'Empordà		Case 3 Salvem les Valls	
	Women	Men	Women	Men	Women	Men
Strongly disagree + somewhat disagree	5 of 15 (33%) ⁶	10 of 18 (56%)	17 of 20 (85%)	22 of 23 (96%)	13 of 13 (100%)	15 of 19 (79%)
Somewhat agree + strongly agree	10 of 15 (67%)	8 of 18 (44%)	3 of 20 (15%)	1 of 23 (4%)		4 of 19 (21%)

It is worth noting the support that the members of case 1 – particularly women –

⁶ The numbers between brackets indicate the percentage of women/men giving the specified answer for each organisation and aim to facilitate the interpretation of the table. Readers should consider the limited statistical significance of these percentages given the limited number of participants in each sample. This observation also applies to the rest of the tables presented in this chapter.

gave to the opinion "I don't know a lot about environmental problems. What worries me most is what happens in my village and how this affects the quality of life of people close to me", and to compare these results with the opinion of organisation members in cases 2 and 3. Notice also that the women in case 3, Salvem les Valls, are the ones that voice the strongest disagreement with this opinion.

In contrast to case 1, the grassroots movement in case 3 appears to be ideology based. *Salvem les Valls*, which translates as "Save the Valleys", was created in 1995 to oppose the construction of a main road and a tunnel to link the towns of Vic and Olot. The Catalan government, the *Generalitat de Catalunya*, was the promoter of the project. They argued that the infrastructure was necessary to foster economic development in the region. However, the planned infrastructure was not supported by local residents and other people who identified with the area, and they decided to organise themselves into a grassroots movement.

Faced with a number of adverse effects if the project were to get off the ground, the grassroots movement took on a conservationist stance, arguing the ecological importance of the valleys. Even though the main reason for the organisation's opposition to the planned project was an ecological one, it also highlighted the detrimental social and economic effects, such as a decrease in the quality of life and a threat to the strong identity of the residents of the area. Overall, *Salvem les Valls* saw the project it opposed as an unsustainable model of development and questioned its necessity.

It is worth noting the particularly controversial conflict of *Salvem les Valls*. The opposition shown by the grassroots movement did not receive full support from the inhabitants of the affected region. Opposing *Salvem les Valls'* position, two organisations made up of businessmen and local governments⁷ supported the construction of the road mainly for reasons to do with the economic development of the region, which they also saw as beneficial to the local residents. According to a poll conducted by the Council of Olot, the solution to the so-called conflict of the *Túnel de Bracons* was considered to be a priority by the citizens of the town. The poll revealed that 56.6% of the inhabitants strongly agreed or somewhat agreed with the project, while 36.7% disagreed or strongly disagreed with it and 6.4% did not respond (Castañer, 2003:132).

⁷ Comissió de Suport a l'Eix (a comission that supported the construction of the Eix main road) and Comissió de Seguiment de l'Eix (a commission that reviewed the construction of this main road) are the two organisations that supported the infrastructure (Castañer, 2003:136).

Indeed, the representative of the organisation expressed the difficulties the group faced in enlisting support from local residents:

"Salvem les Valls walked along a very complicated path because Garrotxa is nothing but a place. At the beginning it was not well received. It was very difficult to get it going (...) The people who created it were local residents and later people who do not live in Garrotxa joined the campaign (...) but it was very difficult to give the movement cohesion" (representative of Salvem les Valls, 2003).

As this quotation illustrates the members of *Salvem les Valls* were not all inhabitants of local towns and villages: some were visitors or people with second residences in the area. For instance, the representative of the organisation was a man who lived in the province of Barcelona. Likewise, many other members of the group lived in Barcelona or the surrounding area.

In contrast to the profile of the members of the first movement, *Salvem les Valls* included a significant number of men and women who had had previous experience as activists in ecological organisations (see table 4.2).

Table 4.2. Profile of the members involved: previous experience in civil society organisations

8	Coord Antilín	se 1 inadora tia de les arres	Case 2 Salvem l'Empordà		Case 3 Salvem les Valls	
Previous experience in	Women	Men	Women	Men	Women	Men
an ecological group	1 out of 15 (6.7%)	2 out of 18 (11.1 %)	7 out of 20 (35%)	10 out of 23 (43.5%)	4 out of 13 (30.8%)	6 out of 19 (31.6%)
a political party	1 out of 15 (6.7%)	4 out of 18 (22.2%)	5 out of 20 (25%)	8 out of 23 (34.8%)	3 out of 13 (23.1%)	5 out of 19 (26.3%)
a local organisation ⁸	9 out of 15 (60%)	11 out of 18 (61.1%)	14 out of 20 (70%)	12 out of 23 (52.2%)	6 out of 13 (46.2%)	9 out of 19 (47.4%)

⁸ For instance, a parties group, a youth group, an excursionist group, AMPA... AMPA is the abbreviation of "*Associació de Mares i Pares d'Alumnes*" (Parent Teacher Association), which represents pupils' parents at educational centres.

Other	3 out of 15 (20%)	2 out of 18 (11.1%)	7 out of 20 (35%)	3 out of 23 (13%)	5 out of 13 (38.5%)	4 out of 19 (21.1%)
No previous participation ⁹	5 out of 15 (33.3%)	6 out of 18 (33.3%)	4 out of 20 (20%)	3 out of 23 (13%)	2 out of 13 (15.4%)	3 out of 19 (15.8%)

The organisation used conservationist rhetoric in the public discussion about the construction project. The activists demonstrated by organising mass walks in the countryside that was to be affected by the road and tunnel, and by distributing posters showing picturesque landscapes of the region. In addition, the organisation drafted a list of animals and plants that would be endangered as a result of the construction project. They also received support from experts (e.g. economists and geographers) who supported their arguments with technical information (Castañer, 2003; representative of Salvem les Valls, 2003). Activities like these indicate the ideological orientation of the organisation.

Salvem les Valls also used the quality of life argument, a more life experience-based orientation. The quality of life concept had more ideological value for Salvem les Valls. Its idea of quality of life underlined the social benefits of living in a natural environment and it questioned the potential benefits of increased economic resources.

Salvem l'Empordà, case 2, like the previous organisation, shared important aspects of ideological groups. It was created with the aim of "defending" the Empordà region from all types of projects - housing estates, tourism investment, industrial sites, intensive farming, etc. - which according to the organisation's members constituted an aggression on the area. Therefore, from its beginning the organisation used an ideological argument. Indeed, the basic aim of the group was to lobby the Catalan government to provide a development plan for the region that would regulate all present and future activities from the point of view of sustainability.

Salvem l'Empordà was essentially an ideology-based organisation from its inception, and this is evident in the ecological and political heritage of its members and their previous involvement in ecological organisations (see table 4.2).

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⁹ He/She did not indicate any participation in an organisation before engaging in the grassroots movement.

Nevertheless, the group also mobilised around a number of important experienced-based reasons. This assessment is significant in understanding the importance of gender in the opinions of the members. Some arguments help to sustain the relevance of life experience-based motivations in Salvem l'Empordà.

First of all, the organisation was created by the non governmental and ecological organisation IAEDEN¹⁰. They considered it necessary to create a group that would unify the increasing number of residents who were expressing their disagreement with a number of projects that were having detrimental effects on the region of Empordà. IAEDEN is mainly a naturalist group and they did not think they could respond to this demand (representatives of Salvem l'Empordà, 2003). So Salvem l'Empordà was founded to primarily defend the interests of local inhabitants including ecologists, farmers, hunters and landowners.

Secondly, the ecological NGO's call for action coincided with the interests of ordinary citizens who were already witnessing the negative consequences of agribusiness, urban sprawl and increased tourism. Problems included water shortages and water contamination. As these problems affected local residents in their daily life, they were instrumental in the process of local people accepting the organisation. During the interviews the representatives of Salvem l'Empordà commented on the important impetus of the problem of shortages and contamination of water for the popular acceptance of the organisation:

We have said this many times... (the organisation) has been very well accepted because of the problem with nitrates. They (the local residents) have had a serious problem with drinking water. It's very serious, don't you think? You open the tap and you know you can't drink the water. Or you want to boil pasta and you have to use water from bottles. This affects you a lot, and you come to a point where you have had enough. (Montse and Marta, 2003).

The local newspapers often include articles on the organisation Salvem l'Empordà and its activities. I dare to say that the organisation has somehow developed into a consultancy body for residents of the area: when citizens oppose a particular project in their village they turn to Salvem L'Empordà for advice and support. Sometimes they even join the movement. A representative of Salvem l'Empordà explained this phenomenon in the following way:

 $^{^{\}rm 10}$ The acronym IAEDEN means Organisation for the Study and Protection of Nature in Alt Empordà (Institució Alt-Empordanesa per l'Estudi i la Defensa de la Natura).

Nowadays we work very much like this. People come [to the group] and say, "This is happening in my village...", and that is perfect. We have direct contact with the population. We say to them, "Listen, you should go to the council and ask for the project, bring it to us and we will assess it", because projects are often incomprehensible (...). Either young people or old farmers whose fields are threatened... It's that, Salvem l'Empordà is open to everybody. (Representatives of Salvem l'Empordà, 2003).

4.3.1. Where are women and what are they like? Sociological profile of ideology and life experience-based organisations

Looking at the sociological profiles of the members of the three grassroots movements I found that more women with experiential reasons for campaigning join the organisations. The results of the questionnaires further indicate that gender becomes significant in the opinions of men and women when the organisation is experience based, as in the case of the *Coordinadora Antilínia de les Gavarres*, or when the organisation has experience tendencies in the reasons for mobilisation, as in the case of *Salvem l'Empordà*.

Organisations that make arguments based on experience have a higher number of women activists than those with ideology-based reasons. In general, civil movements have low levels of female participation, although gender balance is greater than in political parties or traditional ecological organisations (Caiazza and Barret, 2003; Walsh, 2001; Boetzkes, 1998; Mohai, 1997). Of the three cases studied, men and women are almost equally represented in the *Coordinadora Antilínia de les Gavarres*, which is life experience based, and in *Salvem l'Empordà*, which has experienced-based reasons for mobilisation. In contrast, there are less women involved in the ideology-based movement *Salvem les Valls*.

Table~4.3.~Sociological~profile~of~the~members~of~each~organisation

		Cas Coordin Antilínic Gava	iadora a de les	Case 2 Salvem l'Empordà		Case 3 Salvem les Valls	
		Women	Men	Women	Men	Women	Men
Total of members questioned		15	18	20	23	13	19
Age	20-30	2	3	5	9	7	5
Distribution	31-40		2	4	4	5	8
	41-50	7	2	8	7		2
	51-60	4	3	2	1		1

	61-70	2	6				
	71-80		2				
	No answer			1	2	1	3
	Basic or primary	6	7		6		2
Education Level	Secondary or vocational	3	2	6	6	3	6
	High	6	7	14	11	10	11
	No answer		2				

The low level of women's involvement in the organisation *Salvem les Valls* was evident from the results of the questionnaire. Although a special effort was made to obtain as many answers from women as possible, there was still considerably less data obtained from women than men. Indeed, the representative of the organisation mentioned this during the interview. He explicitly said at the beginning that the group was mainly composed of men but that the number of women joining the organisation had increased over the previous years (representative of *Salvem les Valls*, 2003).

In addition, participation in the ideology-based movements appears to be more attractive to young people with a high educational level. This is particularly true for the women in *Salvem les Valls*, who are not only the youngest activists but also the most educated.

On the other hand, when we look at the females' sociological profiles most women in the life experience-based movement were middle-aged or older. These women probably had rather traditional gender assignments and responsibilities in their private and public lives. *Coordinadora Antilínia de les Gavarres* (case 1), the organisation with the most experiential reasons for mobilisation, seems to appeal to women who have received a primary, secondary or vocational education. Indeed, during the in-depth interviews I noticed that most of the women were mothers and/or had everyday responsibilities related to caring for others.

In the case of *Salvem l'Empordà* there were women of all ages but they were mostly between 41 and 50 years old. This does not necessarily mean that they were engaged in caring activities. Indeed, the high educational level of these women indicates that they probably spent much of their day in a professional occupation. Nevertheless, the large number of female members in this age range could indicate that these women had experienced gender from a normative and symbolic viewpoint to a greater degree than the young female members of *Salvem les Valls*. Support for this hypothesis was evident during the interviews when questions

related to gender equity were asked and women from *Salvem l'Empordà* showed the highest degree of sensitivity towards this issue, as well as the highest level of reflection.

I therefore concluded that gender appears to be a variable that helps to differentiate biases in the perceptions of the conflicts, particularly when the well-being of people is affected. When organisations are mainly driven by ideology, women do not show much interest in experiential reasons for mobilisation. Gender is significant in the sense that there are less women and they are younger and better educated (which could mean that they have less experience of traditional gender roles in their daily life).

Likewise, the results of the study by Bru-Bistuer (1996) on toxic waste conflicts in Spain stated that in the three organisations considered many women specified their concern for health risks. Moreover, she also found that in her case studies women over forty were particularly concerned about health risks, while younger women often emphasised their concern for the environment (Bru-Bistuer, 1996).

The women in the three Spanish organisations under study also expressed their fears about the health risks to their family and the community and the degradation of the environment caused by waste disposals sites, while less of them expressed their concerns in terms of environmental protection (Bru-Bistuer, 1996). These findings also support the hypothesis proposed by this study that women have more life experience-based reasons for mobilisation than ideology-based ones.

The type of conflict analysed by Alfama and Miró (2005) concerning the Ebro River may also be classified as experiential. The people were fighting to preserve quality of life, which is not an economic element, but has a more social understanding: the river is identified with community memory, the place where everyday human relations are conducted. According to the authors, in the citizens' organisation there were more women than men, they tended to have an average age of over 45, and there were more women with low and medium educational levels.

In the three case studies from Catalonia the hypothesis that life experience-based organisations are particularly appealing for women was examined in depth through interviews with female members of cases 1 and 2, the organisations with life experience-based arguments. However, before discussing these results it is worth exploring further the theoretical consistency of the experience versus ideology argument.

4.3.2. Experience and ideology-based argument in current and previous grassroots movements

One of the few studies that examine the environmental conflicts that have emerged in Catalonia during the last decade (Nel·lo, 2003) proposes that the current struggles differ from those that propelled the organisation of citizen's committees during the seventies and eighties in Europe and America. In those cases the main reasons for mobilisation were local problems related to the weaknesses of the development model, such as pollution caused by waste disposal or the lack of basic public services like potable water in areas surrounding large cities. Their concern was to *improve* the quality of life by increasing and improving welfare policies. Today citizens are not calling for more welfare policies; rather they seek to have a voice in the decision-making processes that affect the planning and management of the places where they live. They want to *preserve* quality of life by limiting public or private investment that may cause major land transformations.

Yet some characteristics of current struggles are also very similar to the movements of the seventies and eighties. Even if, as Nel·lo puts it, "identity of resistance" – where local inhabitants oppose the local effects of globalisation – is an important element of the three struggles, this concept does not fully describe the types of concerns which I have described as experience based. In the first type the local focus serves to consolidate resistance to social, economic and territorial dynamics occurring on a global scale. In the second type activism is the reaction to the potentially negative effects that projects may have on the well-being of local people, as happened with toxic waste conflicts in the seventies and eighties.

This distinction is essential because this type of experiential motivation is significant for a gender analysis. In this sense, gender theory introduces new elements to the theoretical discussion about land and environmental conflicts taking place in Catalonia and in industrialised countries in general. In particular, gender theory nuances our comprehension of the interests and values of activists involved in these organisations. It also gives us a more in-depth idea of the problems associated with the representation of diverse perspectives. This knowledge is fundamental to making advances in the governance of environmental conflicts.

The similarities between current experience-based movements and the mobilisations of the seventies and eighties, as well as their gender significance, find an important reference in the work of Brown and Masterson-Allen (1994). The authors differentiate between these movements and what they call new social movements, meaning the mobilisations that occurred mainly in Europe as a

consequence of the revolution of 1968 (e.g. ecological, peace and feminist movements). Their interpretations have much in common with the ideology versus experience hypothesis.

Interestingly, Brown and Masterson-Allen (1994) highlighted experience and ideology respectively as the main characteristics that differentiate waste disposal mobilisations from new social movements. They also observed that the particular nature of each movement corresponded to a different profile of activist. There were more women activists, including many leaders, in waste disposal movements and organisations that were led by experience. In contrast, new social movements appealed to a type of activist with a sociological profile more similar to that of the members of *Salvem les Valls*, the organisation I have classified as ideology based: "...new social movements are dominated by younger, more educated people with more of a lifestyle critique where quality of life is more important than class politics" (Brown and Masterson-Allen, 1994:270).

Observations made when comparing citizens' organisations that have emerged in response to local environmental conflicts with traditional ecological organisations reveal that the types of activists involved in these organisations are also different:

Comparison of attitudinal studies to case studies suggest that there are important differences between environmental activists who work on a national or global scale – especially those affiliated with the older, more established and conservation organizations such as Sierra Club or Appalachian Mountain Club –and members of smaller groups who are fighting the presence of a specific local hazard and its consequences (...) Toxic waste activists differ from environmental activists in that the former include more women, more people of color, older people, and people with less education. (Brown and Ferguson, 1997:246).

However, we may find similarities in the profile of members of ideology-based grassroots movements and traditional ecological organisations, i.e. people moved by ideology. We may also find that the sociological profile of activists involved in these two types of organisations differ from those involved in life experience-based organisations, as proposed by this study, and the same in the case of waste disposal movements which have been analysed in the USA .

Ecological organisations have a strong male presence, including many male leaders. Members are from the middle and upper classes and have a higher educational level. They show strong trust in science and a preference for pro-

environmental attitudes. They also tend to see the economy as no more relevant than the environment (Blocker and Eckberg, 1997). These sociological characteristics are similar to the ones described above for case 3, *Salvem les Valls*.

Nevertheless, we cannot simply conclude that ideology-based organisations are a type of "small" ecological organisation, and we may also have difficulty analysing them within the framework of new social movements. The characteristics of ideology-based grassroots movements align with those of ecological organisations in the type of reasons to mobilise and the profile of participants (including gender composition). In contrast, they differ from this type of organisation and are more similar to life experience-based organisations in their interest in local problems and very pragmatic environmental issues (indeed the organisation may disappear when the problem is resolved), in their smaller size and less hierarchical internal structure, in their lower level of organisation at a supra-local (regional, national or international) level, and in their closer contact with the local population.

In contrast, in the case of toxic waste activism most members are from the working and lower middle classes, and are mainly housewives (Brown and Masterson-Allen, 1994) whose main concern is the risk of environmental problems affecting the health of their family and neighbours.

Again, Brown and Masterson-Allen highlight experience rather than ideology to try to explain the different profiles of members involved in toxic waste activism and those involved in ecological organisations:

Because toxic waste activists start out from personal experience, rather than political ideology, they differ from participants in the broader environmental movement. Scholars from the environmental movement tend to either ignore the toxic waste movement or classify it as an indistinguishable part of the environmental movement. But toxic activists differ from the majority of environmental activists in several ways: their general lower class background, lower levels of education, a predominance of women members and leaders, and a higher level of participation by minorities. In general, activists have less overall political ideology than do mainstream environmentalists. (Brown and Masterson-Allen, 1994:273).

The sociological tendency of waste disposal activists does not fully apply to life experience-based organisations, which are not composed solely of lower class members and housewives. But, significantly, there are more members with a low educational level and more housewives than in the ideology-type organisation.

It must be noted that toxic hazards in the USA have traditionally been located in lower class and non-white (e.g. black and Hispanic) communities (Hamilton, 1990). This is an important element in shaping the profile of activists of the organisations formed to protest against these sites. This is not the case for any of the organisations considered in this study and may be a factor in explaining why the type of members in the life experience-based organisation are more diverse than in the toxic waste cases.

Significantly, the diversity of women's sociological profiles in the groups using life experience-based arguments, cases 1 and 2, show that this type of argumentation is not exclusive to lower class and lesser educated women and housewives, but that it cuts across different sociological backgrounds and lifestyles. At the same time, gender tendencies in the ideology-based organisation demonstrate that an interest in life experience-based arguments is a strong tendency but not a normative condition of female activism.

4.4. Gender tendencies in women's concerns about local conflicts and the global environment

In a previous section I pointed out that the organisations with an experience bias attract women for whom gender entails a set of responsibilities and roles in their everyday private and public life. I argued that such responsibilities and roles are linked with social and cultural assignments about femininity, and that these, in turn, profoundly influence female perspectives on the environment.

The reasons for joining the organisation clearly illustrate the experience versus ideology argument described above for the organisations *Coordinadora Antilínia de les Gavarres* and *Salvem les Valls*¹¹. In addition, these initial results indicate that in *Coordinadora Antilinia de les Gavarres*, the life experience-based organisation, it was the women members who defended the issue of health most strongly. The second most important argument used by the members of the organisation – opposition to the model of development – is of an ideological nature, and was cited by similar numbers of men and women.

¹¹ Unfortunately, during the interviews with the organisation *Salvem l'Empordà* the information related to the reasons why members became involved in the grassroots movement was obtained by using an open question. Answers obtained are very diverse and therefore it was not possible to systematise comprehensively the diversity of opinions given by the members.

Table 4.4. Reasons for mobilisation of the members of Coordinadora Antilínia de les Gavarres, based on enquiries. 12

	Women		Men
1. Negative effects on health	12 of 15 (80%)	1. Negative effects on health	12 of 18 (67%)
2. Opposition to the model of	9 of 15	2. Opposition to the model	10 of 18
development	(60%)	of development	(56%)
3. To defend the land from	7 of 15	3. To defend the land from	9 of 18
aggression	(47%)	aggression	(50%)
3. Negative effects on the landscape	7 of 15	4. Negative effects on the	5 of 18
3. Negative effects off the fandscape	(47%)	landscape	(28%)

On the other hand, in *Salvem les Valls* significantly more women than men supported the ideological argument. In this organisation all of the women had a high educational level and, as previously stated, they were also the youngest activists interviewed.

The second most supported argument, "I thought that the infrastructure was an aggression on our land", which has a more experienced orientation, was cited by significantly fewer male and female members.

Table 4.5. Reasons for mobilisation of the members of Salvem les Valls, based on enquiries 12

	Women		Men
1. I thought that the infrastructure did not represent a good model of development for Catalonia.	13 of 13 (100%)	1. I thought that the infrastructure did not represent a good model of development for Catalonia.	14 of 19 (74%)
2. I thought that the infrastructure was an aggression on our territory.	8 of 13 (62%)	2. I thought that the infrastructure was an aggression on our territory.	12 of 19 (63%)
3. I was worried about the impact on the landscape.	7 of 13 (54%)	3. I was worried about the impact on the landscape.	11 of 18 (58%)

¹² Each interviewee had to indicate three reasons why he/she joined *Coordinadora Antilínia de les Gavarres*. The numbers in brackets indicate the percentage of women/men that selected each of the options. The percentages aim to facilitate interpretation of the table. Readers should consider the limited statistical significance of the percentages given the small number of interviewees in each sample.

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4. I was worried about the impact	6 of 13	4. I was worried about the	9 of 19
on the quality of life.	(46%)	impact on the quality of life.	(47%)

Significantly, during the in-depth interviews with the women members of case 1, *Coordinadora Antilínia de les Gavarres*, some of them stated that their activism was ignited by the sight of the cranes starting to construct the high tension power line. The cranes were seen as an aggression on the local area and landscape where the women spent their everyday lives:

I mobilised when I saw the cranes arriving. They came down the path close to my house. I think I was the first to see the cranes arriving (...) I could not believe it was so fast! (Marina, 2004).

I became interested the day I was told the cranes had started working in the forest. I had heard people complaining about the issue and I agreed with them. But when I found out that they had started to work, then I said it's time we did something! (Engracia, 2004).

A general observation about women activists from grassroots movements that include life experience-based arguments is that their fight is strongly motivated by concern about how environmental degradation may affect people locally.

In the case of *Salvem l'Empordà*, where the average woman has a high educational level and is middle aged (30-50) (see table 4.3), the interviews demonstrated that women's concerns for the environment are very much focused on the social impact.

Interestingly, all the women with this profile who were interviewed expressed a strong interest in social issues, even though none of my prepared questions directly addressed that aspect (Àngels, 2004; Anna, 2004; Barbara, 2004; Carme, 2004; Glòria, 2004; Lidia, 2004; Marta I, 2004; Marta II, 2004; Montse, 2004; Mixo, 2004; Xandra, 2004).

The women mentioned their commitment to the social issues involved in *Salvem l'Empordà*'s struggle. In some cases they explicitly asserted that they were not interested in "nature-oriented" organisations as they tended not to be concerned with people's problems (Xandra, 2004).

Some of them also explained that they would have become involved with other social causes (e.g. women's rights groups) if stopping the environmental degradation of *Empordà* had been less urgent. Gloria, a paediatrician in her fifties,

expressed this idea as follows:

I started to get involved in this issue. It could have been another one. Then the problem with the pig farms appeared... Slowly I got more involved in these issues (...) I've been quite an activist all my life. The first thing I wanted to do was to get in touch with people I had known before and also meet new people to organise the 2000 March against poverty and for women... We did something, we did a lot... (...) But then, when Salvem l'Empordà appeared, when we decided to create Salvem l'Empordà, a map with all the harmful projects came to light... then I realised it was very urgent. I didn't know... I always thought the land was deteriorated, but this was a photo that shouted out, "We have to mobilise!" (Gloria, 2004)

A similar opinion is expressed by Marta A., a female activist and member of *Salvem l'Empordà* who was also actively involved in a left-wing party:

I'm much more interested in the issues of social inequity... Well... Everything is one. I'm mainly interested in what impact problems related to the land have on people, but my interest has never been the ecology itself. (Marta A., 2004).

The testimony of Marta B., an activist with a leading role in case 2, is particularly relevant because she describes her transition from a young women who was curious about "the environment" into an adult woman mainly interested in the social impacts of environmental problems:

[The interviewee expressed her general concern about the social problems related to a specific situation where she helped an immigrant family who had a son in the same class as her daughter] "I became friends with his mother and I am helping her with their documentation... I am concerned with social issues..."

[Interviewer:] "That is what worries you most?"

[Interviewed:] "Yes, yes..."

[Interviewer:] "So, personally you have chosen to engage in environmental issues, but you could...."

[Interviewed:] "Well, yes, because I studied environmental science I suppose.... But I could get involved in any other issue, I think... But when I started [to study]

environmental science it was not like that. I think it is more that now I have a social perception. When I studied environmental science I was interested in nature, in urban ecology, I was really interested in the environment..." (Marta B., 2004).

The previous testimony also illustrates the conceptual gap between what the environment is expected to be (the scientific and technical definition) and what women feel concerned about. When the activist says "I was really interested in the environment", she implicitly refers to the hegemonic definition, which is not what she and her fellow activists think about when talking about the environment. Later, I will return to this topic, but first I would like to explore the social dimension that the women interviewed expressed their concerns about.

The general social compromise expressed by the women interviewed when their concerns about the environment were discussed in depth takes the form of other more specific arguments, namely health risks, quality of life, environmental heritage left to future generations and landscape degradation. This point is examined further below.

4.4.1. Health risks as a female concern for the environment

Throughout the interviews and as diverse results were obtained from the interviewees, the relevance of health concerns for the women participating in the organisations that use experience-based arguments for campaigning became clear.

Firstly, when the activists were asked if they supported the opinion "Health risks are what worry me most about environmental problems", the women from *Coordinadora Antilínia de les Gavarres* showed the strongest interest in this issue. Health concerns were also important for men. In this case, the local conflict about magnetic fields influenced their opinion. Interestingly, in the case of *Salvem l'Empordà* the women also expressed strong concern about health risks, while the men did not show a specific preference. In this case, health risk was not a priority in the local conflict. In case 3, the movement classified as ideology based, the women showed a level of concern similar to that of the male activists.

Table 4.6. "Health risks are what worry me most about environmental problems"

	Case 1 Coordinadora Antilínia de les Gavarres		Coordinadora Salvem l'Empordà Antilínia de les		Case 3 Salvem les Valls	
	Women	Men	Women	Men	Women	Men
Strongly disagree + somewhat disagree Somewhat agree + strongly agree	1 of 15 (7%) 13 of 15 (87%)	4 of 18 (22%) 14 of 18 (78%)	3 of 20 (15%) 17 of 20 (85%)	7 of 23 (31%) 16 of 23 (69%)	5 of 13 (39%) 8 of 13 (62%)	6 of 19 (32%) 13 of 19 (68%)
I don't know/ No answer	1 of 15 (7%)					
Other						

Secondly, in case 1 when the activists were asked about their reasons for joining the lobbying group, 12 out of 15 women (80%) and 12 out of 18 men (67%) highlighted health risks.

Furthermore, a more detailed analysis shows that educational level is a factor that affects the issue of concern for health risks, as this element combined with gender promotes a greater degree of understanding of the issue. If we combine gender and educational level, the final number of people interviewed is extremely low, but a comparison of these interviewees' answers is revealing. Women with a low educational level expressed the strongest concern about the health risks associated with environmental issues. Men with a low educational level and women with a high educational level came next. Finally, men with a high educational level were least likely to mention health risks as a reason for their activism.

Table 4.7. Health risks as a main reason for mobilisation of interviewed members of Coordinadora Antilinia de les Gavarres (*)

Women with a primary, secondary or vocational educational level	9 out of 9 (100%)
Men with a primary, secondary or vocational educational level	9 out of 11 (82%)
Women with a high educational level	4 out of 6 (67%)
Men with a high educational level	3 out of 7 (46%)

Better educated people are more likely to have a broader view of environmental problems than people with a low educational level. However, the results also indicate that gender is a strong predictor of health-related concerns.

Thirdly, in the questionnaire the members of the grassroots groups were also asked about their personal interest in environmental problems in general (see table 4.8). The results were strongly biased by the resistance arguments of the groups they were involved with. However, apart from this bias, relevant differences in the priorities indicated by men and women in the same organisation were also obvious.

In the case of *Coordinadora Antilínia de les Gavarres* again more women than men expressed their concern about the negative consequences of environmental problems on health. This was also the most relevant issue for men, but with a clearly lower intensity.

The same question revealed similar but more extreme results in case 2, *Salvem l'Empordà*, where health was not a main reason for campaigning. Ten out of 20 women ranked the impact on health as a relevant environmental concern. It was the second most mentioned concern, preceded only by "destruction of nature" – which is a main priority of the group – from a list of 13 environmental concerns. For men from the same organisation health risk emerged as the fourth most relevant concern, and was indicated by 7 out of 23 men. In case 3, 5 out of 13 women and 9 out of 19 men pointed to this same concern.

Table 4.8. Prioritisation of general environmental concerns

Case 1: Coordinadora Antilínia de les Gavar	rres
Women	Men
1. Negative effects on health – 14 out of 15 (92%) 2. Destruction of nature – 6 out of 15 (40%) 3. Nuclear energy industry – 5 out of 15 (33%)	1. Negative effects on health – 13 out of 20 (72%) 2. Air and water contamination – 8 out of 20 (44%) 3. Climate change – 6 out of 20 (33%)
Case 2: Salvem l'Empordà	
Women	Men
1. Destruction of nature - 11 out of 20 (55%)	1. Air and water contamination – 11 out of

2. Negative effects on health -10 out of 20	23 (48%)
(50%)	1. Nature destruction - 11 out of 23 (48%)
3. Climate change – 6 out of 20 (30%)	2. Negative effects on the landscape – 9 out of
	23 (39%)
	3. The loss of biodiversity – 6 out of 23 (26%)

Case 3: Salvem les Valls

Women	Men
1. That there are more and more urban and	1. Negative effects on health – 9 out of 19
less rural areas – 7 out of 13 (54%)	(47%)
2. Negative effects on health – 5 out of 13	
(38%)	1. Climate change – 9 out of 19 (47%)
2. Destruction of nature – 5 out of 13 (38%)	2. The loss of biodiversity – 8 out of 19 (42%)
3. Contamination of air and water - 4 out of	2. That there are more and more urban and
13 (31%)	less rural areas – 8 out of 19 (42%)
3. The loss of biodiversity – 4 out of 13 (31%)	3. Nature destruction – 7 out of 19 (37%)

The gender tendencies observed in organisations showing life experience-based arguments were not the same as for *Salvem les Valls*, the group classified as ideology based (see table 4.8). In this organisation the women showed less concern for health risks. They demonstrated strong unity regarding the highest priority issue, concern for the degradation of rural areas, which is a main argument of their struggle. On the other hand, a large percentage of men in this organisation indicated their concern about health risks, and also climate change. This male tendency is not consistent with the results of another question related to health risks in the same questionnaire (see table 4.4. discussed above). Consequently, there is some doubt as to whether the men in *Salvem les Valls* conceive health risk as a global consequence of environmental degradation – linked to issues such as climate change, to which they give equal importance – or if they are concerned about health risks that affect specific local people, as in the case of life experience-based arguments.

The specific approach that women showed regarding health risk concerns in the life experience-based organisation, *Coordinadora Antilínia de les Gavarres*, was clearly illustrated in the in-depth interviews with members of this group.

In some cases women framed the issue by referring to gendered feelings and responsibilities. For instance, during the interviews with female members of the life experience-based organisation who had mobilised against the high tension power line (case 1), arguments constructed from female-specific life experiences when

talking about health emerged. Engracia, a secondary school teacher in her forties, expressed her concern about the health risks associated with the high tension power line as follows:

A family who lives close to us has a daughter who is in the same year as mine. They are the same age. The mother of this girl has cancer. At that time [when the conflict took place] she was recovering in hospital. Then you hear about scientific studies [in relation to electromagnetic fields] which talk about childhood leukaemia, cancer... everything! We experienced this specific case first hand because that girl also plays basketball with mine... And that family has the [high tension power line] tower closest! They have the tower so close that if it fell down, it would go into their living room! (Engracia, 2004).

The interviews with the activist members involved in case 1, *Coordinadora Antilínia de les Gavarres*, suggest that the health argument was strong enough to mobilise people who would not otherwise have reacted because they would normally see themselves as unable to participate in local politics (Montserrat I, 2004; Montserrat II, 2004). This is particularly relevant for women if, as mentioned before, we consider that they are less involved than men in other organisations related to local development (e.g. political parties or ecological organisations).

Significantly, potential health risks for the local population motivated women activists from the same citizens' group to construct a database of their personal knowledge about neighbourhoods affected by high tension power lines. Their original idea was to pass on information about the health risks associated with electromagnetic fields to potentially affected households:

We [she refers to the women in the organisation] even decided that we would go to residential areas with high tension power lines to inform residents about the negative effects on their health. And in the end we made a list of [places affected]... For instance, there is a house very close to a high tension power line in [the village of] Quart. In [the village of] Santa Cristina... I found one (high tension power line) in Sant Cugat which crosses a residential area... (...) I was on a street (...) the line was in the middle with houses on each side of it! I thought, "If we have to go somewhere [to inform people] we should come here! (Engracia, 2004).

4.4.2. A gendered approach to quality of life

The results of the interviews revealed that quality of life was a relevant motivation for campaigning for all members of the organisation.

Nevertheless, in the case of grassroots movements with life experience-based arguments (cases 1 and 2) women tended to show greater concern for quality of life as a main aspect of environmental problems.

Table 4.9. "What worries me most about environmental and land problems is how they could affect people's quality of life."

	Case 1 Coordinadora Antilínia de les Gavarres		Coordinadora Salvem l'Empordà Antilínia de les		Case 3 Salvem les Valls	
	Women	Men	Women	Men	Women	Men
Strongly						
disagree +	2 of 15	4 of 18	1 of 20	6 of 23	2 of 13	3 of 19
somewhat	(13%)	(23%)	(5%)	(26%)	(15%)	(16%)
disagree						
Somewhat	13 of 15	12 of 18	19 of 20	16 of 23	11 of 13	16 of 19
agree +	(87%)	(66%)	(95%)	(70%)	(85%)	(84%)
strongly agree	(0/%)	(00%)	(93%)	(70%)	(03%)	(04%)
I don't know/		2 of 18				
No answer		(11%)				
Other				1 of 23		
Oulei				(4%)		

It is significant that in the case of the ideology-based organisation, *Salvem les Valls*, large numbers of both men and women highlighted quality of life. However, my hypothesis is that they approach this concern from an ideological perspective and not a life experience-based one. As explained before, quality of life, which is considered to be the chance to live in a natural environment with a pleasant landscape, is a main argument of *Salvem les Valls*' fight. The idea of quality of life is articulated from a vision of a development model as an alternative to the hegemonic one. This idea is well illustrated in the words of the representative of *Salvem les Valls*:

Therefore, the law about mobility... If we assume that it is not possible to carry on growing in mobility, in private transport, for many reasons, not only because of the greenhouse effect but because of the quality of life of people. It's not normal, is it? For instance, I said that here in Vidreres it has got to the point where there isn't room for any more people, there isn't room for any more cars in the village. The problem is that... the village has a limited capacity! I mean that. We are constantly going beyond

these limits. Maybe there is a limit to mobility, to the construction of roads. Maybe there are alternative ways to develop that allow us to live and work... Of course, people are always frightened by those who say, "You will lose your job! Companies will go elsewhere, there will be no investment!" Well, we are sure that there are ways to build a country without the need to destroy the natural heritage. This is what we have, isn't it? And if what we want is to transform Catalonia into a scalextric slot car track crisscrossed by fifty thousand roads... (Representative of Salvem les Valls, 2003).

In the case of the organisations showing life experience-based arguments, the women's opinions revealed a rather different point of view. The women interviewed emphasised everyday problems perceived through personal feelings and gendered roles. They tended to express their worries about the environmental situation their descendants would inherit and how their families would be affected by the degradation of the landscape. Therefore, their concern for quality of life appeared to be strongly shaped by gender experiences and assignments. Nevertheless, this standpoint did not exclude reflecting in more ideological terms, as in the case of *Salvem l'Empordà*. However, it is still relevant to highlight the gendered root of their environmental concerns.

It is significant that when asked to reflect on their reasons for engaging in environmental activism, most women spontaneously mentioned their concern for the environment that their sons, daughters, nieces and nephews would inherit. For instance, when Marina, a housewife in her forties, was asked about her motives for being involved in the organisation she answered:

The thought that... I have daughters, if one day they said, "See, all this was not here before. We used to come here to collect mushrooms, to walk, and one day they built all this!", and that they would say, "And did anyone do anything to prevent this?" (...) I will do all I can, I will do everything in my power to stop it! (Marina, 2004).

A similar opinion was expressed by Carme, an architect in her forties and an activist and member of the organisation in case 2:

I think [women] are worried about the future we'll leave to our kids. I'm concerned about the idea my grandchildren will not have the chance to experience things that have moved me emotionally... (Carme, 2004).

Both testimonies also show that women frame the argument not in abstract economic terms but in the concrete space of feelings and life experiences which are linked to their roles as mothers and, more generally, to their gender caring assignments.

The way they think about the concept of environmental heritage for future generations is notably different from the technical argument used in political spheres inspired by the Brundtland Report. This second view is synthesised in the following lines:

Sustainable development is development that meets the needs of the present without compromising the ability of the future generations to meet their own needs. (WCED 1987:43).

This citation shows that the technical-inspired perspective considers nature and the environment to be resources: they are means by which continued development in the future will be made possible. It also shows that "future generations" are conceived in very abstract terms.

On the other hand, women want to preserve the local environment because it is seen as a community with familiar and personal memories rooted in the land itself. The environment has a value which cannot be expressed in economic terms because it is a more sociological concept: a sense of belonging.

The results of the interviews demonstrate that concern for the landscape and historical memory is a very appealing argument for both men and women engaged in local environmental conflicts (see table 4.8). Indeed, this argument is a fundamental element of current grassroots mobilisation in Catalonia (Nel·lo, 2003).

Table 4.10. "The loss of our landscape and historical memory is what worries me most about the environment."

	Case 1 Coordinadora Antilínia de les Gavarres		Case 2 Salvem l'Empordà		Case 3 Salvem les Valls	
	Women	Men	Women	Men	Women	Men
Strongly disagree + somewhat disagree	2 of 15 (13%)	3 of 18 (17%)	1 of 20 (5%)	1 of 23 (4%)	0 of 13	0 of 19
Somewhat agree + strongly agree	13 of 15 (87%)	13 of 18 (72%)	19 of 20 (95%)	22 of 23 (96%)	13 of 13 (100 %)	18 of 19 (95%)
I don't know/ No answer		2 of 18 (11%)				1 of 19 5%
Other						

Nevertheless, my argument is that a sense of belonging (expressed in the interview as the historical memory of landscape) works as a mechanism to channel the environmental concerns of women, which are very much linked to gendered experiences. This argument has been explored in other studies:

During the interviews, it was rare that women framed their feelings of threat in relation to the environment. They spoke about their concerns regarding health, especially that of children, and about a feeling of loss of a place and a milieu that they considered their own. (Bru-Bistuer, 1996:119).

Memories and experiences which belong to personal history are identified in the landscape and, thus, they struggle in reaction to a sense of belonging to a place and environment which they consider their own; they think of it as a human being, as if it would be a part of their family or of their body. (Alfama and Miró, 2005; translated by the author).

Similarly, during the interviews women showed specific gendered feelings and concerns based on everyday experiences and roles. For instance, Lidia, a

craftswoman in her forties, said:

When I was a child my mother brought me to the river to clean clothes. I was too small to stay at home and she used to tie me to a tree with a rope. (...) From there I could see the stream flowing and clean basins. I've grown up with that. I haven't got any children, but if I did I would be even more furious! (Lidia, 2004).

The importance that the women interviewed attached to the landscape was also expressed by Carme:

Places where we [she refers to herself and her family] have been going for many years start to be negatively affected. Where are we going this weekend? Where are we going for a walk? We go to the mouth of the river Fluvià. In summer, where do we go for a swim? To Cap Ras beach. Many places are part of our everyday life, they are important for our quality of life, and suddenly they are all disappearing (...) So much so that this is an issue affecting my emotions and feelings (...). (Carme, 2004).

4.5. Women are not a group! Acknowledging differences between women

The women in the ideology-based organisation (case 3) had different opinions from the women in the life experience-based ones. Moreover, the number of women that highlighted health and quality of life was similar to the number of men in the three organisations; and when they gave their reasons for the support they gave during the citizen's committee conflicts, women presented ideological arguments more often than their male counterparts.

If we look at the results for case 3 in table 4.6 we see that the number of female members with the opinion "Health risks are what worry me most about environmental problems" is similar (8 out of 13) to the number of male members (13 out of 19). The same can be observed in table 4.9 regarding quality of life. This is a main argument for the struggle of *Salvem les Valls*, as explained in a previous section. When asked if they agreed with the statement "The reduction of quality of life is what worries me most about environmental problems", both women (11 out of 13) and men (16 out of 19) tended to answer positively.

In addition, when the members were asked to highlight the three main arguments

from a list of 11 items to explain their initial reasons for mobilising for the cause of *Salvem les Valls*, all the women (13 out of 13) indicated that the ideological argument had fuelled their decision: "I thought that the infrastructure didn't represent a good model of development and progress for Catalonia". There was no unanimity for the other options selected by the women in second and third positions: eight indicated that the infrastructure was an aggression to the local environment and seven highlighted the impact on the quality of life.

Why did women in the ideology-based organisation demonstrate different tendencies in their environmental concerns from women in the life experience-based ones? Does this demonstrate that gender differences are not relevant when interpreting citizens' concerns for the environment?

As mentioned above, the women in the ideology-based organisation had a different sociological profile from the women in the two organisations with life experience-based arguments for campaigning (see table 4.3). When the interviews took place, in *Salvem les Valls* (case 3) the dominant age range of the women was 21-20 (7 out of 13) and 31-40 (5 out of 13). The opposite results were obtained for case 1, where nearly all of the women were between 41-50 and 51-60 years old. In case 2, the ages of members ranged from 21 to 60, but most were between 41 and 50 years old (8 out of 19). Significantly, the women in *Salvem les Valls* were not only very young, they were also the most educated.¹³

According to these sociological profiles, we could hypothesise that in comparison to the ideology-based organisation more women in the life experience-based organisations could have traditional gender responsibilities related to the carer role. This hypothesis would explain the women's concerns about health and quality of life, as well as their female standpoint when reflecting on the environment left to future generations and when expressing the social value of landscape.

The differences that emerged in the analysis of the case studies illustrate that women are not a single group and cannot be treated as such. Women constitute more than half of the world's population. They live in very different economic and geographical contexts, and have very diverse opportunities and choices in terms of education, religion, sexuality, profession, etc. (Lorde, 1984). This female diversity

proposed hypothesis.

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¹³ The education variable might not be sufficient to explain the different concerns among women in the organisations under study; women with a low and medium educational level were well represented in case 1, but women with a medium and mainly high educational level were well represented in case 2. The profile of young, highly educated women may provide a basis for the

may also lead to diverse interests and perspectives on the local environment.

However, although local historical, cultural, social, economic and/or ecological variables may help to explain the differences among women regarding their environmental concerns, these variations do not invalidate gender as a major cultural and social mechanism that explains male- and female-specific concerns about the environment.

On the other hand, the fact that female members of Salvem les Valls demonstrate mainly an ideology-based interest in the environment – even more so than their male counterparts – is not necessarily an indication that Salvem les Valls represents gender-neutral values about the environment. In fact, conservationist values in the organisation's discourse refer to issues of public life that have traditionally been within the sphere of male responsibilities. Moreover, the low representation of women in this organisation could be explained by the androcentric bias that dominates land and environmental management and decision making, which implicitly reduces female citizens' interest in such issues. Indeed, feminist and gender researchers have exposed androcentric biases in the composition and function of the fields of science and policy and the negative effects of these biases on women's access to these domains of power (Walsh, 2001, Waylen, 1998, Rose, 1994, Fox Keller, 1992; Harding, 1991).

4.6. Gendered tendencies in environmental activists' opinions about general environmental concerns and in pro-environmental attitudes

Although many of the questions in the interview focused on local conflicts, some questions explicitly addressed global issues. Participants were asked to rank 13 environmental conflicts, to indicate who was in charge of everyday responsibilities linked to housework, caring work and environmental behaviour in the family unit, and to express which environmental attitudes they would be most likely to engage in.

The results of ranking the general environmental concerns have already been described in table 4.5 to illustrate gender tendencies in the three groups. Such an approach provides an in-depth picture of the influence of each organisation's fight on the opinions of the activists, and a comparison of men and women with different sociological profiles.

Nevertheless, interesting trends can also be observed if we consider gender tendencies in the opinions of all the activists. In this way we can compare the main tendencies in the opinions of the 108 environmental grassroots activists, of which

48 are women and 60 are men. Indeed, one of the purposes of including this question was to observe potential gendered interests in information which not only related to different types of problems but which also expressed different discursive styles and information means: lay language and everyday perception (e.g. nature destruction), scientific and technical terminology and information sources (biodiversity) and mass media coverage (the Prestige).¹⁴

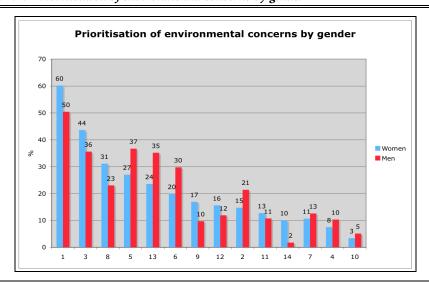


Figure 4.1. Prioritisation of environmental concerns by gender

LEGEND

- 1 The negative effects on health
- 2 The negative effects on the landscape
- 3 Destruction of nature
- 4 Extinction of animal species
- 5 Contamination of water and air
- 6 The loss of biodiversity
- 7 That the places I love are destroyed
- 8 That there are more and more urban areas and less rural areas
- 9 The quality of the foot we eat

-

¹⁴ We could certainly claim that "climate change" and "biodiversity" have been very much diffused by the media. Nevertheless, they are concepts that probably need some kind of scientific background to be integrated as an environmental concern.

- 10 The loss of forests
- 11 The nuclear industry
- 12 Major natural disasters like the Prestige
- 13 Climate change
- 14 Other

Total number of people interviewed 108

Women 48

Men 60

The highest priority for women, and to a slightly lesser degree for men, is health risks, although these results are extremely biased by the opinions of members of the grassroots movement *Coordinadora Antilínia de les Gavarres*, as explained above. The tendencies observed for other items where the influence of the grassroots movements' local concerns is not as evident are of greater interest.

The biggest difference between the opinions of men and women regards "climate change". This is an item highlighted by a large number of men, and by somewhat lower numbers of women. Differences are also observed in the items "the contamination of air and water" and "the loss of biodiversity", which are both given a higher priority by more men than women.

On the other hand, more women than men highlight the issues of "destruction of nature" and that "there are more and more urban areas and less rural areas".

Even though no general conclusions can be extrapolated from such a population sample (a limited number of participants strongly biased the interests in the local conflicts), it is worth noting that male concerns tend to be expressed using abstract and scientific terminology such as "contamination", "biodiversity" and "climate change". On the other hand, women's concerns are more often linked to lay knowledge and popular perceptions of environmental problems. Such a tendency is relevant enough to be considered to be a hypothesis for future analysis.

The interviews with the grassroots organisations' members also included a series of questions which aimed to provide a better picture of what influence gender had on the distribution of responsibilities among members of a family unit. The questions referred to the assignment of everyday and environment-related responsibilities.

Because some of the people interviewed lived alone or shared a flat with friends (often of the same sex), I only used the answers of the interviewees that lived in a family unit (as a couple, a single parent or a traditional family).

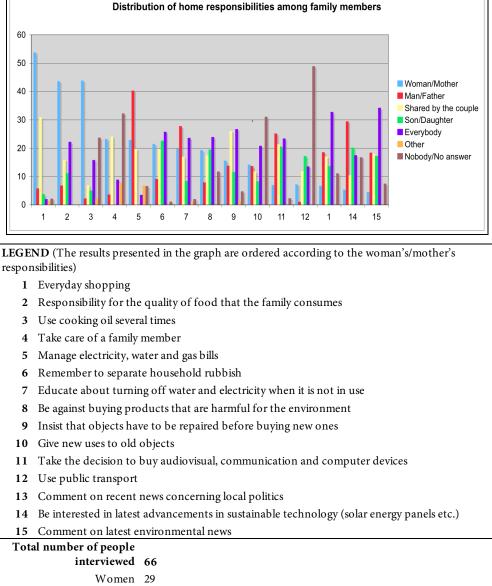


Figure 4.2. Distributions of home responsibilities among family members

LEGEND (The results presented in the graph are ordered according to the woman's/mother's

Men 37

The opinions of the men and women interviewees varied enormously. People tended to include themselves in most of the responsibilities, and to indicate other members of the family less often. For this reason, the table includes the average of the percentage of male and female answers.

As has been observed in other cases (Littig, 2001), the results indicate that gender is relevant to obtaining a more detailed picture about the roles assumed by men and women in the everyday management of the home that have direct links with local environmental issues.

Women are mostly responsible for shopping everyday. This is relevant from two points of view. Firstly, women are the target group in the marketing of more environmentally friendly products and in the application of policies to reduce the environmental impact related to the consumption of household goods (packaging and cleaning products). Secondly, women tend to be more concerned about environmental issues related to consumption. Indeed, another item where a large number of women participate is "responsibility for the quality of food that the family consumes", which is linked to the female consumer's role. We have seen in chapter 3 that women are very interested in information related to food and consumption. Indeed, women have been very active in lobbying industries to reduce the environmental impact of their productions (Littig, 2001; Seager, 1993). Results from the survey also indicate that women engage in other everyday habits such as reusing cooking oil.

In the case of men, their household tasks are very much related to taking decisions about resources and technological equipment, activities traditionally linked to science and mainly in the hands of men (Roehr, 2001). Men are more often responsible for managing the electricity, gas and water bills and for deciding which technological equipment is to be bought. They are also more interested in sustainable technology, such as solar energy. The results of the survey also show that men are slightly more often responsible for educating the family members about saving energy and water. Nevertheless, this role has been observed for women in general population surveys in the case of Germany (Roehr, 2001).

Interestingly, men comment more often on environmental news or talk about local politics at home, although the results also indicate that this role is common for all the members of the family.

Finally, the series of questions related to pro-environmental attitudes complement the results of the gendered tendencies in the opinions of men and women in family roles.

When the members of the organisations were asked which three actions they would engage in to reduce their impact on the environment, two major differences

between men's and women's opinions emerged.

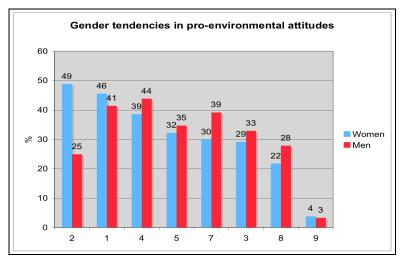


Figure 4.3. Gender tendencies in pro-environmental attitudes

LEGEND (The results presented in the graph are ordered according to the women's answers)

Reduce consumption and use products that do not have a negative impact on the

- 1 environment
- 2 Buy products which I am sure do not contain chemical or genetically modified organisms If possible I would change to an electric company that offers guarantees that their energy
- 3 does not contaminate the environment
- 4 Claim that part of my taxes are used to improve the quality of the environment
- 5 Use public transport or walk when possible
- 6 Install solar energy panels and other sustainable technology at home
- 7 Use less energy and water Buy electrical devices with low consumption or change for low consumption light bulbs at
- 8 home
- 9 Other

Total number of people interviewed 108 Women 48 Men 60

More women than men said that they would buy environmentally friendly

products. This was the biggest difference between the opinions of men and women. On the other hand, more men than women, albeit with a smaller difference in numbers, said that they would install solar energy panels and other sustainable technology at home.

Although differences in numbers were small, more women than men said that they would change to a more environmentally friendly electric company. This may be significant if we consider that women are less engaged in decision making about energy sources, as described in the previous table. However, we should consider that these results are strongly biased by the women from *Coordinadora Antilínia de les Gavarres*, which opposes high tension power lines.

Significantly, Roehr (2001) has observed that gendered roles and behaviours are reproduced in the use and management of energy, and she suggested taking advantage of the challenges and transformations offered by new technology to narrow the gap between women and energy. For the author, a challenge facing new technology is to engage women in taking decisions about energy sources for home use, and to increase the presence of women in the energy sector. Likewise, we should reflect on the need to fight against the double work burden of women who are recognised as the target group by environmental political agendas addressing consumption.

SUMMARY OF CHAPTER 4

Chapter 4 focused on the analysis of three environmental grassroots movements in the North of Catalonia (Spain). In contrast to the statistical approach of studies considered in chapter 3, in this case I explored qualitative results for local environmental conflicts. In addition, in this case the opinions collected are not from the general population, but from citizens that have been involved in local environmental activism.

A fundamental result of the analysis is the distinction between ideology versus experience-based arguments for campaigning. In both cases, citizens become activists because they consider their local environment is at risk. However, ideology-based arguments are more linked to ideals of sustainable development, while the experience-based ones are more a reaction to the degradation of place felt as one's own.

The relevance of that distinction is the observation that it helps to interpret gender tendencies in the sociological profile of activists involved in the organizations using one or the other type of arguments. When the organization uses more ideology-based arguments, like case 3, Salvem les Valls, there are fewer women, who tend to be young and highly educated. In this case, I suggested, women have also experienced traditional gender roles to a lesser extend. By contrast, women are more numerous when there are experience-based arguments. Case 1, Coordinadora Antilínia de les Gavarres, indicates experience-based arguments appeal to older women with a lower level of education. These observations are consistent with the results obtained from the comparison of the sociological profile of activists from new social movements and grassroots groups against waste disposal. However, case 2, Salvem l'Empordà, in which experience-based arguments have been instrumental for the engagement of many activists, also shows that experience-based arguments are appealing to highly educated professional women, demonstrating how it cuts across different sociological backgrounds and lifestyles.

In addition, as far as this distinction is significant for a gender analysis, it appears to be a relevant indicator to introduce a gender perspective in environmental governance. In concrete, it indicates participatory processes

should be the place to give voice to both ideology and experience-based arguments about the local environment, in order to allow the emergence of diverse gendered perspectives. In this sense, as I will discuss in-depth in chapter 8, it is also essential to consider the power and legitimacy imbalances between the different types of rationalities behind such arguments.

By focusing on the two cases that show experience-based arguments, I looked at the relevance of women's concern for the local effects and social dimension of environmental problems. Such a general concern is shaped in specific issues that motivate their reasons for campaigning: health risks, the environmental legacy left to future generations, quality of life and a sense of belonging. Women's testimonies from the case studies also showed how these concerns are strongly marked by women's experiences of femininity in a symbolic and normative sense.

In concrete, I explored how women consider their concern for the degradation of quality of life, which is very much connected to their families' everyday life, and to their descendants. The female testimonies often referred to their role as mothers and expressed feelings marked by gender caring assignments when expressing their reasons for becoming activists. Women also showed a sense of belonging that is very much connected to their descendants. The landscape is the place of the memories they would like to leave to their children and grandchildren. I argued that women also give a concrete sense to "future generations", instead of considering them as abstract ethical entities. All these are specific ways of framing environmental problems that bring to the fore personal experiences about the environment and specific values that enrich the environmental discussion. The local landscape and the personal historical memories associated with it appear then as promising instruments to channel the debate on the environment in discussion processes introducing a gender perspective.

In the case of Coordinadora Antilínia de les Gavarres, the concern for health risks was also instrumental in motivating women who until then had not been interested in environmental issues or even felt themselves unable to participate in local politics. That observation is coherent with the contribution discussed in chapter 3 that women's interests in the environment and scientific information would increase if their concerns were addressed. It demonstrates that giving priority to environmental problems as people perceive them is a mechanism for including different perspectives in the debate. On the contrary, if the discussion is centred on scientifically coded problems, people feel disengaged, as demonstrated by the testimonies of people who consider they have never been interested in "the environment" *per se*, although when talking about their health, quality of life or concerns for future generations they are indeed referring to it, though in a non-scientific way. In the same line, the results of activists' interests in general environmental concerns suggest that men are more likely to express their interests through scientific concepts (such as "contamination", "biodiversity" or "climate change"), while women tend to refer to lay knowledge; this also indicates that by ignoring experience-based arguments we are implicitly disempowering women.

However, case 2, Salvem les Valls, which has been classified as ideology-based, has revealed few differences between men and women's concerns for the environment. Moreover, the concerns shown by women in this organization are more similar to the opinions of men in the other case studies than those of women. This finding is also coherent with results presented in chapter 3, according to which gender does not determine clearly different opinions for men and women, though it explains specific tendencies in "some" men's and women's opinions. In this sense I argued, as set out in chapter 1, that we should consider gender as something that is not fixed; a diversity of female and male identities coexist, which, as the case studies demonstrate, are biased by socio-cultural factors such as age and education.

This finding does not contradict the relevance of gender as an influence in environmental concerns, but nuances and enriches that idea. It indicates the relevance of considering gender as a complex category that interacts with other social variables (e.g. economic status, occupation, geographical location, etc.). Gender complexity should be also addressed in relation to different types of actors involved in the discussion—citizens, stakeholders, scientists, politicians, etc.—in order to give voice to the diversity of perspectives on the environment when aiming at organizing "inclusive" environment-related participatory processes.

At the same time, the diversity of women's gendered experiences also demonstrate female concerns for the environment are the result of social and cultural processes, that shape women's experiences, and not an essential or mystical connection with nature, as cultural ecofeminism affirms. Gender influences women's perceptions in a symbolic, normative and practical sense, and that, in turn, shapes women's experiences about nature and their perspectives of, interests in and concerns for the environment.

The analyses of case studies presented in chapter 4 also considered gender tendencies in the everyday management of the home and the influence of environmental problems as well as the willingness of female and male activists to adopt diverse pro-environmental attitudes. The results indicate women are mainly responsible for everyday shopping, and they are also more interested in introducing pro-environmental attitudes in consumption decisions, such as buying environmentally friendly products. Women also take an interest in the application of policies to reduce the environmental impact of household goods such as packaging and cleaning products. By contrast, men are more likely to take decisions on energy resources and technological equipments, and they are also more interested in applying a pro-environmental attitude in these aspects of home management, such as installing solar panels or other sustainable technologies at home. Men also claim to be more interested in environmental news and local politics.

These results bring to light two reflections: first, the need for considering gendered priorities for activities aimed at promoting pro-environmental attitudes among citizens; and, second, the interest in considering how pro-environmental campaigns may reinforce the gendered division of roles at home, or, alternatively, may help to fight them.

5. Confidence in policy, science and society in conflict situations: a gender approach

In chapter 3 we looked at the issue of gender tendencies in institutional trust. In particular, we presented the results of sociological studies and European surveys that conclude that women tend to have less confidence in politics, science and technology. Whether this argument has received significant statistical support, to my knowledge it has been rarely explored in specific case studies. In other words, we know very little about the possibility that women's trust in politics, science and policy is more easily undermined by the controversial role those institutions tend to play in local conflicts. This hypothesis is coherent if we take into account the more sceptical opinion women have shown for policy and science generally.

That focus is very relevant, as the decrease of confidence in the current political system and in political representatives has been considered essential for understanding the complexity of the social, political and scientific aspects involved in the management of the environmental crisis (Funtowicz and Ravetz, 2000). Environmental conflicts have directly or indirectly played a central role in the profound delegitimization crisis that has afflicted technical-inspired political governments in Europe and around the world, and which has fuelled the emergence of civil society groups fighting for a voice in political decision-making. For instance, when it came to light that BSE-contaminated food was the most probable cause of a fatal human disease, the British government and other national and international governments faced a serious loss of public confidence (Millstone & van Zwanenberg, 2003). Indeed, the loss of confidence in political authorities is recognized as a fundamental reason to propose the move towards the governance paradigm in European Commission politics (European Commission, 2001).

Considering the relevance of the issue, I have explored the relevance of gender in the level of confidence that the grassroots activists from the three North-Catalonian groups show in politics, science and society. That research focus was not explicitly planned when designing the questions and interviews of the case studies. Nonetheless, results obtained from a specific question about the level of confidence in the different parties taking part in the problem, as well as some opinions from the people interviewed, have helped to form a clear idea of this issue.

Diverse types of actors are involved in each of the conflicts under study. In some cases some relevant parties, such as the Catalan government, local authorities,

economic developers or scientific experts, have played rather controversial roles. Therefore, each case must be explored individually.

In general we can observe that experiences of conflict tend to have significant effects on people's degree of confidence, and some gender marks are highlighted. Although robust conclusions cannot be established, in this chapter we will indicate how women and men's degree of confidence in governmental institutions, science and society is affected by local conflicts. I hope these contributions could motivate further explorations in the subject.

5.1. "Apolitical", "unideological", "against politics"?

Nel·lo (2003) believes that the crisis of legitimacy faced by political authorities is one of the arguments explaining the emergence of environmental conflicts in Catalonia. The author explains that Catalan citizens platforms are characterized by a profound mistrust of all political authority, whether at local, regional, national or European governmental level.

The discrediting of the legitimacy of political representatives has also been observed for the three grassroots movements considered in this study. All of them have expressed a low level of confidence in political parties and institutions. Indeed, they consider their activism as a way to fight the negligible actions of political representatives in preventing the degradation of the environment:

I think they [the members] are in the grassroots movement because they think this is the best approach. They are disillusioned by politics, by politicians in general, very profoundly. [...] I believe that very often it [their activism] is an answer to the fact that...politicians will not solve anything. [...] I think people are of the opinion that the general public should mobilize for that, because they know that their representatives will not make a very important...a very important change. (Marta and Montse, 2003)

Very often the members of the group are of the opinions that political decisionmaking is strongly influenced by economic and business interests, and that politicians do not take environmental issues seriously:

[The interviewer asked the opinion of the citizens group on Agenda 21] The idea we all share is scepticism. Scepticism in the sense that...declarations of intentions, even if

they are very good, have little value, because economic activities and political relations have another focus. (Representative of *Salvem les Valls*, 2003)

Interestingly, as for other Catalan cases (Nel·lo, 2003; Miró and Alfama, 2005), the three grassroots movements under study show contempt for politics and thus they publicly defend the groups as "apolitical". The political independency of the group gives the movement strong public credibility. The apolitical image is also instrumental in attracting new activists. People from very different backgrounds and with defined or undefined ideological tendencies feel sympathetic with the grassroots movement and many feel free to join it.

In addition, the three grassroots movements carefully avoid establishing links with political parties. Moreover, their claims are issue-focused on a problem, and they explicitly do not link their interests to any ideological framework.

Nonetheless, politics is at the core of their reasons for campaigning and in the mechanisms used to defend their interests: public demonstrations, political negotiations or the submission of claims through official means. They may even have the support of political groups and local authorities and use them as channels to communicate their concerns.

They all also express their support for the principle of sustainable development, although this is not explicitly expressed as a political aim or an ideological principle. Sustainable development is often argued as the right or "common sense" approach. Living in a healthy and quality environment is regarded as a human right.

Yet, contrarily to their public stance of being non-ideologically guided, the interviews with the representatives of the groups also revealed that they recognize an ideological background to their fight. For instance, the representatives of *Salvem l'Empordà* expressed the following:

Interviewer: It is interesting that you consider your group to be apolitical. So do you see your perspective about the territory as a political position? Or you think it is a necessity: that the environment has reached a limit? [...] Do you think about a social ideal, or that there are natural limits [to the exploitation of the territory]?

Interviewee: Well, I think it is clear that people from the citizens group tend to be more left-wing...but many people do not vote. They are apolitical. I mean that there are

many people in the group that do not vote for any political party because they do not trust them anymore. (Representatives of *Salvem l'Empordà*, 2003)

The political identification with left-wing parties was also observed in case 1 and case 2. In addition, the testimony of the representative of the groups showed that regardless of the profound discontent with politics, the citizens committees still have some confidence in specific political parties

For instance, the representative of *Coordinadora Antilínia de les Gavarres* expressed his hope that the conflict situation with the government would improve with a radical left-wing party in power:

Interviewer: So you don't believe in politicians applying Agenda 21 because of the political orientation [of the group at the government]? Do you believe that with a leftwing party in the Generalitat "things" would be different?

Interviewed: Well...we should think so! We should think so!

Interviewer: This is what you hope for?

Interviewed: Yes, otherwise we are in bad way! This is why we have always been looking towards and always had support from Esquerra Republicana [Republican Left of Catalonia]. With the socialists [moderate left-wing party] the discourse has always been more ambiguous. (Representative of *Coordinadora Antilínia de les Gavarres*, 2003)

Similarly, the representative of *Salvem les Valls* also said he had more confidence in a moderate left-wing party in government:

Well, this is my personal opinion; there are many different opinions regarding this. [...] That with the political parties that could have the opportunity to govern, changes will be difficult. But then, we have the internal dynamics of these political parties. I think we all agree that the socialists [moderate left-wing party] pay more attention to mobilizations by the public... [Instead, Convergencia i Unió—centre-right Catalan nationalist party] stand firm in their position. [...] They do not listen to the general public; they listen to businessmen. (Representative of *Salvem les Valls*, 2003)

5.1.1. The impact of conflict dynamics on grassroots activists' level of confidence in politics

The faith in politics espoused by grassroots activists is usually undermined by the role played by political representatives in the local conflicts.

The interviews with the representatives took place in summer 2003. Some months later the election results favoured left-wing parties. A coalition led by the socialists (Partit Socialista de Catalunya, PSC), and also made up of the left-wing proindependence party (Esquerra Republicana de Catalunya, ERC) and the Green Party (Iniciativa per Catalunya Verds, ICV), formed a government. Yet the situation did not improve for the grassroots movements.

In case 1 the high tension power line had already been built. However, the political change still had some consequences. Some people who had played a leading role in the fight against the construction of the high tension power line gained a formal political position or improved the one they had previously. That was seen with critical eyes by other members from the grassroots movement. They criticized people that acquired a political position because they did not use that new power to lobby for the modification of the high tension power line route or to dismantle it.

For instance, during the 2004 interviews an elderly female activist expressed the following view:

The mobilization we have had has been beneficial for politicians. The mayor is now a Member of Parliament. I see that the person that has won most is him. [...] He has been mayor, he has been re-elected, thanks to our mobilization. And I signed so that he could do this. [...] Because it was not a political party, but a group...he needed signatures in front of a notary. [...] And I signed...I did all I could, but now I see. [...] Look, we are in the Generalitat, we are in parliament, and we are on the council. [...] Maybe I expected more. (Montserrat A., 2004)

That same opinion was expressed by a male activist with a leading role in the group:

Now Lluís Postigo [Major of Llagostera] has what he wanted, that is to be Member of Parliament for ICV. I've asked him many times: "move on this issue", and he answers, "no, first we have to meet, and this, that and the other". "You came to the power thanks

to us!" [...] "You think we have spent eight years for your benefit! No, it is not like this!" (Josep Maria, 2004)

In case 2, *Salvem l'Empordà*, activists were also unhappy with the new left-wing government, because although they had answered the group's demand of elaborating a general plan for the whole Empordà region, they did not agree with the participatory process and with the proposal coming from the government.

Finally, case 3 was probably the most controversial. Although the left-wing political groups had expressed their opposition to the Bracons Tunnel project when they were in opposition, the project was once again taken up by the government and some modifications were proposed. Nevertheless, the grassroots movement continued to oppose it and despite strong disagreement between the groups and the government, the high-speed road was built.

5.1.2. Public participation: a strategy to solve the crisis of traditional forms of government?

Throughout the interviews the activists were very critical the role of the autonomic government in local conflicts. However, they still considered it to be the organization with the main responsibility for the environment. The questioner asked participants from the three groups who they considered to have the principal responsibility for improving the environmental quality of Catalonia. Out of a list of ten items, in all the organizations the total of the members placed the Generalitat de Catalunya in first place. Local councils and citizens were assigned second and third place, respectively.

Those results indicate the crisis of political credibility has not directly affected the basis of the traditional hierarchy of the decision-making system, led by the supralocal government. However, activists feel that the view of citizens should play a more relevant role. At the same time, they are sceptical as to whether the authorities would ever pay attention to people's demands. That opinion is visible in the criticism of the openness of governments to public participation in activities such as Agenda 21:

[The interviewer asked if the citizens committee would be open to participate in an Agenda 21 process] I think that we would participate in anything we would be asked for, we are open to participation. [...] Because we think it is worth being a pain. Be

there, and to remember every day that. [...] But if you ask me "do you believe in it? Do you think it is worth doing?" Then one has his doubts, his sceptical moments...because without refusing all institutional initiatives systematically, you should be sceptical, because you see what happens, you read things, and the tendency [of authorities] is completely in the opposite direction. (Representative of *Salvem les Valls*, 2003)

As in the case of the representative of *Salvem les Valls*, scepticism about the application of participatory processes is common to the opinion of the representative of *Coordinadora Antilínia de les Gavarres*:

[The interviewer asks about the opinion of the representative of the group about Agenda 21] It is the incoherent discourse [manipulated by partisan] interests. They may formulate Agenda 21, but putting it into practice is another thing. Politically it is very well seen, but practically, of course, powerful organizations are always powerful organizations. Electrical companies are very powerful. [...] The percentage of sustainable energy we are committed to with Europe. [...] Instead of progressing we are going back. [...] This is the incoherent and inconsistent discourse of politics. To formulate Agenda 21 gives a very good image!

Interviewer: But do you believe in Agenda 21?

Interviewed: [We do not believe] in the politicians that should apply it!

(Representative of Coordinadora Antilínia de les Gavarres, 2003)

However, the harshest view was expressed in the following words of a representative of *Salvem l'Empordà*:

[The interviewed gives her opinion about Local Agenda 21 of Figueres (the main city in the Empordà region)] They pull our leg! It has to be done, then they do it! If "I" [referring to politicians] can make myself up green before the elections, it could give me votes from a new sector. [...] Then, this is perfect. But then, for instance, as regards Agenda 21 we criticized the fact that the issue of planning, urban planning, was not discussed! They did not present us any map! What urban growth is planned? [...] In addition, while they were doing Agenda 21 they had approved a partial plan for nine hundred new houses. Then, you say: well, we are speaking about the timetable for the main rubbish dump. [...] What relevance do timetables have if I do not know how the city will grow?

[Later, the interviewer refers to Agenda 21 of Catalonia] I will not spend another minute on Agenda 21 of Catalonia because of the policies that the Generalitat is currently carrying out! I do not believe in it. More public money thrown into the garbage! (3)

Those opinions show the damage provoked by public participation processes that do not consider properly how to address and integrate critical views about environmental and territorial planning coming from organized citizens, and more critically, that are not politically accountable.

They also point to the relevance of exploring further the multiple and complex factors shaping the diverse opinions of activists about the role of authorities and political parties in local conflicts. In that sense, a relevant contribution comes from results indicating gender is an element giving an insight into our understanding of people's confidence in politics and how that confidence is affected by political controversies happening in local environmental conflicts.

5.2. How gender tendencies influence trust in politics

The results of research showed that political discontent was common to both men and women activists from the three organizations. For instance, most of them expressed that they had lost confidence in the autonomic government, the Generalitat de Catalunya, after participating in the grassroots movement. In case 1, *Coordinadora Antilínia de les Gavarres*, both men and women lost confidence in the autonomic government in very high numbers. For cases 2 and 3, although results for men and women were rather similar, it is worth noting that women were usually more critical with the role of the autonomic government. Men also expressed more often than women that they maintained the same level of confidence in the government.

Table 5.1. After your involvement in the conflict, did you change your level of confidence in the Government of Catalonia (Generalitat de Catalunya)?

	Case 1 Coordinadora		Cas Salvem l'I		Case Salvem le	
	Antilínia de les Gavarres			1		
	Women	Men	Women	Men	Women	Men
Less confidence	13 out of 15 (87%)	17 out of 18 (94%)	16 out of 20 (80%)	16 out of 23 (69.6%)	9 out of 13 (69%)	12 out of 19 (63%)
Same confidence			4 out of 20 (20%)	5 out of 23 (21.7%)	2 out of 13 (15%)	6 out of 19 (32%)
More confidence				2 out of 23 (8.7%)		1 out of 19 (5%)
Don't know / No answer	2 out of 15 (13%)	1 out of 18 (6%)			2 out of 13 (15%)	

When asked how they changed their degree of trust in politicians since they are in the citizens committee, in cases 1 and 3 women and men lost confidence in similar numbers, but men more often indicated that they maintained the same level of confidence in politicians than before. Interestingly, the more severe opinions came from women in case 2. They expressed that they lost confidence in government in markedly higher numbers than men.

Table 5.2. After your involvement in the conflict, did you change your level of confidence in politicians?

	Case 1 Coordinadora Antilínia de les Gavarres		Coordinadora Salvem l'Empordà Antilínia de les			Case 3 Salvem les Valls	
	Women	Men	Women	Men	Women	Men	
Less	9 out of 15	11 out of	15 out of 20	12 out of	8 out of 13	12 out of	
confidence	(60%)	18 (61%)	(75%)	23	(62%)	19 (63%)	
				(52.2%)			
Same	4 out of 15	7 out of	5 out of 20	7 out of 23	3 out of 13	7 out of	
confidence	(26.7%)	18 (39%)	(25%)	(30.4%)	(23%)	19 (37%)	
More confidence				1 out of 23 (4.4%)			

Don't	2 out of 15		3 out of 23	2 out of 13	
know / No	(13.3%)	 	(13%)	(15%)	
answer					

Those results are coherent with the hypothesis that women's confidence in political institutions is more easily damaged by the controversial role they play in local conflicts. We do not have graded results explaining those tendencies. However, it is possible to suggest some potential interpretations and to discuss them hypothetically.

First of all, we could propose again the hypothesis of gender power inequalities already suggested in chapter 3. According to this, women's opinions are more critical with current environmental risks provoked by highly industrialized societies because being in a marginal power position they have less to lose if business as usual decision making changes. Women tend to have little engagement with traditional politics, which probably means their interests are less represented and they also identify themselves less with the dominant political framework. All these elements could explain why women's opinions are more critical when they experience for themselves a controversial role of the autonomic government and the political parties through the local conflict they are engaged in.

Secondly, we could also hypothesize that because women tend to have little involvement in politics, they may see it as a distant reality, which works with its own robust rules, which women respect and may also admire. Therefore, when they engage in a local conflict in which the role of politics is controversial, they feel extremely disappointed. However, *a priori* this hypothesis could not be fully applied to case 2, and, partially to case 3, as in those organizations a significant number of women have previous experience in political and ecological organizations. It is, however, a potential argument for some members in case 1, as most women did not have experience in political or ecological groups before engaging in the grassroots movement (see table 4.2.). Speaking about toxic waste activism, in which women tend to take part in large numbers, Brown and Masterson-Allen notice that:

The ideology underlying the movement is largely based on democratic principles which activists perceive as subverted by government and corporate actions. Unlike the more highly educated members of the environmental movement, these people do not generally start from a cynical approach to government; they tend to have faith in the established order. (Brown and Masterson-Allen, 1994: 275)

In case 1, the disillusionment with politics that profoundly affects men and women of the organization must be also explained as a consequence of the specific role played by the mayor of Cassà de la Selva Town Council. For a long time this council gave public support to the citizens committee and openly opposed the building of the high tension power line. However, finally, the mayor agreed personally with the autonomic government the building of the infrastructure. In compensation the town would benefit from various investments. This political strategy provoked one of the most critical and painful moments for the members of the grassroots movement. The feeling of disappointment and its consequences in form of the low degree of confidence the participants felt towards politicians is well expressed in the following testimony of a female member of the organization.

Interviewed: Of course, if the mayor sells himself for some benefits anyone knows which ones!

Interviewer: I have observed that members of your organization are deeply disappointed...

Interviewed: Very much so! We cried a lot, we cried! I mean in the middle of the street! The day the town council decided to go ahead with it [with the building of the high tension power line].

Interviewer: That happened in Cassà, then came the bad moment in Llagostera...

Interviewed: Yes...the day it happened...with Cassà de la Selva Town Council, many people came crying, children crying! My father had a heart attack!

Interviewer: Because he was worried?

Interviewed: Yes, yes, yes...well, he had had other heart attacks in the past. [...] I cried so much, so much, so much! I would never have never thought that I could cry so much in front of so many people! (Engracia, 2004)

In the case of the village of Llagostera, the town council became the protagonist of the final period of the conflict, by opposing the building of the high tension power line in direct confrontation with the Catalan government. The mayor came to a preliminary agreement with the electricity company Fecsa-Enher and the Catalan government to modify the route of the line, with a lower impact on inhabited areas. Nevertheless, he had difficulties getting the consent of residents who would be affected by the alternative route (Barrera, 2001, September 25; 2001, November 14).

In September 2001, the Catalan government imposed the construction of the high tension power line in the municipality of Llagostera by decree. An unnecessarily large contingent of policemen ensured the development of the work by force (Editorial, 2001).

A third potential hypothesis to explain the critical view women have regarding their degree of confidence in politics goes back to the caring role hypothesis expressed in chapter 3. The quotation above shows the personal commitment the activists bring to the fight, and the emotional consequences played by controversial political actions. We have seen in the previous chapter that women shape their environmental concern in a very personal way, mixing their gender responsibilities and assignments of caring for others. We could hypothesize that women feel extremely disappointed by politics because their decisions go against their gender responsibilities in the local sphere. Women's opinions of politics may become particularly critical when political representatives prioritize other arguments (for instance economic ones) before the concern for people's health and well-being.

That hypothesis may be also applied to case 2, in which women expressed that their involvement in the grassroots movement was related to a general concern about how environmental degradation can affect people (see chapter 4), being more critical with politics.

5.3. Science and expert technical knowledge in question

While we have seen a rather solid unanimity in the critical view of activists towards policy-making, scientific and/or technical knowledge is questioned by the three grassroots movements under study, albeit in a less regular manner.

In case 3, *Salvem les Valls*, the citizens committee saw the role of technical expertise that designed the high speed road in a negative light:

In relation to the project, in relation to the main road, we always had a very negative view...because there were geographical problems, orographical problems [in the proposed design]. (Representative of *Salvem les Valls*, 2003)

Similarly, during the enquiries, many members of the grassroots movement were critical with the role played by technical knowledge involved in the elaboration of the report about the environmental impact of the high-speed road. In this case,

men expressed that they had lost confidence in the technical knowledge involved in the conflict slightly more than women. 14 out of 19 men (74%) against 7 out of 13 women (64%) expressed that they had lost confidence in "technicians or environmental consultancies that were responsible for environmental assessment reports".

In case 2, Salvem l'Empordà, results about confidence in experts who elaborate reports on environmental problems were very diverse. Gender differences were irrelevant¹. Significantly, scientific or technical expert knowledge had not played a controversial role in any of the conflicts in which the grassroots movement was involved. This may be a satisfactory answer to explain the diversity of opinions among the members. During the interview with the representatives of Salvem l'Empordà, they expressed their opinion that until that moment technical information was not an issue in the conflicts addressed. However, they predicted that the discussion on the legitimacy of expert knowledge could emerge in relation to some projects they were dealing with:

I think that the first "thing" will be with big infrastructures projects. Currently we are analyzing large-scale projects that will pass through the region. We are now putting all the information on a map. We are trying to find out exactly what is going on. Well...and a main road we did not consider came up. I mean that we may find more than we expected. That means the TGV [high speed train]. I think this will be the first problem. Until now all the cases were very clear: for instance, a golf resort on an important archaeological site. That [the conflict with expert knowledge] has not arrived yet. I think this could be the first case, and we should treat it carefully. Do it little by little: discussing it, organizing information activities with diverse people from diverse contexts. (Representatives of *Salvem l'Empordà*, 2003)

In contrast to the previous cases, case 1 is paradigmatic in relation to the controversial role that scientific and technical expert knowledge played, and it is in this case that gender has become relevant for interpreting the confidence of activists in scientific knowledge.

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¹ Out of 20 women, 7 (35%) expressed they had lost confidence in experts elaborating reports about environmental problems, 5 had more confidence, 7 (35%) had the same amount of confidence as before the conflict, and 1 women had no opinion. Results are very similar for men: out of 23 male activists, 8 (35%) lost confidence, 4 (17%) had more confidence, 10 (43%) kept the same degree of confidence, and 1 did not answer the question.

The conflict that fuelled the emergence of *Coordinadora Antilínia de les Gavarres* was marked by scientific uncertainty in relation to the potential health effects of magnetic fields. Members of the organization were confronted with contradictory information from scientists. That uncertainty was politically used to justify the construction of the high tension power line. On the contrary, grassroots activists saw scientific uncertainty as a reason not to construct the infrastructure. The role played by the scientific committee responsible for the official report was fundamental in the critical position of mistrust that grassroots activists took towards science. In the following lines the public information on the topic of health risks that was used in the conflict is briefly described. That explanation helps us understand the discrepancies that emerged among activists, the government and experts in relation to the possibility that high tension power lines cause health problems to people that are exposed to them. The next section will expose gender tendencies regarding confidence in scientific and technical knowledge.

5.3.1. The political use of scientific uncertainty

Since the beginning of the conflict, the citizens committee of *Coordinadora Antilínia de la Gavarres* claimed to the competent authorities that they should prove that magnetic fields produced by high tension power lines are innocuous for people living close to them. Their opinion was that the project should stop if health risks existed. As explained previously, that was a fundamental argument of their opposition, and the reason that had motivated many local inhabitants to mobilize, because they would not have done so otherwise.

The Catalan government answered the citizens committee request by appointing a committee of experts. The so-called "commission of experts in the topic of high tension electric lines" was created officially on 29 May 2000 (DOGC 15 June 2000). One year later a report on the topic was made public (Generalitat de Catalunya, 2001). The controversial document had a second edition in 2005 (Generalitat de Catalunya, 2005).

The report applied the methodology of comparing results from existing publications about magnetic fields and serious human illnesses, such as cancer. In total, three types of studies were taken into consideration: epidemiological studies, experimental studies *in vivo* and experimental studies *in vitro*.

For the first type, the committee admitted discrepancies among existing publications. They affirmed, however, that the majority of studies concluded that a link between electromagnetic fields and harmful effects on health were not found.

They also pointed to research limitations of studies concluding that there was a relationship. Diverse problems related to scientific uncertainty were indicated to explain the "inconsistency" of some published studies: the difficulties of evaluating with precision the level of exposure to electromagnetic fields during the long period of development of the illness; statistical biases related to the limited number of cases of ill people considered; and the difficulty of identifying electromagnetic fields generated by electric lines from other types of sources. Such methodological uncertainties were used in the scientific report as an argument to discard the possibility of stating scientifically that electromagnetic fields have serious health consequences, such as cancer, on exposed populations (*Generalitat de Catalunya*, 2005).

The second type of publications considered results from laboratory testing on animals. In this case the report concluded that no scientific evidence existed to affirm that exposure to electromagnetic fields caused by high tension power lines could provoke cancer or other negative effects on the health of animals.

The third type of studies used human cells. They aimed at finding harmful biological negative effects caused by electromagnetic fields. Results concluded that electromagnetic fields of 50 Hz do not cause modifications on cells or molecules. Thus, it is rather difficult they would develop cancer. The report also said that the effects of other levels of electromagnetic fields on health could not be demonstrated (*Generalitat de Catalunya*, 2005).

In short, the scientific report recognized the impossibility to affirming or negating robustly that electromagnetic fields have harmful effects on health. Yet they adopted the scientific "maximization of proof" by negating any harmful consequence because scientific evidence did not exist.

Based on the results of that bibliographical analysis, the committee of experts proposed a series of actions. They recommended the adoption of directives indicated by the European Commission (EC) Council on 12 July 1999, as well as the limits of human exposure established by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) of April 1998. They also advocated the principle of "prudent avoidance": to limit human exposure to a level that is "reasonable, cheap and easy to establish"; as well as the principle of ALARA (as low as reasonably achievable), i.e. to avoid unnecessary exposure (*Generalitat de Catalunya*, 2005).

In this way, the scientific committee did not really provide a "scientific" solution to the problem; uncertainty made this objective impossible. Indeed, without saying it explicitly, they returned the problem once again to the arenas of political discussion. Then, the controversy increased. Conclusions pointing to power lines as not being dangerous according to up-to-date scientific results were inevitable an origin of conflict. In addition, recommendations for looking for the cheapest and the easiest solution, and avoiding "unnecessary" exposure, is imprecise and political-inspired advice, improper of science. In consequence, the role of scientists could be seen as politically biased. The fact that the expert committee had been directly created by the autonomic government fuelled the criticism of activists. Confidence in the expert team was seriously damaged.

Practically, the official scientific position negating any relation between the electromagnetic fields of power lines and health risks regardless of uncertainty was dealt with by the grassroots movement in two ways.

On the one hand, activists felt suspicious of partisan interests of the scientific report presented by the Catalan government. They had information from alternative scientific sources affirming that high tension power lines had harmful effects on humans. In 1999, the grassroots movement organized conferences in the *Hospital del Mar* in Barcelona entitled "High Tension Power Lines and Health" (Línies d'Alta Tensió i Salut). They aimed at informing the members of the group and the general public about scientific studies supporting the negative health effects of high tension power lines. Dr. Jocelyn Leal, Director of the Department of Bioelectromagnetism at the Ramón y Cajal Hospital of Madrid, and Dr. Carlos M. Requejo, founding member of the Association of Geobiologic Studies (Associació d'Estudis Geobiològics) and author of a book entitled *Estrés d'alta tensió* (*High Tension Stress*), were invited. The later sustained the thesis that electromagnetic fields disrupt the natural bioelectric balance having negative effects on people's health (Morén Alegret, 1999²).

This science-based information was used by the grassroots movement to publicly maintain its opposition to the high tension power line. For instance, on November 2000 the representative of the organization sent a letter to a journal mentioning results from the Karolinska report concluding risks of children's leukaemia increased in the proximity of electromagnetic fields. He also argued that the EC directive was outdated, and that the World Heath Organisation (WHO) was working on updating information on the topic.

The publication of a report in the summer of 2001 from the Consejo Superior the Investigaciones Científicas (CSIC), the Spanish official research institute, which also

² http://www.pangea.org/aeec/ecoilla/art62-2.html

discarded the negative effects of electromagnetic fields on health, is another example of the controversy generated by scientific uncertainty, its poor management, and the partisan use of that information. The report came to light when one of the most difficult phases of the conflict was taking place: only one village affected by the planned high tension power line, Llagostera, still remained strongly opposed to the government decision to construct the high tension power line. The local council of Llagostera gave support to Coordinadora Antilínia de les Gavarres. The conflict was having important local and regional mass media coverage. The unyielding position of the town council, disregarding the insistence of the Catalan government, was the cause of a lively political and social debate. Under these conditions, the publication of the report was seen by the citizen's committee as a shady political strategy to impose the line. The representative of the organization declared to the mass media that, although a relation between magnetic fields and cancer is not demonstrated, studies from the US, Sweden and UK give statistical support to the link between the number of people affected by cancer and their proximity to high tension power lines (Barrera 2001, August 29).

When reflecting on the conflict, the representative of the group expressed the difficulties of coping with scientific uncertainty in the following way:

The issue of health has the problem that there are many arguments against it, companies and published books that say it does not affect it. [...] It would be different if it were clear, like with tobacco. [...] It is even written on the packets. [...] That would be so clear that it would be very difficult to dispute it. But that problem is different, it is very difficult. [...] You have five thousand studies confirming it affects health, and another five thousand saying it doesn't. Then it is very difficult to take a position. [...] Scientists are...how could I express it? They are more pragmatic. They say, "I have that knowledge, I know it only in relation to that place". [...] It is very difficult for them to state "Yes, this is harmful". It depends on the circumstances. (Representative of *Coordinadora Antilínia de les Gavarres*, 2003)

The grassroots movement claim of health risks was undermined by scientific uncertainty. They did not manage to defend publicly their political position on the problem, which was clearly diverse and as legitimate as the one sustained by the official science and the government. Whereas the government aligned itself to a predominant principle of "acting" because no scientific evidence existed, the grassroots movement saw the problem in the opposite way. This confrontation shows the different value underlining techno-scientific and cultural rationality, as

well as the weakest position of the precautionary view of the grassroots movement (we shall return to that issue in chapter 9). That is clear in the testimony of a member with a leading role in the organization. When in a court session a judge asked him to prove his health concern related to the high tension power line, he answered the following:

Do you know what a judge said once to me? "Listen, could you show the mechanism through which you argue that [the high tension power line] could lead to cancer?" That was asked by a judge! And I said, "Excuse me, please, could you repeat the question again?", "Could you demonstrate the mechanism through which that provokes cancer?" [and I answered] "If I could show that mechanism I would be the Nobel Prize winner! Neither the best scientists nor anyone else knows this mechanism!" [...] Is it me who should demonstrate that? I'm just an ordinary citizen. [...] I've read some studies saying it affects us and others saying that it doesn't. What should we do? Risk prevention! [...] Is it me who has to show that? What should I wait for? For me or my son to die? (Josep Maria, 2004)

The discrepancies raised by scientific (and by extension political) standards of proof, and the different understanding of the problem shown by the affected local population, have been reported by other studies. Brown explains, referring to epidemiological studies involved in toxic waste disposals conflicts, that (1) "the level of statistical significance required for intervention is a frequent source of contention", and (2) "Epidemiologists [i.e. scientists] prefer false negatives to false positives, i.e., they would prefer to false claim no association between variables when there is one than to claim an association when there is none" (2000: 310; text in brackets added). That is exactly what happened in case 1.

The case also shows the perverse effect caused by the incapacity of the scientific community to make their methodological and epistemological uncertainties explicit, and how the most powerful actors (in this case, the political authorities) can manipulate this uncertainty to support their position, instead of recognizing that the diversity of opinions regarding the scientific knowledge available can be taken legitimately.

Thus, one of the consequences was that, paradoxically, the lack of scientific evidence on the issue also meant that the argument on potential health risks took a secondary position in the political discussion, even being the strongest concern for most of the members of the grassroots movement.

They simply did not move their position. "We would never advance! If everything suspicious had to be demonstrated to be innocuous we'd never advance!" [the government said]. That was their solely argument. [...] Available studies did not show that that [high tension power lines] were harmful for health. [...] But we said, "neither is there any study saying it is innocuous!" [And the government answered], "this is never done like this!" [...] We were also aware there are no studies. A scientific report prevailing over others did not exist. [...] And therefore the discussion always ended in the same way, there were as many studies in favour as against it. (Emili, 2004)

Health concerns were publicly denounced throughout the conflict, as first raised by the "Anti-line Manifesto" of 12 October 1998. But the discussion with the electricity company and the Catalan government focused on negotiating the design of the line. At the beginning of the conflict the grassroots movement efforts had focused on claiming the project had to be cancelled. However, as the conflict evolved, they engaged completely in negotiating an alternative design that could reduce the impact of the high tension power line on inhabited areas to the minimum, and left the health issue aside from the debate with politicians.

First of all, we believe that the line should not exist. Then, we sit at the [negotiating] table. "Well, as you have always said 'no to the line', now you will see that it will be built" [the government representatives used to say]. "If we had said something else, then you would have build it before now, wouldn't you?" [We answered] "If we say no to the [high tension power] line it is because we want to clearly express our desire. [...] But our position can move. But if we start out like that [receptive to the construction of the high tension power line], we would never achieve anything". We wanted to make positive proposals, we were concerned with that. (Representative of *Coordinadora Antilínia de les Gavarres*, 2003)

The grassroots movement proposed several technical alternatives to the government. The local ecologist organization *Associació de Naturalistes de Girona* (ANG) developed a study that proposed saving strategies for public energy. According to their calculations of consumption, their proposal would liberate the quantity of energy presumable needed in the coastal tourist region, which was the principal argument of the electricity company Fecsa-Enher to justify the construction of the high tension power line (*El Periódico*, 9 July 2001). Previously to that study, the grassroots movement had presented to the Catalan government another study conducted by the environmental consultancy Ecoserveis that denied

the need for the high tension power line and proposed alternatives for energy production (Morén Alegret, 1999; Representative of *Coordinadora Antilínia de les Gavarres*, 2003).

Apparently, the Catalan government and the electric company Fecsa-Enher paid little attention to the abovementioned study (Barroso, 1998, April 4). One of the proposals made by the grassroots movement was to bury the line underground when passing close to inhabited areas. However, that alternative was considered economically unviable. The building of the high tension power line was never questioned, although the original route was modified thanks to the grassroots movement lobby. However, *Coordinadora Antilínia de les Gavarres* never agreed with the design proposed by the line's promoters (Barrera, 2002, May 7).

The process of distrust also affected the electricity company involved in the conflict and its role in the negotiation process. This is illustrated in the following paragraph taken from an article published in a local newspaper. The text expresses the opposition of Francesc Armengol, president of *Coordinadora Antilínia de les Gavarres*, and one of the owners affected by the construction of the high tension power line:

Fecsa-Endesa...changes the position of tower 38 to install it four meters away from its original location. Francesc Armengol, owner of the plot where the tower is, thinks that the agreement has been done "to cheat people" and to "take advantage of them", because he thinks that to move the tower four meters does not solve his problem "at all". (Translated by the author from Barrera, 2001, August).

The case shows how scientific knowledge is produced by official spheres and is appropriated by the public according to their own interests. The interest for the present research is not to establish whether one of the studies was right and the other wrong. By contrast, the case helps to demonstrate how different perspectives (interests, scopes and framings) may lead to diverse analysis and potential solutions of a problem. Certainly all the methodological processes and proposals need to be submitted to critical examination and quality assurance, but their legitimacy to be included in the debate must be acknowledged. In contrast to the type of problems of modern science in which only one solution is possible, in this case different analyses and potential solutions may coexist. The situation is proof of multiple complex and legitimate perspectives emerging in complex environmental

problems, as described by post-normal science, an issue that we are going to discuss in-depth in chapter 9.

5.3.2. Gender marks in the health controversy of case 1

As part of the survey, the members of the organization were asked if after their involvement in the conflict they had changed their confidence in scientific expertise. The results indicated that the controversy generated by scientific uncertainty did not have strong negative effects on the trust activists expressed for science. In most cases activists did not condemn science itself. They continued to think that science is primarily an objective project, and that uncertainty is only a symptom that it should progress to obtain better results. The testimony of the representative of the group illustrates that position. He expresses his opinion that science is not the problem itself, rather economic interests influencing it:

Interviewer: [Regarding the controversial role of science in the health conflict of case 1] Do you think that science is biased by political interests? Or that science should still progress towards a knowledge of what happens? Or that science is not the only possible discourse on that problem?

Interviewee: I would say the second version, that there is still a long way to walk. Some things have been discovered, but it is very difficult. It started with the Karolinska report. They did a very important report on a population of half a million inhabitants, and that was the starting point. Electricity companies have already done some [studies]. They have done many [studies] about their workers. How it affects them, and other things like this. [...] But, of course, it is very different for a worker who may spend several hours [exposed to a high tension power line], [from someone] who is at home and he/she is [exposed] 24 hours a day. It is very different. And here there is still a lot to do. But then, it so happens that. [...] For instance, for AIDS and things like this, there are millions and millions, and so, although this is something [discovered] recently, there is research, a lot of research, it is impressive. Instead, this topic, who will invest in it? Money does not appear for an issue like this. Electricity companies continue to be very powerful. (Representative of Coordinadora Antilínia de les Gavarres, 2003)

However, the opinions of the members were rather disperse. In general, women were slightly more critical of science than men. Approximately half of both men and women declared their confidence in scientists had not changed. But a relevant

number of the men surveyed did gain some confidence in scientists. By contrast, less women than men had lost confidence in scientists.

Table 5.3. After your involvement in the conflict, have you changed your level of confidence in scientists who carry out research into the potential effects of magnetic fields people's health? (Members of Coordinadora Antilínia de les Gavarres)

	Women	Men
Less confidence	4 out of 15 (26.7%)	2 out of 18 (11.1%)
Same confidence	7 out of 15 (46.7%)	8 out of 18 (44.45%)
More confidence	3 out of 15 (20.0%)	8 out of 18 (44.45%)
Don't know / No answer	1 out of 15 (6.6%)	

More significant gender tendencies in relation to the level of confidence in experts are observed in how the members of the organization perceived the role of the technical team in charge of designing the high tension power line.

As described above, the design of the high tension power line was strongly biased by political negotiations and impositions. The role of the expert technical team of Fecsa-Endesa that designed the high tension power line is seen in a more critical light by members of the grassroots movement. However, women are more critical than men; an important number of them lost confidence in the expert technical team. Instead, men are divided between those whose level of confidence decreased and those for whom it stayed the same. Interestingly, a few men acquired more confidence in the expert technical team despite its controversial position.

Table 5.4. After your involvement in the conflict, have you changed your level of confidence in the expert technical team in charge of designing the high tension power line? (Members of Coordinadora Antilínia de les Gavarres)

	Women	Men
Less confidence	11 out of 15 (73,3%)	7 out of 18 (38,9%)
Same confidence	2 out of 15 (13,3%)	7 out of 18 (38,9%)
More confidence	1 out of 15 (6,7%)	3 out of 18 (16,7%)
Don't know	0 out of 15 (0,0%)	1 out of 18 (5,5%)
No answer	1 out of 15 (6,7%)	0 out of 18 (0%)

The enquiries did not include other questions that could help us explore potential hypothesis to this gender tendency. However, studies on population polls presented in chapter 3 on American and European cases pointed out that men tended to trust science and technology more. It could be that for some men of the grassroots movement the traditional separation between knowledge and power is less questioned. They could see the problem as mainly political and would assume technical expertise is just another victim of political manipulation.

By contrast, opinion polls based on a large sample also show that women tend to be much more critical of the negative effects resulting from our high technological societies, and they appear to have a lower perception of the benefits afforded by science and technology compared to men. That critical view on science and technology because of its effects on health and security could be an explorative hypothesis of the weaker confidence in science and technical expertise shown by female members of the grassroots movement.

That idea is implicit in the words of Montserrat, a housewife and farmer in her fifties, who stated that she would prefer to renounce certain commodities brought by technology if this would mean living in a safer environment:

If the only way to have electricity is nuclear energy...then we would be better to go back to the olden days. (Montserrat A., 2004)

Complementary results from interviews also suggest that another hypothesis could be that women expect more from science because of their higher concern for health, as we have previously observed with politics. Science is assessed very negatively because it does not accomplish the traditional modern role of providing certain knowledge.

Members of the grassroots movement followed a process of increased distrust of the traditional neutrality of science because of the health controversy of high tension power lines. Little by little they forged the opinion that science is easily biased by economic or other partisan interests. That idea is found in the testimony of Montserrat:

Doctors say that to live close to those [high tension power] lines is not healthy. [...] That it is better that a child suffering from "that" [cancer] is kept away, that "that" [electromagnetic fields] worsens it [the illness]. But if you ask them, "will you sign

that?" they say "no". Why not? Which powers are behind it? This is what makes me furious. I like to put the truth first. [...] Of course, you know, no-one wants to lose his job! (Montserrat A, 2004)

The official report of the commission of experts on the topic of high tension power lines was seen as the "government" report, clearly biased by political interests. This is exemplified by the words of Marina:

We were a little suspicious because, for example, we had read about the Karolinska report. [...] They have reports, statistics, case studies. And the Generalitat could complete it [the scientific report] in three months! It wasn't very reliable! How it could be that they had a conclusion in three months when after five or six years of studies the others could not arrive at a conclusion? (Marina, 2004)

5.4. Gender marks in the level of confidence in different actors involved in the conflicts

The concept of governance extends the management of the territory to diverse economic and social actors involved. In this process, alliances between those actors are fundamental to strength their positions. In consequence, the confidence that citizens groups have in those other actors is also fundamental to making their claims stronger.

Results obtained on the changes in levels of confidence in different actors involved in the conflicts open up new gender reflections.

The results of the enquiries into how the members of the grassroots movements assess the role of the local inhabitants of the regions in which the conflicts take place lead us to think about the influence of gender roles in views on the involvement of local inhabitants in the conflict.

Table 5.5. After your involvement in the conflict, did you change your level of confidence in local inhabitants?

iotui iiimoi	Case 1 Coordinadora S Antilínia de les Gavarres		Case 2 Salvem l'Empordà		Caso Salvem le	
	Women	Men	Women	Men	Women	Men
Less	3 out of 15	1 out of	4 out of 20	2 out of 23	7 out of 13	5 out of
confidence	(20%)	18 (6%)	(20%)	(9%)	(54%)	19 (26%)
Same	7 out of 15	11 out of	7 out of 20	7 out of 23	1 out of 13	10 out of
confidence	(47%)	18 (61%)	(35%)	(30%)	(8%)	19 (53%)
More	2 out of 15	6 out of	8 out of 20	11 out of	4 out of 13	2 out of
confidence	(13%)	18 (33%)	(40%)	23 (48%)	(31%)	19 (11%)
Don't	3 out of 15		1 out of 20	3 out of 23	1 out of 13	2 out of
know / No answer	(20%)		(5%)	(13%)	(8%)	19 (11%)

In cases 1 and 2, the majority of men and women maintained the same level of confidence in the local population affected by the conflicts. However, there were more women who lost confidence, while men tended in higher numbers to gain it.

That gendered tendency is very clear in case 3: women were very critical with people, although there are also some who gained confidence. In the case of men they tended to maintain the same degree of confidence as before the conflict. The results are relevant if we consider that, according to a poll conduced by Olot Town Council, more local inhabitants were in favour of building the infrastructure (56.6%), and less disagreed or strongly disagreed with it (36.6%) (Castañer, 2003). Therefore, the grassroots movement did have some difficulties in garnering local support for their claims from local inhabitants, instead drawing more support from people who did not live in the area.

Generally, women are the users of the public spaces and the protagonists of social relations at the community level. That gendered position is fundamental to understanding the role usually taken in the grassroots movement, as we shall see in chapter 6. It also indicates that women are more vulnerable to the impact that the conflict has on local inhabitants and how they react to it. Women may expect more support from the community in which they spend their daily lives, and which they think will suffer from the project they oppose.

In the case of men, they on the other hand tend to have more sporadic contact with the community, which is linked to formal and organized activities, such as work or participation in local organizations. This lower experience of everyday relations with the community may indicate they expect less from the local population when the conflict takes place, and therefore they value better their level of involvement.

Gender roles may also explain the results obtained on how men and women value the mass media after their participation in the conflict.

Table 5.6. After your involvement in the conflict, did you change your level of confidence in the mass media?

	Caso Coordin Antilínio Gava	adora a de les	Cas Salvem l'I	~ —	Case Salvem le	
	Women	Men	Women	Men	Women	Men
Less confidence	5 out of 15 (33%)	7 out of 18 (39%)	2 out of 20 (10%)	3 out of 23 (13%)	1 out of 13 (8%)	6 out of 19 (32%)
Same confidence	7 out of 15 (47%)	9 out of 18 (50%)	4 out of 20 (20%)	12 out of 23 (52%)	8 out of 13 (62%)	9 out of 19 (47%)
More confidence	1 out of 15 (7%)	1 out of 18 (6%)	13 out of 20 (65%)	7 out of 23 (30%)	2 out of 13 (15%)	2 out of 19 (11%)
Don't know / No answer	2 out of 15 (13%)	1 out of 18 (6%)	1 out of 20 (5%)	1 out of 23 (4%)	2 out of 13 (15%)	2 out of 19 (10%)

Although there are no significant differences in the opinions of men and women in case 1, they do exists in cases 2 and 3. In case 2, the organizations explicitly used the mass media as a strategy to publicize their claims to the general public and lobby the authorities. They organised public performances to attract the mass media, and managed to have an important presence in the local newspapers:

The action consists of communicating via the media. We convene the mass media to a place, and we bring them to see a contaminated area. [...] Then two of us put on a mask and a white overall... and they take a photo of us. These are what we call actions. But we also do demonstrations. For instance we did one in Cap Ras. We also did the Empordà train and we demonstrated in Barcelona. (*Representatives of Salvem l'Empordà*, 2003)

Interestingly, in case 2, in which the mass media was so instrumental, women gained a significant amount of confidence in it. In case 3, men are more critical than women of the role of the media.

All in all, contrary to what we mentioned regarding the level of confidence in local inhabitants, this time it is men who appear as more critical of the support received from the media. Men may expect more from the mass media, since it an instrument pertaining to the public domain in which men have traditionally had a more dominant role, as the results from case 3 show. Women, instead, may value more positively when the mass media support the grassroots movement, as they may expect less from it, as shown by case 2.

The hypothesis that gender roles in the general public and in the local community environments may bias the perception and assessment of the different actors involved in the conflicts is also shown by the opinion of *Salvem l'Empordà* activists about the support they received from ecologist organizations, which is highly valued by women:

Table 5.7. After your involvement in the conflict, have you changed your level of confidence in ecologist organizations? (Members of Salvem l'Empordà)

	Women	Men
Less confidence		2 out of 23 (9%)
Same confidence	8 out of 20 (40%)	10 out of 23 (43%)
More confidence	12 out of 20 (60%)	9 out of 23 (39%)
Don't know/ No answer		2 out of 23 (9%)

Table 5.8. After your involvement in the conflict, have you changed your level of confidence in economic developers that locate their business in the Empordà region? (Members of Salvem l'Empordà)

	Women	Men
Less confidence	18 of 20 (90%)	15 out of 23 (65%)
Same confidence	2 out of 20 (10%)	6 out of 23 (26%)
More confidence		1 out of 23 (4%)
Don't know/ No answer		1 out of 23 (4%)

In another way, this hypothesis could also explain the critical view espoused by women of Salvem Empordà regarding the role of economic developers that promote many of the projects their group opposes.

SUMMARY OF CHAPTER 5

Chapter 5 explored the confidence that activists from the three grassroots organizations showed in policy, science and society, and the existence of gendered tendencies. This analysis is relevant as citizens' trust, particularly in politics and science, is a critical aspect of environmental governance and also of participatory processes. Conclusions from chapter 3 had also indicated some tendencies in women's and men's confidence in governmental institutions and in science and technology, which made it significant to explore the issue for the case of local environmental activists.

The results show the sceptical view of politics held by citizens involved in local environmental conflicts. Moreover, their confidence decreased after their participation in the grassroots movement.

Activists' confidence in politics is undermined by the specific role the government and political parties play in the conflict they are fighting for. However, results of the questioner indicate that the crisis of political credibility did not directly affect the basis of the traditional hierarchy of the decision-making system. Major responsibility was placed on the government (in the cases considered, the *Generalitat de Catalunya*) and on local authorities. At the same time, activists supported the increase of responsibility that citizens should take in environmental decision-making. However, they were sceptical as to whether the authorities would ever pay attention to people's demands.

In relation to gender, although clear-cut conclusions cannot be drawn, results indicate that women's confidence in political institutions may be more easily damaged by the controversial role governmental institutions and politicians play in local conflicts. The feeling of disappointment with politics is specifically framed by gendered arguments in the conflict of Coordinadora Antilínia de les Gavarres, case 1. Some testimonies showed women felt extremely disappointed by politics because their decisions went against their gender responsibilities in the local sphere, which were focused on people's health and well-being rather than economic compensation.

The conclusions about gender tendencies in the activists' confidence in technical and scientific information were particularly relevant for case 1.

The scientific uncertainty related to high tension power lines in the scientific controversy of case 1 was assessed slightly more critically by women than by men. However, gender divisions were more evident in relation to the perception of the role of the technical team in charge of designing the high tension power line, in which women's loss of confidence was much greater. Men's less critical assessment of the role played by the technical team is coherent with results presented in chapter 3, in which men appeared to be more confident of technical expertise.

These different gendered tendencies regarding the perception of scientific and technical expertise should be considered when environmental problems involve scientific and technical uncertainty.

Finally, the chapter also dealt with men and women's confidence in local stakeholders and citizens. While male activists tended to be more critical with the role played by economic stakeholders, women perceived with more critical eyes the role played by citizens. Those gendered perceptions should be explored further in relation to the influence of gender potential alliances among different actors in participatory processes.

6. Women are supporting / women are leading: confronting scenarios of gender power relations in the grassroots movements

Authors of gender studies agree that grassroots movements appear to involve women more than traditional and hierarchical structures such as political parties. For instance, toxic waste activist organizations have a very high level of women's participation (Brown and Ferguson 1997), something that is not common in ecologist organizations.

Mohai (1997) notices that the diversity of social issues in which women are interested in results in their presence being widely spread among different types of organizations, which also explains their scant involvement in ecologist groups. However, this interpretation must be complemented with other hypothesis.

For instance, the social dimension given to environmental problems in grassroots movements explains the greater involvement of women, which in turn points to the possibility that women do not find that interest sufficiently represented by most ecologist groups. In this sense, in chapter 4 I argued that the emphasis on environmental health risks and quality of life, which are significant interests of women's environmental concern, coincides with the programme of the local movements under study in North Catalonia.

However, gender scholars have also pointed out the gender inequality that continues to exist inside the new social movements, despite the increased presence of women. Women tend to disappear when we look at the gender composition of power positions in internal structures of the organizations (Walsh 2001; Boetzkes 1998).

The situation, however, is rather complex. At the same time that most grassroots movements emerging in the face ofenvironmental conflicts tend to reproduce gender inequalities in the distributions of roles and tasks, they also constitute a social context in which the urgency of tackling action and the extreme conditions in which the participants get involved may lead to the transgression of traditional gender norms, roles and assignments.

For instance, women make a strong personal commitment to the grassroots movement, but they continue to develop caring responsibilities, and often a paid job too. For this reason, they may put in practice new forms of organization and campaigning in which, as they are forced to combine very different types of

responsibilities, the border between private and public activities and environments becomes weaker. Moreover, as women's participation in grassroots movements is extremely time consuming, their partners may become responsible for activities that are usually carried out by women, which has the effect of changing the traditional gender distribution of roles (at least while the conflict continues). At the same time, the type of actions required to make the claims of the organization heard at a public level may also lead women to subvert traditional gender assignments and to challenge the myth of female political passivity.

In this way grassroots movements become a kind of real-life laboratory, in which we can observe the reproduction of gender inequality, but also ways in which the androcentrism found in public environments and unequal gender relations in the private sphere can be challenged. Let's take a look at this.

6.1. Gender biases in the organization and workings of grassroots movements

Men's higher level of education and higher income and occupational status have been identified as important factors that explain higher levels of political participation by men (Burns et al., 2001; Mohai, 1997). Particularly high education and occupation status guarantees the skills and knowledge necessary for leading roles, and they also imply a major public acceptance. These are other reasons that help explain the greater presence of men in ecologist groups. Like men, women with higher levels of education and higher incomes are also potentially more likely to be involved in environmental activism (Caiazza & Barret, 2003).

Yet that tendency does not determine that people with a low level of education and in an occupation status that is not socially recognized are not qualified to take a leading role. For instance, in the case of toxic waste activism, some organizations have engaged women with a low level of education and home workers in high numbers, and they have taken a leading role (Brown & Masterson-Allen, 1994; Brown & Ferguson, 1997).

In the case of the grassroots movements considered in this study, it has been shown that women participate in similar numbers to men in the organizations with life experience based arguments for campaigning (cases 1 and 3). In the organization guided by ideological arguments (case 2), women appear to participate in lower numbers (see chapter 4). However, the analysis of the distribution of roles between genders in cases 1 and 3 have shown that men are mainly involved in leading and in representative activities, while women tend to be in supporting roles.

The cases illustrate that grassroots movements, even when women participate in

similar numbers to men, suffer from gender inequality related to social organization.

Salvem les Valls (case 3), which is the organization in which women are less represented, shows unequal gender distribution of roles among its members, particularly for positions of power, even though women members enjoy higher levels of education and have experience in local associations, NGOs, ecologist organizations and political parties (see table 4.2, chapter 4).

The organization has a board of directors leading the organization, while the rest of the members engage in supporting activities. Common decisions are taken in the general assembly, in which all members are invited to participate. The members are geographically spread mainly over the area of the Garrotxa and the city of Barcelona. As a result, general assemblies have been more difficult to call together and therefore the board of directors plays a very crucial role in leading the organization.

Table 6.1. Distribution of tasks between genders in the organization of Salvem les Valls (case 3)

LEADERSHIP AND PUBLIC ACTIVITIES	Women	Men
Member of the board of directors	1	5
Negotiation processes with the authorities	1	8
Contribution to technical studies	1	3
Contribution to juricial processes		5
Writing to newspapers	4	9
SUPPORTING ACTIVITIES		
Participation in demonstrations	11	14
Support tasks in community activities (trips, meals)	7	10
Public information and awareness raising	6	8
Organization of activities (conference, etc.)	6	6
TOTAL of women/men surveyed	13	19

The questionnaires revealed that five men and one woman sit on the board of directors, while the organization is always represented by a man in public.

The considerably unequal gender distribution of power roles in the organization is partly explained by the initial development of the organization. The representative from *Salvem les Valls* reported that at the beginning of 1995, the organization

consisted mainly of male members. The results of the questionnaires confirmed that most women only started taking part in the organization in the last few years. However, *Salvem les Valls* has been active for almost a decade. In recent years the organization's structure and leadership has undergone changes as a result of the fatigue of certain members and the influx of new members. Even so, the transition of power has only slightly modified the male predominance in the movement. Women continue to be less numerous and continue to have lower representative and power roles. The representative of *Salvem les Valls* phrased it in the following way: "In the last few years there has been an important influx of active women...but it is difficult for them to take responsibilities at a leadership level".

From the questionnaires we learned not only that men are dominant on the board of directors but also that the organization's male members played important roles in public and leadership activities. Men have been the ones negotiating with politicians and following the lawsuits. In addition, they have also been more active in taking initiatives such as writing opinion letters to newspapers. Set against these male activities, women across the board claimed to be involved in supporting activities like demonstrations and popular activities. Women also claimed that they had played an important role in organizing and developing internal activities, such as taking care of the communication between members.

Similarly to what happens in *Salvem les Valls*, the *Coordinadora Antilínia de les Gavarres* (case 1) is another example of an organization in which women have been mainly involved in the supporting activities. Their role in leading and representation has been minimal.

Table 6.2. Distribution of tasks between genders in the organization of Coordinadora Antilínia de les Gavarres (case 1)

LEADERSHIP AND PUBLIC ACTIVITIES	Women	Men
Member of the board of directors	1	4
Negotiation processes with the authorities		
Contribution to technical studies		2
Contribution to juricial processes	2	3
Writing to newspapers	2	4
SUPPORTING ACTIVITIES		
Participation in demonstrations	12	11
Support tasks in community activities (trips, meals)	5	1
Public information and awareness raising	3	4

Organization of activities (conferences, etc.)	4	5
TOTAL of women/men surveyed	15	18

As in the previous case, the organization is headed by a board of directors that defines the role and the public representation of the organization in the process of the conflict. The other members have participated in decisions through general assemblies, and have been particularly active in supporting activities, such as the organization of demonstrations, protests and popular actions or activities involving public information and awareness raising.

The board of directors consists of three men and one woman. She was involved in the opposition to the infrastructure since the beginning. Two of the men on the board of directors have an important representative role; they often appear in the mass media representing the organization. As such, the public mainly sees the male leadership. Instead, the women of the organization state that they are mainly active in supporting activities like organizing demonstrations and popular activities.

The low level of female representation in the leadership activities is striking since health safety has been particularly identified as a female environmental concern, both in this study and in the general bibliography.

What explains the gender bias in the leadership of and support for the organizations?

The burden of household and family responsibilities plus paid work has been suggested as an explanation for the lower level of active engagement of women in civic organizations (Burns et al. 2001). The time-consuming maternal responsibilities of young women have been seen as hampering their involvement in social and political activities (Burns et al. 2001). Alfama and Miró also pointed to these same arguments to explain the handicaps that women faced upon taking leading roles in the grassroots movement that opposed the water transfer from the Ebro river in Catalonia (Alfama and Miró, 2005).

The androcentric environment that characterizes leadership defines implicit patterns of time-organization to be followed in positions of power in the organization and publicly. Women have to adapt to such an androcentric environment if they wish to have a leading position. As one activist puts it:

The role that each sex plays at home is profoundly sexist, and that means that at specific times of day men have more time than women, and thus, in the kind of

activities found in the associative and voluntary sector, that take place at specific times, it is easier to find men than women. (Montse, 2004)

However, women's time flexibility during the daytime should allow women to engage in representative and decision-making activities, but the opposite occurs if the organization works according to a male timetable. Indeed, some studies show that time flexibility of home workers benefits their leading tasks:

In earlier stages of the Yellow Creek Concernec Citizens group, women played a more "organizational housekeeping role" in which they followed traditional gender roles, e.g., record keeping and fundraising. As they and the organization became more experienced, they took on more public roles—speaking, meeting with reporters, collecting water samples. This developed out of necessity, since women were more likely to be available during daytime hours. It also developed out of increased confidence and self-esteem, which grew out of women's organizing successes. (Brown and Masterson-Allen, 1994: 274)

If time is organized according to men's availability, women that want to take a leading position may partially renounce their traditional gender assignments as carers. In this case, women need the complete support of their male partners, or other people around them. This is well illustrated in the testimony of the female leader of *Coordinadora Antilínia de les Gavarres*:

During that period I had two aunts who were over eighty. One was eighty-nine years old, and the other ninety. Of course, I had a woman who took care of them. In the evening I always went there to check she put them on bed. I had a woman all day to whom I had to pay a lot of money, but of course, if I had no time... (Montse, 2004)

If women take on supporting roles, they are less constrained by the public activities of the organization, and they find the flexibility and complicity to make their gender responsibilities and personal interests in the movement compatible, as I will describe in the following section.

Nevertheless, the analysis of the cases considered here has shown that the lack of time due to gender responsibilities, and levels of education and occupational status are relevant interpretations, but we need other hypothesis to explain the different

types of obstacles that prevent women from taking a more prominent role in the grassroots movements.

It has to be acknowledged, however, that according to my enquiries very few women of the three movements stated that family responsibilities made their participation difficult (1 of the 15 women of *Coordinadora Antilínia de les Gavarres*, 1 of the 20 women of *Salvem l'Empordà*, and none of the women of *Salvem les Valls*). Women could have underestimated the consequences of the time they spend on other activities on their family responsibilities. Indeed, some women admitted that work responsibilities made their participation in the grassroots movements difficult (4 of the 15 women of *Coordinadora Antilínia de les Gavarres*, 5 of the 20 women of *Salvem l'Empordà*, and 1 of the 13 women of *Salvem les Valls*), and this could be interpreted as a difficulty to combine public and private responsibilities. Even though, as in total few women point to those arguments, it cannot be considered as the main explanation of their lower leading attitude.

Regarding education, according to the information provided in table 4.3. (chapter 4), men and women have a very similar educational profile in the case study on *Coordinadora Antilínia de les Gavarres*. What's more, women in *Salvem l'Empordà* and *Salvem les Valls* have a higher level of education than men.

Alternatively, some studies have argued that gender power relations in the private and public spheres are transferred to the gender division of activities, responsibilities and power roles of the grassroots movements (Burns et al. 2001, Walsh 2001, Boetzkes 1998). Indeed, grassroots movements appear to be complex arenas of gender relations that form a transition between the private and the public sphere. In these contexts, women and men tend to take on different tasks according to their traditional gender roles. Moreover, areas of power are mainly gender biased.

6.1.1. "Natural" male leadership?

When asking directly the members of the organization of *Coordinadora Antilínia* de les Gavarres why women did not have a leading position, it was clear they had not thought about the issue before. Male leadership had been assumed as natural: they thought gender inequalities had nothing to do with the election of the representatives of the group.

However, although the members of the group were not conscious, results from the enquiries and interviews show diverse factors related to gender that have been fundamental in the greater representation of men than women.

Most of the members of the organization of case 1 that were interviewed think that the members of the board of directors are in their position because they were promoters of the mobilization. The profile of the male members of the steering committee also points to their high level of education and socially well-regarded professions. According to the enquires, an important number of women state they took part in founding the organization, but they have lower educational levels and professional positions that do not require leadership knowledge and skills. However, women with higher levels of education, socially well-regarded professional positions and experience in local organizations were already well represented in the first year of the organization's existence, and still they did not have a leadership or representative role.

That women were not founders of the movement, or that they had lower levels of education or fewer professional skills, hence seems to be an insufficient argument to explain why they were not part of the board of directors. The following testimony shows that the members wish to believe that gender inequalities have not affected the composition of the leading group, yet the argument over who were the founders is insufficient:

Interviewed: In the case of Cassà, women arrived later. They [the male leaders] started it...

Interviewer: Do you think that if women had been there from the beginning it would have been different?

Interviewed: Yes, I think so.

Interviewer: Do you think then that women would have taken a leading role?

Interviewed: Yes, exactly. I only found out later that they wanted to build the line. The ones that had been working in it, they were the one that knew, Quim [male representative of the group]...I think because they are affected, Vilallonga and Preses [male members of the group]. [...] Of course, they received the notification. The rest, as we were not affected, we did not know. They were the first ones, they knew how it worked. [...] In Llagostera, Montserrat Calm [female leader], as she was affected, she was there from the beginning; she is a women and was with them [the male leaders].

Interviewer: I have observed that the public image of the group consisted mainly of men.

Interviewed: Yes.

Interviewer: There was very little media attention paid to the work you [the group of women] were doing...

Interviewed: Yes, there have been some casualties as well. [...] Because there are many women who could be in a leading position. [...] For instance, the wife of Preses, Leonor, she is the first person I phoned...I phoned Leonor, the wife of Jordi Preses. She was in, she is a lawyer, I think, and she is also very much involved. But...

Interviewer: It was more her husband who...

Interviewed: Yes, it was more her husband...

(Marina, 2004)

Gender inequality in education and work do not fully explain low female participation in positions of power. Instead, the strategic position in public spheres as well as the popular recognition of people that are economically and socially privileged appears to be a better explanation. Thus the more powerful position and the social recognition of men in public environments is replicated within the organizations.

For instance, when I asked one of the representatives of the group why men were in leading roles, while women were in supporting ones, he pointed to his own strategic position in local politics:

I think that the roles we played. [...] My case was very clear: I was a councillor and in this case it was clear I had to take a more. [...] To speak with the council, to present motions. [...] I had a more public image that was important for the contact with the mass media, and this is why I had a more leading position. In addition, as I was in the government, I was at the negotiations and could bring first hand information. (Emili, 2004)

The representative of the organization had also been involved in local and political organizations; he had the knowledge and knew the formal mechanisms to help the grassroots movement to be heard at a public level.

The testimony of the only woman who became part of the board of directors points to the cases in which the social power of people who are recognized publicly because they have an economically privileged position is the main reason to explain their leadership:

Interviewer: Were you members of the board of directors because you had been the promoters of the movement, or because the members chose you? Why did you make it to board of directors?

Interviewed: When we held meetings it was Cassà and Llagostera together. We needed

a chair, at that moment Armengol was very much affected because of his son. [...] He collaborated very much...for instance, we organized a dinner to raise money, and Armengol gave sausages for free, so that we could raise more money. [...] Then Quim, as secretary, he also helped us very much. It had to be a representative from Llagostera, of course, and people from Llagostera said Montse, you, you...

Interviewer: It was because you were well known in the village?

Interviewed: Yes...
(Montserrat, 2004)

The only female representative on the board of directors is an important landowner in Llagostera, well known in the village as a local businesswoman. She was the person who first started collecting signatures to stop the construction of the high tension power line. Emphasizing that she is a woman, a member of the leading group aimed at showing the gender composition of the group was irrelevant:

For instance, Montserrat Calm probably had a similar role to Armengol in Llagostera. There they have both a woman and a man. (Emili, 2004)

However, her role in the leading group is mainly the recognition of a social position that is traditionally taken by men. That female leader asserted that gender was irrelevant to the leading role she accomplished in her personal trajectory. However, the following lines show how her social position and her leading role are perceived by others and by herself as a masculine one:

Interviewer: Did you ever felt uncomfortable [in a leading position] because you were a woman?

Interviewed: No! I have always been a woman. [...] When I was young I became a member of the board of directors of the Forest Organization, they were all men! At the Forest Organization of Santa Coloma de Farners, I've been the only woman! After, I was the president of [...], and again when I went to meetings it was only me! I was only twenty years old when I started to go it alone [alone in the sense of the only woman]! I never had any problem. [...] Well, the first time...I find it normal [to be the only woman]! You see, I have managed my forests on my own, and I had to work on my own with men! To work in the forest. (Montserrat, 2004)

6.1.2. Informal gender rules and behaviour for leading and discussing

Another common answer to justify the role of male representatives in case 1 was that "he" had the "right" character to lead a group of people.

In the case of Quim, he is a person with an innate capacity to organize and work. [...] He has resources—not economic—he has resources to work. [...] He was working, and so he took that role [of representative]. (Emili, 2004)

Again, for the members the gender of the leader was the result of chance, and had nothing to do with social inequalities

It was related to the availability and the willingness of each person. I am sure that if there were a woman with the ability to play the role of Quim, or a woman that would be a local councillor as I was, then. [...] In this case it is hard for me to believe that gender had nothing to do with it. (Emili, *Coordinadora Antilínia de les Gavarres*, 2004)

Contrary to the opinion of that activist, the fact that public environments are strongly androcentric, together with the scant acknowledgement of these unequal situations, has led to some authors claiming that in gender-mixed organizations women have more limited opportunities for expressing their opinions and taking leadership roles (Burns et al., 2001).

Both the Coordinadora Antilínia de les Gavarres (case 1) and Salvem les Valls (case 3) movements are mixed in terms of gender. However, this does not mean that they are gender neutral. The traditional androcentric character of the private and public spheres is upheld in the organization's internal functioning. The androcentric environment sets the norms for certain types of behaviour, personal relations and discursive practices that are better undertaken by men, and which contribute to limiting the participation of women most of the time, unless they display a male gendered attitude.

Walsh studied the creation of masculine and feminine domains in public life, particularly in ecologist organizations. The author demonstrated how, in gender mixed public arenas, discursive practices are adopted that are associated with

middle-class male speakers, even though the relations between the organization's members are considered to be gender-neutral. She adds that in these gender biased contexts:

Women's public rhetoric is more likely than men's to be fractured by competing, often contradictory, norms and expectations and...this fact, in turn, has implications for the way in which women are perceived and judged by others, as well as the roles they are assigned within the public sphere. (Walsh 2001: 1)

The case studies provide us with examples of particular gender power relations between the members of the organizations. For instance, one of the members of *Salvem les Valls* (case 3) made the following remark:

In general, in the discussions about the present and future initiatives of *Salvem les Valls*, women tend to have a more reasonable, tolerant and flexible attitude. Painful disagreements and criticism resulting from internal conflicts have been mainly caused by men with attitudes that are much more sectarian, aggressive and not open to dialogue. Even so, women have been more in the background; *Salvem les Valls* has been headed by men. (Member of *Salvem les Valls*, 36-year-old man, 2003 enquiries)

The gendered attitudes described here in detail imply different ways of handling disagreements and problems. The situation, as described by one member, shows the transfer of gender roles from the private sphere to the public arena: just as in family life, women feel more responsible for avoiding conflict and crisis in personal relations among the members of the group.

Similarly to what happened in case 3, a male member of the organization *Coordinadora Antilínia de les Gavarres*, case 1, expressed an opinion that also indicates how gendered attitudes and non-spoken androcentric norms inherent in public environments have consequences for women's opportunities to lead organizations and influence the decision-making:

Each person, by virtue of being male or female, has a different way of leading. I think there is not a clear difference between men and women that indicates one of the genders

should lead organizations. I do not believe that. Nevertheless, I do think some aspects are more prevalent in women, although not exclusively. I mean, there are men who also have them. For instance, women tend to be less aggressive, which I thing it is a virtue. I also think that in general they are more sensitive. But, on the contrary, I think they have less confidence in themselves than men, which makes them more insecure in leading a group. However, I insist that there are many exceptions to those generalizations among men and women. (Member of *Coordinadora Antilínia de les Gavarres*, 40 year-old man, 2003 enquiries)

The "insecurity" that the activist considers to be inherent in women has been observed in a few cases, normally linked to low levels of education:

For instance, Bosch [group representative] has been to university, Armengol [another representative] works in industry. [...] They are more suited to represent us. Most of us women are farmers, just local people. (Montserrat, 2004)

Women tend to engage easily in supporting activities because they are seen as an extension of their gendered roles in the family. Some of the women interviewed found themselves and other women of the organization "secure" enough to take a more leading position. However, they expressed that they had "freely" assumed supporting activities instead of a leading role:

Interviewed I think that someone had to do this job and we did it.

Interviewer: But to be on the board of directors?

Interviewed: No, no, we leave it to them [the men]. [...] Yes, there were enough things to do! [...]

Interviewer: Did you feel more comfortable in that position?

Interviewed: Yes, yes, and we saw ourselves able to do it. [...] Someone had to do it! Of course, we could have been members of the board of directors and speak publicly, but see...they were also very busy. For example, Quim [male representative], he was at the secondary school, he had a lot of work, there was a lot of activity with Esquerra Republicana, and Quim was inside. [...] Of course, that other thing, the line, it was a lot. Then, if you could do another job, and Quim did not have to go to stop the machines, then that was better! And we distributed the roles. (Engracia, 2004)

The words of that activist shows clearly how women strongly assumed a gender female attitude consisting of ensuring that things worked, and helping leaders to do their work without "disturbances". The attitudes attributed to men allow them to maintain strong leadership and decision-making positions. The situation illustrates how gendered behavioural norms implicit in the grassroots movements results in women having unequal opportunities in the political framework of the organization and, by extension, also at a public level.

At the same time, the testimony also shows that women do not only assume their gender roles: they have little interest in taking a leading role and in engaging in competing positions. This female tendency has been observed elsewhere (Alfama and Miró, 2005). In the face of those results we could conclude that women exclude themselves from decision-making positions. However, as I will discuss later for case 2, it is not only those gendered attitudes, but overall the androcentric environments that are reproduced in the internal working of the groups that disempower women. Case 3 will show that by transforming the internal structure of the organization and the implicit norms of contribution and debate, women may feel more open to participating in the decision-making.

6.2. Transgressing the androcentric order

As I introduced above, the interpretation that gender-mixed environments tend to disempower women is illustrated by the study of grassroots movements against toxic waste disposal, which showed several examples of movements led by and mainly composed of women. In these cases, the activists were middle class housewives with no political experience (Brown and Ferguson, 1997). In these particular movements, the low male presence involved a changing of traditional androcentric organizational rules. As traditional norms and roles of gender cannot be applied, decision-making environments have a more equal basis that is much more beneficial for women's political empowerment.

All the activities that we have been told destroy organizations have instead worked to sustain this movement. For example, for a year and a half the group functioned without a formal leadership structure. The unconscious acceptance of equality and the democratic process resulted in practice in rotating the chair's position at meetings. Reporters were disoriented when they asked for the spokesperson and the group responded that everyone could speak for the neighbourhood. (Hamilton, 1990: 219)

The grassroots movements under study have also shown examples of how women alone, in case 1, and women and men together, in case 2, have transgressed traditional gender roles and common gender power relations.

In the first case, Coordinadora Antilínia de les Gavarres, I have already described a gender bias in the distribution of leading and support activities. Nevertheless, women organized an "informal" subgroup inside the organization, in which they were responsible for stopping the work of the cranes that had started to build the high tension power line. In this way women produced an alternative form of organization inside the citizens group in which female time availability, gendered responsibilities and socialization mechanisms took a leading role. At the same time, women faced typical situations that lead them to transgress traditional female roles.

In the second case, *Salvem l'Empordà*, I will argue that there were a series of circumstances that benefitted the leading position of women. At the same time a different form of internal organization is tested, which I will argue benefitted the contribution of female activists. However, I will also argue that this extraordinary situation is not the result of chance. Although it may appear to be a tautological argument, the strong presence of some active women stimulates the participation of most women in the organization, and the prevalence of a female leadership lays the foundation for an alternative form of organization.

Regardless of their profound differences, the two grassroots movements appear as a place in which, unconsciously or on purpose, traditional decision-making norms and gender roles are challenged, becoming, in turn, environments in which we can explore mechanisms to empower women.

6.2.1 A women's group inside the grassroots movement: time, values and participation according to female activists

Case 1 shows an example in which women have unconsciously put in practice a way of organizing that is structured according to female "rules", in which gendered responsibilities, time distribution, values, interests and social relations take a leading role.

Interestingly, women improvised a specific subgroup responsible for everyday actions to stop the working of machines that started to build the high tension power line.

Many! We were nearly all women! Many! After school, children also came along. [...] At five you picked them up from school, and you came back to your place. Well, families...but above all, women, women. Women appeared from everywhere. Many did not know each other before, and we became friends, we became very good friends. (Engracia, 2004)

Members of *Coordinadora Antilínia de les Gavarres* acknowledge that the work women did was fundamental for the workings of the organization: as the construction of the high tension power line was slowed down, the leaders of the group had more time and strength to lobby the political negotiations and to formally ask for legal action. Yet that support activity is hardly visible at a formal and public level, and it is perceived as mainly informal and valued as less relevant, even by the very women in the group:

We also went to the Coordinadora meetings. We also went to the serious meetings. We went to the appointed meetings. We met once a week or fortnight, or if there was any urgent situation, we phoned Quim [male representative of the organization]. We followed all this. But the rest was the dirty work. What we did was mainly the dirty work. Everybody came here. [...] We asked any woman we came across, "What is your schedule like?" (Engracia, 2004)

The division of work according to gender is important in understanding why the composition of the resistance group was mainly female. Most members of the organization that have been interviewed explain that because many women worked at home or had part-time jobs, they could engage in the everyday opposition.

Cranes started working at eight in the morning. We had to engage people that, like me, had free time. Then, of course, there were not many men. Some retired men. Women who worked at home, some farmers, some retired men...some women came with their babies, they came to the forest with babies! (Marina, 2004)

However, it is not that women involved in the resistance group had more free time, rather that their everyday activities allowed a more flexible timetable. They continued their everyday activities, despite the difficulty of developing multiple

and different tasks at the same time.

Because the resistance group was mainly composed of women and most of them had family and household activities, they had to make them compatible with the lobby actions. In this way, women produced a form of organizing compatible with female traditional roles: the group worked according to the women's timetables and they shared their everyday responsibilities.

This is my situation: I am at home all day, the children are at school, and since often it was necessary for someone to stay longer, then someone would say, "today I will prepare lunch for the other people in the group". For the others, and for the families of the others. And of course, that was not for a week, it was...yes, of course, months. (Marina, 2004)

The organization was very flexible: decisions about the distribution of tasks were taken according to everybody's situation at the time. Therefore, women organized the resistance group with the same rules and dynamics they applied at home, in which the diverse interests, type of activities and timetables of the family members are made compatible.

Interviewer: How did you organize yourselves?

Interviewed: We phoned each other and we said, "let's meet at the tower!" We knew where they [workers building the high tensions power line] went and where they were digging the holes. [We'd say] "I'll go home and prepare the lunch, and you stay here." "All right, I'll leave the car." And one person picks up the other, and it worked like this. [...] We were... I don't know, maybe twelve women. On market days there were more of us, more came along. (Engracia, 2004)

The diversity of activities they had to develop and the spontaneity of their way of working in the female resistance group lacked any leadership.

Interviewer: Did you hold meetings?

Interviewed: We met at 10 o'clock in the morning, for instance at the café...we started the rounds with our mobile phones. "Were should we go?" "Over there." [...] Meetings were like this. We finished them very quickly. (Engracia, 2004)

Women also put their caring values and interests into practice in the activities they

carried out. Women facilitated everybody's engagement, despite their everyday actions consisting in going to the forests and opposing the construction of the high tension power line with their physical presence:

When we saw a lorry going up, we blocked its way and we did not move. We stopped there with our cars, or we sat down in the holes, inside the holes, or on the towers, so that they could not make them stand up with the crane. [...] Some men were retired. [...] He was old, and we took him with us. He was grandfather Artau, and we took him with us. He loves all that [the land] very much, but he could not walk very well, so we took him up and down with the car. (Engracia, 2004)

It is also worth emphasizing the gendered valued women gave to their activism. They expressed how they were very proud to be able to use their resistance activities to educate their children. As often as possible, women engaged their children in the lobbying actions. Doing so, they felt they were implementing their caring values and concerns through the resistance group:

Children also collaborated quite a lot. I was not against that. Some people say we manipulated children. [...] Manipulating! I call it educating! I educate them with my ideas and my convictions. It is not that I want them to do everything that I say and think like me. But they will be influenced by what I teach them and what their father teaches them. When they go out into the wider world they will learn from others, and they will contrast this...they will form their own ideas, won't they? But, obviously, I have to give them mine. Of course, which ideals should I teach them? Other people's?

[...]

I think I have set a good example to my children. I think they learnt that, and they are the future. [...] [My eldest daughter] decided that she wanted to study law. She thought it was so unfair that she decided to study law, and now she is studying law. (Marina, 2004)

One consequence of the large number of activities women assumed in the resistance group was that gendered distribution of roles at home had to be revised, at least while the conflict was demanding greater involvement from women. As they fully engaged in the grassroots movement, their male partners had to assume home tasks that they were not used to:

It was a lot of work, a lot of work. [...] My husband came sometimes, to some meetings... But mainly to demonstrations. [...] We ate the same all the time. Can you imagine? Always eating the same! Sometimes I went [to the resistance activities], and I thought, "Today I won't tell him I went. It is better I keep quiet!" [...] Or I was arriving from a meeting, and he had to prepare the lunch, and go shopping. [...] I mean, things that normally I do, he did. Things that we share, he took care of them. I said to him, "Take care of this because I am very busy!" (Engracia, 2004)

The complicity of male partners was fundamental for the engagement of women in the grassroots movement, but the change of roles provoked some tensions inside the family.

My husband did not come to meetings, ever. Someone had to stay at home! In the evenings he stayed with the girls. I was the one going to meetings. [...] Normally, I used to help the girls with the homework. All this was new for my husband. Because I am the one who stays at home. He is not there very often. This is why there was a time that we were a little bit...silly things happened. For instance, the school said, "Tomorrow you should bring some black cardboard", and [my daughter said] "mum, I told you, and you didn't remember!" Things like this. Stupid things, nothing important, but small everyday things. Yes, this happened. Even with other members of the family that do not live with us. My mother who lives alone... Of course, I cannot do everything.

Interviewer: But did they understand you?

Interviewed: Yes, they did. But in their own way. [They did not understand] why I had to get so involved in it. They also suffered because sometimes... The first days they dug the holes, the crane was there, and we thought, "What could we do?" Cranes were working, and we all sat there. Mainly where they had to start cutting. Policemen were there. They took us out by force, and the TV was there. Of course, my family saw all that on television. They may have though "They will hurt her!" well, my mother though, "They will hurt her. Why does she need to be so involved in that?" (Marina, 2004)

The emergence of difficult situations inside the family is not only reported by women; a man with a representative role in case 1 also explained this, as I will describe later. However, in the case of women, they are pressured because they diverted their attention from caring activities. Although female activists in case 1

made an effort to combine their private responsibilities with work in the lobbying group, they could not be at home with the same intensity as before, and their absence was noted in the everyday workings of the family. However, they did everything in their hands to maintain traditional relations with the family, and to avoid ruptures. As I will discuss later, that is not the case for women from *Salvem l'Empordà*, in which two cases show women's activism can lead to emotional ruptures.

The previous testimony also shows the actions in which the female group opposing the construction of the high tension power line led women to transgress traditional gender roles.

Montse, a female farmer and housewife in her sixties, explained with pride and excitement how she had fought against policemen while the group of women were physically blocking cranes that were working to install the high tension pylons:

It was a private path, not a road, and we did not want to go away. "Then, it will be by force" [the policemen said]. I held onto a car, and they could not take me. There were six policemen, they took me, and they brought me, some holding my arms, others my legs, to the van. (Montse, 2004)

Other women explained the courage they found to oppose male workers who were building the high tension power line.

When we arrived they already had the tower ready to stand it up. They tied it onto the crane. And then [we said] "What shall we do? What shall we do?" "We'll get on it!" We got on the tower, all together on the tower. The man from the crane tried to stand it up slowly, to see if we were afraid and got off. [And we said] "We're not getting off!" (Marina, 2004)

When women were physically involved in confrontations that were publicly known they challenged a female myth of weakness and submission. According to the female testimonies, gendered stereotypes were used by some of the men from the groups they opposed (construction workers and also lawyers representing the electric company) to discredit them and the work they did. Moreover, even sexual abuse was used to humiliate women in the hardest moments of confrontation:

At beginning there was a very bad atmosphere. They said all kinds of things to us. All kinds. The best thing they said was "go home to cook the lunch!"

[...]

They even harassed us...they harassed some of the women. Someone told one of the women that she needed to be fucked. Like this, because he spoke like this! [They told us] to get back in the kitchen, that we had nothing to do if we were all the day in the street, that they would never have a woman like us...it was terrible! (Engracia, 2004)

Generally speaking, a positive result of women's involvement in the conflict is that they engaged in a very important learning process: developing skills, practical and technical knowledge that produces a change in women's personal confidence to act at a more public level:

I had studied philology and I did not understand anything about this [technical aspects related to high tension power]. It seemed to me the most difficult thing in the world! But of course, they explained it, and they explained it again, and finally...I liked it a lot! (Engracia, 2004)

Some older female farmers started participating in the meetings of the local council of Llagostera during their participation in *Coordinadora Antilínia de les Gavarres*. After the conflict finished they have continued that political interest. They feel deeply disappointed because the high tension power line was built, and now they feel responsible and want to be aware and participate in municipal decision-making environments:

We went there [the council meeting of Llagostera] to ask what we wanted, to lobby the mayor to take action. We went to the council meetings of Cassà as well. We wanted results. We wanted them to see that there were people against the high tension power line. Well, and now we still go, to see how it continues, see what the latest news is, and sometimes we also go to know what is going to be done in the village. (Montse, 2004)

6.2.2. Towards a form of citizen participation based on gender equality

At the beginning of the chapter we commented that cases 1 and 3 have shown

unequal gender distributions of task, resulting in men having leading and decisionmaking responsibilities, while women have invested most of their time in supporting tasks.

The gender pattern described does not fully apply to Salvem l'Empordà (case 2). The results of the questionnaires lead us to conclude that in Salvem l'Empordà, just as in the two other organizations, men and women each have preferences for a certain type of task. Men, for instance, have been more involved in public roles, whose objective was that the organization garnered media interest. Women, however, are more numerous in the working group that has been responsible for technical and legal activities. During the enquiries, some members of the organization also commented on the different types of activities in which men and women were expected to be involved in. According to one 43-year-old female member of Salvem l'Empordà, "Maybe men are expected to have a greater role that involves risk, strength or physical effort."

However, according to some results of the organization, I will argue that a number of circumstances favour the leading role of women that opens up a suitable platform for triggering their political and ecologist activism.

The first unusual feature of *Salvem l'Empordà* in comparison with the grassroots movements of cases 1 and 3, *Coordinadora Antilínia de les Gavarres* and *Salvem les Valls*, is the social profile of men and women. In general, women in this organization have higher levels of education and tend to be older ages than men (see table 4.3, chapter 4). These educational and demographic conditions seem to favour their leading position in the organization.

During the interviews with the female members, they also pointed to the "unusually" active character of many of the women of the organization to explain the strong female role.

I think there are very interesting women in the Empordà, that go out. I lived in Port de la Selva. It is full of women. Maybe we could see another organization and we would also find many. This is why I say that it is not by chance [there are many active women in Salvem l'Empordà]. But what I know, very modestly... I have lived in the Empordà for five years. The first thing I wanted to do was to work on gender issues. At a demonstration we met four or five women. One from Castelló, another from Cabanes, from Port de la Selva, from Figueres. [...] We met...we followed the network of women...linked to Barcelona, because I had connections with them. [...] And I met women, women and more women. Lesbian women: Empordà is the place where I met the most! Maybe because there are not many of us, and because of our character...we

met in Figueres, whereas. [...] We share thoughts, interests...and then I think that the others, [women] that aren't from abroad, who were born here, they are active, they are very active. (Àngels, 2004)

In effect, the enquiries also showed many women had previous experience in political parties, ecologist organizations and local groups (see table 4.2, chapter 4).

However, age, education and previous experience in organizations does not fully explain women's leading role, and we should consider other factors. The leadership of the organization is structured somewhat differently from the ones described above, and my hypothesis is that this organization mechanism has strongly empowered women.

The civil movement is organized into issue-based groups called commissions, each responsible for a particular task: one for economic tasks, one for technical and legal issues, one for tasks related to public information, and so on. Apart from the weekly meetings of each commission, there are plenary sessions every week that take broad decisions and discuss the work of the commissions. In particular, these assemblies seek agreement by consensus on the position the organization should adopt in each conflict.

Table 6.3. Distribution of tasks between genders in the organization of Salvem l'Empordà (case 2)

ACTIVITIES	Women	Men
Representative and formal part-time jobs	2	1
Economic Commission	1	1
Technical and Legal Commission	5	
Action Commission	3	6
Public Information Commission	1	5
General Assembly	15	14
Occasional Activities	13	13
TOTAL women/men surveyed	20	23

When the survey of the members of the group took place, a man and a woman represented the grassroots movement in public, and a young woman was also acquiring a representative role. The female representatives also filled two part-time jobs for organizing the routine activities. The legal and technical commission consisted mainly of women: they were architects, lawyers, environmental scientists and geographers who applied their knowledge and skills to the activities. The two

female representatives of the organization explained that the legal and technical commission had a major role in defining the organization's strategic position in the conflicts: "The technical and legal commission analyses the projects, drafts legal complains and defines the direction in which the organization should evolve" (Representatives of *Salvem l'Empordà*, 2003).

This situation gave women an important role in leading the movement. Moreover, according to the study, the women of the organization started to attend the general assembly, which is the decision-making forum, in great numbers.

This fact seems to demonstrate that a strong presence of women in leading and public roles is an incentive for political action of other women in the organization. Having stated this, other studies have shown that female leadership in political environments tends to attract the activism of female citizens (Burns et al. 2001).

The reasons that explain the heavy involvement of women in leading and representing the organization were explored through the interviews with the more active female members of the group. The relevance of the strong presence of women in the leadership of the organization to empower other women in the group was asserted by diverse female activists.

There is no [formal] leadership in the group, but there is Marta, who is a public representative and who also leads a lot. There is also Bene [male representative of the group], but Bene...well, he is better at organizing, while Marta shows a more personal side, she shows a stronger feeling...I think that facilitates women participating more. Well, this is something we can assume, because it always happens: when a man leads a meeting, women stay in the background. It seems that they [men] have to know more. I am also interested in the issue, because in my political organization I am also working with the topic of women. It is true that in small groups, and when we all are women, they [women] put forward many arguments, they speak a lot and give reasons. I mean, they do not say anything silly. But later, when you meet in a mixed environment, or there are more men, well it seems that they [women] do not find the courage. (Marta A., 2004)

Boetzkes (1998) suggests from the results of a Swedish study that women get involved in grassroots politics to improve or preserve their communities, while men tend to show career development aspirations that go beyond local leadership (Boetzkes, 1998).

Interestingly, some members of the group pointed out that women in Salvem

l'Empordà did not show leadership ambitions, and they compared this situation to male led organizations. For instance, one female activist compared the female representative of *Salvem l'Empordà*, Marta, with the male leader of the ecologist organization IAEDEN¹, Sergatal.

I think that Marta is a complete leader, and in addition [acts] as a woman. She is a female leader, with female qualities. [...] She knows how to speak, she can be strong if she has to. [...] She is very radical...she is not moderate, it seems that women are more moderate... Marta Ball-Llosera, I wish there were more women like her! Everything changed. We all commented, "Well, what a difference to Sergatal." [...] In 1977 I was the PSUC (communist party) candidate for Girona, in the province of Girona. [...] He (Sergatal) came to ask us for support. Of course, we are talking about 1977, and leftwing groups were not ecologist at that time. But we did what he wanted. He acted very much as a leader, he was very young! Well, we all were very young at that time. But he was even younger than me...if I was twenty-three years old, he would have been twenty, eighteen or nineteen...and he managed to stop them. After that he became director of the Wetlands Park, and later he created IAEDEN. [...] As director of IAEDEN he negotiated to become a leader himself, I mean that any other person could have become [leader]. Many people thought he would become the Minister for the Environment. It is clear that he wants to play that role, very much a masculine one. [...] In that the difference has been clear. I think it has to do with the fact that Marta is a woman. (Gloria, 2004)

Marta, the female representative of *Salvem l'Empordà*, confirmed that view, as she self-reported her low interest in having a traditional leading role in the group:

It is clear for me: I would be happy not being the public image of the group. I do not have ambitions to do this. My aspiration is to work and to be successful in dealing with the issues. In the beginning we did not have representatives, we did not want to impose any public person. But, in practice, because I worked here [for the organization], and because I am the person who knows more about the issues, then

¹ IAEDEN was founded in 1980, being the second oldest naturalist organization in Catalonia. The role of that group has been fundamental to promoting the legal protection of the wetlands, Albera and Cap de Creus, in the Empordà region. IAEDEN also promoted the constitution of *Salvem l'Empordà* in 2002, with the aim of focusing in that organization all lobbying campaigns. At present, the naturalist group organizes educational activities to promote the natural values of the Empordà area (IAEDEN, 2008. Què és la IAEDEN? Consulted on 5 August 2008 at http://www.iaeden.cat/pag/iaeden.htm)

obviously I ended up being the representative. If, in addition, you can speak well and in front of the camera you. [...] Lluís Benejam [male representative] does not work here [for the organization], and probably he does not know so much about the technical side of things, he worked more in organizing campaigns. (Marta B., 2004)

In contrast to what I have described in case 1, the fact that women (and also men) did not show ambition for taking on a leading position at a public level did not disempowered women. On the contrary, it involved a more democratic and equal basis for decision-making, which female activists considered beneficial to their active participation:

I think that women do not have such ambition (I don't know if it is genetic or not) to have any power...And so, well, it worked, and I think it will continue to work. There is no-one with the ambition to be the star, to achieve more power than the others, and probably women are more like this. That does not mean that sometimes there are women who are like men. But in general we do not have that ambition for having power or being the stars, and probably we also respect more each other. (Carme, 2004)

I think that women...the majority...I think we are not very interested in power. I think we prefer the assembly form, which is much more equal. Of course, there are exceptions! (Lídia, 2004)

The scant interest of the grassroots movement members in having clear leadership explains why the group decided to organize the work into small issue-based commissions, as described in table 6.4. That type of organization, in turn, has been beneficial for women. By working in small groups women have been able to participate in decision-making activities, and to find the courage to take a more leading position if the group needs it, without the need to engage in competing attitudes.

In favour of that hypothesis, some of the female activists interviewed expressed the fact that women tend to display behavioural and discursive patterns that favour a more open and effective discussion, while male discursive practices tend to prioritize competitive attitudes that may hamper reaching agreements:

I think women are more practical than men. Normally, women who participate in politics are more practical than men, they are quicker finishing meetings; we make a

programme and at the end we do the work. On the contrary, when there are men, they like to hear each other, what one says is repeated by the next one, and the next one...the whole speech. (Marta A., 2004)

It is noteworthy that regardless of the fact that the group's form of organization incentivizes the participation of women, and although that empowers their voice, they still find resistance from public spheres. That situation was reported by some activists during the enquiries:

I think that being a woman creates a distance and even mistrust among conservative men in villages. (50-year-old female member of Salvem l'Empordà)

I would like to believe that there are no gender differences, but I think they do exist. Unfortunately, in our society men are taken more seriously than women. (40-year-old female member of *Salvem l'Empordà*)

Throughout the interviews the female activists also noted that women were hardly present in the higher power structures of governmental authorities and economic actors with which the organization had to negotiate:

There was a symposium about tourist issues. All day. It was a symposium with many speakers, public discussions...From twenty-two speakers I was the only woman. I think people are disconcerted that a woman can speak, more or less coherently, about a topic. [...] See, someone said to me "It is strange that there are still so many men as public representatives!" Yes," he said me. He came from the Costa Brava Consortium. He said, "Yes, it is strange, but if you look carefully, you'll see that all the key positions in these kind of places are occupied by women, but it is difficult for them to take a public role". I did not ask if it is women who do not want to take a public role, or if they are not allowed. I cannot tell you. [...] The other day we were in a public discussion with politicians, and again, from a table of twenty people, I was the only woman. I said, "Let's see if in ten years there will be more women." (Marta B., 2004)

Interestingly, women of the group are sensitive to gender inequalities in public environments, and they see the need to change that situation:

For the Directive Plan for the Empordà, the Generalitat held two public meetings: one in Palafrugell, for the Baix Empordà, and one in Figueres. At the Palafrugell table all [the speakers] were men, and the public was mixed. [...] Not only was the table made up solely of men, in addition, they placed businessmen in the front row, they were all men! All men! There were around twenty of them! But there were a lot of women in the audience. Many women spoke. I raised my hand to say it, but someone else said it before and I did not say it myself afterwards. How is it possible that the entire first row and all the speakers were men? It had been organized by the University of Girona. [...] When we were outside they had the car close to mine and they said, "Sorry, I think I did not give you the opportunity to speak", and I said "I wanted to say the same thing as the other women: how is it possible that there were no women?" and that person answered, "We sent letters to all the organizations asking them to send a woman, but none of them send one. We tried." (Gloria, 2004)

The limited presence of women in public environments was seen by some members as disempowering for female leaders:

When you are dealing with the authorities, if you are a woman, like in all things...all public environments, you have to show you are the twice as good as them, or you are not credible. [...] Each thing you say has to be thought out carefully. It is like a test. You always have to prepare yourself, because they will catch you, and all the work you did during two years will not be useful because that day you were...that is so clear!

(Angels, 2004)

Similarly, another activist with a position in a political party mentioned that women who engaged in public discussions were not taken seriously:

It seems that what is said by a man has more impact than what a woman says. There is the idea that it is not possible to be aggressive with a woman. I mean, that she has to be spoken to softly... It is like this. At a public level, you are at the council speaking to the mayor and a male councillor, and it seems that they don't take you

seriously...They do not see you like a person that makes a claim. They see you as a woman.

(Marta A., 2004)

Nevertheless, at the same time, to be a woman was also seen as strategic, as soon as traditional gendered assignments were transgressed, because women display unexpected attitudes:

I think that when there is a woman it unsettles some people. For instance, in a public discussion with politicians, they feel disconcerted if you can maintain a debate and put them on the ropes. I think that because I am a female representative...men are disconcerted. They don't know what to do. They don't act as if I was a man. I think that in specific moments this can be positive for our organization.

(Enquiries from Salvem l'Empordà, 2003)

Alternatively, gendered norms and relations are also challenged when women's behaviour, lifestyle and sexual options do not fit in with conventional patterns, showing, as Butler (2006) suggests, that gender alienation may be subverted by showing the limits of the gendered identity and its foundation on a heterosexual hegemony. For instance, Gloria, a female doctor who lived several years in Nicaragua, and was homosexual, expressed the following:

I noticed that men do not see me in the same way they see their wives. Because I have no children, because I am not married, because I lived many years abroad, because they see me as completely strange!

Interviewer: But you think that because of that men treat you differently?

Interviewed: Yes, I think so, I think so... I feel that men speak to me, not as if I were a man, but nearly. I mean, on a male level. [...] Also women, they also do not see me as a normal woman. Other women the same age as me, they see me... I don't know, they see I am not like other women.

[...]

I also think that...well, I don't mind if you tape it. But...I ask myself why I am like this. I don't know if it has to be that way... Going to Nicaragua made me...she and I are a couple...As I am in a relationship with another woman, I don't need a man as a partner. [...] I think there is a side, perhaps, unconscious, but that I feel that I don't need them as partner. [...] It is not so much to say, "I am independent", but naturally you

feel you don't need them, and so we are here, we have a relationship, but...I think that men think women need them. (Gloria, 2004)

Interestingly, with a very different focus, the transgression of traditional gender roles by male activists was also commented as beneficial to set up the basis of a more gender equal form of participation in the grassroots movement. Many of the female activists interviewed noticed that the more equal and democratic environment of the organization, which had been beneficial for empowering women, was possible thanks to the complicity of the male members of the group, who did not display traditional androcentric stereotypes:

Maybe it is not that women have such a relevant role, but that men do not have the traditional role. They do not have the traditional male role of leading, that their opinion. [...] There is someone like this, but in general. [...] Now I was thinking in the assembly, and I think that men that participate...I think they are very advanced. They are very sensitive...Maybe they have female hormones! (Marta B., 2004)

[Speaking about the commission dealing with the technical and legal issues] Usually there is me, Marta, Montse and Anna. We are the permanent four women. Instead, in the case of men...active, active, only Josep Ciurana, that is the lawyer. Well, we are lucky to have him, he is a man, but I said to him the other day "You do not really fit in with the traditional male pattern!" I think the ones who work the most are these five people. There are two more men, but mainly to give support. [...] At meetings one of them prepares some food, he says this allows us to work better.

(Carme, Salvem l'Empordà, 2004)

6.2.3. Acknowledging gender ideology, empowering women

As the testimonies included in the previous section have shown, in the grassroots movement with a more gender equal environment in decision-making and representative activities, women reflect deeply on the negative effects of gender ideology, often found in public environments, on the workings of the group and are willing to describe unequal gender situations inside the group.

By contrast, in cases 1 and 3, in which power positions are unequal between the genders, the activists usually saw the working of the group as gender neutral. Despite some exceptions, women and men denied any gender bias in the activities

or in the leadership. Moreover, the mere reference to gender differences and inequality were even qualified as sexist provocations by a number of members:

When running a marathon, men finish first. Do you think this is related to the activities that are being carried out in the movement?

(Member of Coordinadora Antilínia de les Gavarres, 49-year-old man)

I have no problems with being a woman. (Member of *Coordinadora Antilínia de les Gavarres*, 42-year-old woman)

I think that gender differences exist in the labour market, but not in social movements. (Member of *Coordinadora Antilínia de les Gavarres*, 44-year-old man)

I don't think there are differences between the sexes. We can all participate in the same way.

(Member of Salvem les Valls, 23-year-old woman)

In an organization like *Salvem les Valls*, gender is irrelevant. (Member of *Salvem les Valls*, 24-year-old woman)

My hypothesis is that the low level of awareness of gender inequalities implicitly contributed to the disempowerment of the female position, as women and men did not feel the need to improve the level of participation of the female activists.

Contrary to that situation, women are empowered in organizations with a strong female composition and lead as a consequence of their acknowledgement of the gender ideology implicit in the power structures and dynamics of the public domain in which they bring their claims.

In favour of that hypothesis, most of the women interviewed in case 3—who were open to reflect on gender ideology—declared that they felt sympathetic to or identified personally with the feminist movement, and some also asserted they had been involved in some kind of feminist organization.

Table 6.4. Interest in feminism of female activists interviewed from Salvem l'Empordà

Has worked in femin	ist Feels identified with the	Is sympathetic with the
organizations	feminist movement	feminist movement
Angels	Montse	Barbara
Gloria	Lídia	Carme
Marta A.		Marta B.
Xandra		
Ouestion not asked: Mixo	<u> </u>	•

Even in one specific case, a member of the group considered that there was a link between their interests in the environmental grassroots movement and the feminist fight.

I think that all fights, like globalization, pacifism...these are fights to which I would be the first to align myself with. I don't think these are different fights. I think they are fights based on common sense...the world is not all right. It is not normal that three-quarters of the humanity is hungry and has problems...and one of the reasons is the inequality between men and women, another reason is neo-liberalism, another is the lack of respect for the environment. [...] These are not separate things, they are all linked: it is common sense. After it materializes in different fights: feminism, etc., but it is all about the same thing. (Xandra, 2004)

6.3. Sacrifices, conflicts and ruptures: gendered impacts of grassroots activism

Although activists value positively their participation in grassroots movements, the strong commitment of that type of activity also involves important social and personal costs. Among the impacts at a personal level, there are some that are biased by gender, and hence it is worth paying them some attention.

I have already mentioned that some of the female activists in *Coordinadora Antilínia de les Gavarres* admitted that their participation in the organization had caused conflicts and led to tense situations with their families. Significantly, a male leader of the same organization also expressed the personal difficulties and sacrifices he experienced with his family because of his heavy involvement with the organization:

[Speaking about a very controversial period in the conflict of case 1] Maybe you don't realize it, but it affects you. You are more irritable, more moody, sadder. You are

eating and you think, "How will you manage that?" You are more absorbed at home. My wife doesn't like me not being there, she tells me so, I get angry, and there is an argument. [...] There has not been one particularly bad period, but it has been permanent during many years at home. I don't know how we did not explode!

(Emili, 2004)

Although men and women suffer from tensions with other family members, in the case of *Coordinadora Antilínia de les Gavarres*, women tried to avoid them. Most of the situations of family conflicts had been solved easily. As we have shown in section 6.3.1., female participation in the grassroots group was possible thanks to the complicity of the male partners who engaged in home activities. Otherwise, women would not have been able to take such an active role in the grassroots movement. However, women organized to be able to combine their participation in the resistance group and to continue with their private responsibilities, and they involved their children in the group activities so that they could accomplish with their role as carers. Tensions, therefore, were low because women made all possible efforts to disrupt family life as little as possible. Women carefully maintained their traditional gender roles, regardless of their participation in the grassroots movement.

The previous testimony does not describe the same situation. Emili's conflict with his partner is not a consequence of the fact that his involvement in the conflict has disrupted practical aspects of the everyday workings of the family. It is his emotional state and the negative effects that this has on relations with family members that leads to the problem. Interestingly, he did not express an attitude in which he intended to minimize the negative effects that his participation had in his personal life, as women from the same organization tended to.

In case 2, *Salvem l'Empordà*, similar to what happens in case 1, women express the negative consequences of not being able to carry out their family responsibilities:

My partner is from Salvem, but I think it is more because I am in it. [...] He is in the action group. This brought me problems sometimes. To say, "I don't know if next Saturday we have to go", things that we had to do with Salvem. [...] There has been some minor arguments, some tensions because of Salvem. This with my partner. My son...well, he is sixteen already and...I don't know, I suppose, often...now it is not so often, but before I suffered a little bit because I thought, "Maybe I am paying too little attention to him". And to juggle everything...there are moments in which you are not sure if you are doing it right...and it is not related to time. [...] We also organized our

lives differently; I only had one son probably because of that, I had other interests and if I had children it meant time to be with them; I did not want another person to take care of them.

(Carme, 2004)

However, in some testimonies women did not align themselves with the gendered behaviour expressed in case 1, in which family conflicts are minimized and avoided as much as possible. Two female members of *Salvem l'Empordà* that were interviewed explained that they had ended relationships as a consequence of their activism. In the case of these women, their relationships had suffered from their active participation in the organization:

Interviewer: At a personal level, did you have problems making things compatible...I mean, your work, your home responsibilities...? You told me you have a daughter.

Interviewed: Yes, I separated, which says it all. I don't know what to say to you...in the beginning Salvem l'Empordà helped us a lot as a couple...I have always been aware that Salvem l'Empordà take up a lot of mental energy, it is very much in my mind...I think it is more the fact that. [...] If I had time I always took care of my daughter, but without being aware we did not pay a lot of attention to the relationship. And what happened, happened. I also think that if not now it would have happened later. Salvem l'Empordà has been the focus of something that in two years, one year, six months would have happened. But it's true that Salvem l'Empordà, if you put in your heart in, your passion...you have to leave something, it is impossible you go ahead with everything. (Marta B., 2004)

Interviewer: As a woman who is active in politics, you have your job, your personal responsibilities. How do you combine all these? Does it entail sacrifices? Did it have consequences for your personal life?

Interviewed: Well, it was the reason why I separated. [...] When I asked to have my own space, someone said it was not possible. It was not the reason, but it provoked it. From that moment I took a strong position, I had that need to participate...I cannot do anything else, it is part of me...There have been moments in which I have been very busy, I cannot go ahead with everything. In my personal life, well, it is clear that when I meet someone, he also knows the movements I am in. I suppose that if sometime I meet someone...and we have a stable relationship and move in together...I will have to reduce the amount of work I do. [...] I also have my son, but he lives with his father, he only comes at the weekends. Really, I have plenty of time for myself, so I really don't get bored! (Marta A., 2004)

In both testimonies women's empowerment as a consequence of their participation in the grassroots movement has played a relevant role in determining their life choices.

SUMMARY OF CHAPTER 6

Chapter 6 explored gendered power relations in the three cases of environmental grassroots movements under study.

The results illustrate the theoretical discussion about power introduced in chapter 1. Gender theory affirms that gender determines specific power positions in society, and that biases political arenas, which tend to be androcentric. Nevertheless, gender theory also indicates that power relations are not fixed, and that as social constructions, they can be transformed. In this sense, chapter 6 has shown both gender inequities in power relations in the grassroots organizations that uncritically reproduce gender power relations of public spheres, but also specific contexts in which women have found strategies to develop their interests and values on the environment and participation environments that empower their position in the decision-making of the grassroots group.

The analysis develops from the grassroots movement, but the conclusions obtained could be used to sustain good practices for participation processes.

Unequal power relations between men and women were observed in cases 1 and 3, Coordinadora Antilínia de les Gavarres and Salvem les Valls respectively. In both grassroots movements, men tended to take leadership and representative roles, while women tended to engage more often in supporting activities. I pointed to different reasons to explain the gender unequal power relations observed:

- In case 1 male leaders worked in well-regarded professions and, overall, had a public image before engaging in the grassroots group. For instance, male leaders in case 1 had shown previous experience in local politics. However, this may explain why male leadership does happen, but does not necessarily explain the lack of female leadership: in case 2, Salvem les Valls, women showed a high level of education, well-regarded professions and previous experience in other organizations but did not take a leading role. Significantly, in case 1, in which a woman participated on the board of directors, her leading role was implicitly assumed by herself and by others as a traditional male

one.

- Case 1 also showed that the timetable of the group was organized according to androcentric patterns, in which activities are made compatible with paid work, but not with household and caring responsibilities. When this happens, women are more easily involved in supporting roles because they can easily find the flexibility and complicity to make their gender responsibilities and personal interests compatible.
- Cases 1 and 2 have also shown that in gender-mixed environments women may have fewer opportunities for expressing their opinions and taking leadership roles due to gendered roles and assignments. Women are described by those testimonies as less aggressive, concerned for avoiding disagreements, less "secure" of themselves, taking the role of facilitating the work of the representatives, and having little interest in taking a leading role and engaging in competing positions. Instead, men were described as expressing more aggressive attitudes and not always open to dialogue. Therefore, when a more hierarchical and competitive environment of discussion exists, these female attitudes bring fewer opportunities to influence the debate.

While androcentric patterns of participation were described for cases 1 and 2, I explored other more gender-balanced environments of participation or situations in which women are empowered.

Case 1 showed a specific form of female participation through the group of women that organized themselves in order to stop the work of the trucks that had started the construction of the high tension power line. This group demonstrated a form of participation based on gender roles and that puts female interests and values first.

It is worth mentioning that, as it was described in the chapter, women found in the female group the time and task structure that allowed them to make their gendered responsibilities compatible with their lobbying activities. Women also applied their gendered values and interests inside the female group, involving their children and considering it as a form of education, or helping people with physical difficulties such as the elderly to participate in the movement. Such examples demonstrate a specific form of female

participation in which the distinction between private (household and caring activities) and public roles (meetings and lobbying activities) is weaker, or, at least those activities are made compatible.

In another sense, case 3, Salvem l'Empordà, revealed an organization whose structure and organization mechanisms empowered women. This situation has been explained by various factors:

- The sociological profile of the activists: on average, women were older and better educated than men; women also showed previous experience in other organizations.
- The internal organization of the group: they organized themselves into issue-based commissions and key decisions were taken weekly in the general assembly. This structure enabled more cooperative relations and all the members of the group to participate in the decision-making.
- The key role played by women as representatives and members of the technical and legal commission, which contradicts the male predominance in public environments and was instrumental for inspiring other women to take an active role in the organization.
- The transformation of competing attitudes that tend to dominate androcentric environments. Apart from the positive consequences of the type of group structure described above, the lack of ambition for taking a leading role displayed by female and male activists also favoured more cooperative attitudes.
- Finally, Salvem l'Empordà, in contrast with Coordinadora Antilínia de les Gavarres and Salvem les Valls, showed that the members were open to critically reflect on gender inequities in grassroots movements. In this sense, I also suggested this could favour a more gender equal participation environment.

Nevertheless, women in Salvem l'Empordà also described situations in which gender inequalities affected female participation. In concrete, the testimonies pointed to the lack of women's presence in higher power structures of governmental authorities and economic actors.

Yet, significantly, some testimonies in case 3 also showed the complexity of

that situation when revealing that the androcentric norms that implicitly govern public environments could be transformed when women demonstrated a strong yet still female way of leading or unconventional lifestyle or sexual preference. This example illustrates postmodern reflections presented in chapter 1, according to which the transgression of behaviour, lifestyle or sexual preference associated with conventional gendered patterns helps to show the artificial nature of such norms and to transform them.

These observations lead to some considerations for introducing a gender perspective in participatory processes:

- 1. As it was already suggested in chapter 4, it is relevant to consider the sociological profile of the members engaged in the participatory process. Moreover, it is strategic to plan the sociological composition of the discussions groups, as this biases the discussion and the results in gender terms. For example, the specific dynamics observed for the female activist group organized in case 1, Coordinadora Antilínia de les Gavarres, suggests an interest in organizing female discussion groups, as specific issues and ways of discussion may emerge.
- 2. At the same time, the observations pointed out from case 3, Salvem l'Empordà, suggests that a strategy to empower women in participatory environments may be to involve them in leading roles of the discussion process (e.g. as experts or leading participants). These women may play a strategic role in discussion processes to empower the participation of other women.
- 3. It is very relevant to plan the structure of the discussion. Case 3 demonstrates that discussions in small groups before a general discussion group takes place favours cooperative attitudes and female participation.
- 4. Another important factor to guarantee a more gender-balanced participation process is to consider time and infrastructures that may facilitate making citizens' participation compatible with their gendered responsibilities. The female group described in case 1 showed that women participated because they could organize their time and practical arrangements (e.g. organizing lunch for everybody

- or picking up all their children from school together) that made their activism compatible with their caring roles.
- 5. And last but not least, it is relevant for participants to openly reflect on gender unequal power relations in public environments as a strategy to make them aware and take consensual actions that could directly empower women in the participation process.

PART III: FROM THE FIELD BACK TO THEORY: FEMINIST REFLECTIONS ON VALUES, SCIENCE AND LEGITIMACY

Introduction

Throughout the previous part I have focused on presenting the basic elements of what I have called "a female gendered concern for the environment". At the same time I have also persistently claimed that we should recognize diversity among women's identities and experiences, and that women cannot be considered as a unitary group.

In line with that assumption, the view that is expressed by a majority of women in statistical studies, as well as the life experience arguments identified in the cases studies, is that we should not presume there is a single "woman's voice". It is not a "woman's voice" because some women are not represented by it. And it is also not a "woman's voice" because that concept would presuppose a female "voice" that is more original than other female opinions.

However, although such a view is not a part of a supposed female essence—an idea that the diversity of women's experiences of femininity undermines—, we should not underestimate the fact that caring constitutes a common "meta"-experience for many women, regardless of economic, education, class, ethnic, and geographic differences. In addition to the fact that many women are engaged during their adult lives (and sometimes in infancy as well) in caring activities—as sisters, wives, mothers or daughters—, caring is fundamental in the symbolic construction of femininity, and thus it constitutes values, roles and behaviours expected for (and experienced by) women, and shaped by their particular socio-economic conditions and personal choices.

Hence we cannot say results from empirical studies speak about a women's voice, but they do refer to values—the emphasis on social relations, the concrete and the contextual—that are intrinsic to a "carer stand", which has been traditionally associated with femininity. At the same time that stereotype, and the values associated with it, have been delegitimized in the public sphere and in positions of power.

Sarah Ruddick's (2004) use of the concept of "maternal thinking" carefully expresses the idea that caring embodies values attached to a "delegitimized femininity". The author also points out that there is a female experience that leads to a specific vision of the world. In particular, Ruddick notices that maternal thinking is (1) a systematically subordinated and neglected epistemological position, and (2) a feminine/feminist achievement, an engaged vision developed from struggle and

change that brings a distinct and "insurrectional" vision of the natural and social world:

Or to put the point romantically—adapting Foucault—maternal thinking is a "subjugated knowledge", "lost in all-encompassing theoretical framework or erased in a triumphal history of ideas"—"regarded with disdain by intellectuals as being primitive or woefully incomplete" yet likely to become "insurrectionary". (Ruddick, 2004: 163)

It is the "insurrectional" power Ruddick recognizes in the maternal thinking that opens a promising reflection on the strategic use of "caring" in relation to the application of a gender perspective to environmental governance. Yet, in coherence with the assumption that those values are not inherent in "women" per se, but are embodied in social roles traditionally attached to femininity, I will refer to them by using the concept of a "carer standpoint"—which may be identified in many women's experiences, and also in the case of some men—instead of using the widespread concept of "maternal thinking", which easily leads to biological and essentialist interpretations.

According to that conception, to assess gender in the governance process may not be only about sex-counting participation, but mainly about assessing the gender implicit in the arguments that are legitimated in the public debate, the discourses that sustain them, and the knowledge available to support those positions.

In this present third part of the thesis, I will explore and reflect on the concept of a "carer standpoint" as a metaphor for delegitimized social values traditionally attached to femininity. I will use the concept as a strategic tool, firstly to make androcentric assumptions in environmental governance visible, and secondly to offer reflective and practical instruments to introduce a gender approach to the practice of environment related participatory processes.

However, before we can go ahead in exploring the potentials—as well as to show the "insurrectional" character—of a "carer standpoint", we should carefully point to the ideological biases and the oppressive mechanisms that have traditionally worked through the establishment of a deterministic link between women and caring roles. It is by pointing to the patriarchal elaboration of a female carer, embodied in the stereotype of motherhood, that we can engage in a process of deconstruction that (1) will demonstrate that caring is a socio-cultural construction (2) around social values traditionally undervalued due to its association with

femininity, and (3) seen as the negative mirror (and therefore as subordinate to) a hegemonic stereotyped masculinity. Only after that process of critical assessment of the women-caring role link can we start to recover the "carer standpoint" as a potential source of reflection on our society's relationship with the environment, and as an axiological and epistemological position in the environmental debate, which we can recognize in the opinions of many women, as men.

Hence part III is structured into three chapters.

Chapter 7 will explore "motherhood" as the social role that embodies the deterministic argumentation that women are natural carers. I will start the discussion by exploring feminist authors that argue that motherhood is a socio-cultural construction. Through their work we will query the strong socially accepted idea of a maternal instinct as the origin of women's caring capacity. The discussion will start from a historical deconstruction of ideologies about maternity that are instrumental to hegemonic social and political periods. That historical analysis will be followed by a brief description of the sexist assumptions about gender that have biased and distorted scientific research, mainly in the field of biology, contributing to the fatalistic view of motherhood as female determinism.

Obviously, motherhood has been one of the key discussions in feminist circles. It has been seen both as a social imposition that condemns women to the private sphere, as well as a clue for the reconstruction of a female identity. Positive and negative aspects of those feminist readings about motherhood will be explored.

Finally, I will expose the powerful link attached to women, mothers and nature that in Western culture has accomplished a double sanctioning function: firstly as powerful rhetoric about the biological deterministic view of women as "natural" carers, and secondly as fundamental elements of the dichotomy and hierarchical order that attaches an inferior and subordinated status to female values, and therefore explain the delegitimized position of a "carer standpoint".

In chapters 8 and 9 I will work on the theoretical elaborations of:

- 1. "Care ethics" as it has been discussed in feminist contributions to moral theory and ecofeminism.
- 2. "Standpoint theory" and "situated knowledges" as it has been proposed by feminist science epistemology
- 3. "Cultural rationality" as it has been explored in environmental social theory.

These three independent discussions in feminist and environmental academic circles are going to be the theoretical background in which I will explore the potentialities of a "carer standpoint".

Chapter 8 will depart from feminist discussions on the findings of Gilligan about gender differences in morality. Gilligan's theoretical contributions will be exposed and used to interpret some of the empirical findings exposed in part II. Gilligan's proposals will also be the means to expound the basic elements of the feminist critique of the androcentric character of environmental ethics. The chapter will finally explore the notion of "care ethics" by exposing the alternative readings of both ecofeminist cultural and constructivist perspectives.

The second part of chapter 8 will take into account feminist reflections on modern science, which critically assess gender biases in the establishment of objective knowledge and the legitimacy of who is a knowledge producer. In the case of science feminists, one of the consequences of demonstrating androcentric biases in science has been that they have started epistemological reflections on the potential legitimacy of "other" forms of knowledge. Such an idea will be explored by exposing theoretical arguments of standpoint theory and situated knowledges.

What are the consequence of feminist critiques of moral thinking and science for environmental governance practices? In what sense does that reflection shed light on the possibility of a gender bias in participatory practices? And if that is demonstrated, what are the practical strategies we may apply to fight androcentric assumptions in the environmental public debate opened through institutionalized forms of participation?

Chapter 9 starts with a brief approach to Habermas' theory of discursive democracy. By connecting feminist ethics with discursive ethics, I will establish the basis of the issue of the legitimacy of multiple perspectives relevant to the environmental debate. In the framework of that theoretical elaboration, I will focus on post-normal science, a solving-strategy of complex environmental problems that proposes the ideal of discursive democracy. Although post-normal science theorists do not pay specific attention to power imbalances between different perspectives that may be involved in an environmental participatory decision-making process, applied case studies demonstrate that complexity and scientific uncertainty may lead to increasing the legitimacy of non-scientific perspectives. That contribution opens a promising challenge to a gender approach.

However, I will argue that the notion of legitimacy based on "those affected", as post-normal science puts it, does not fully help to consider traditionally

underrepresented views on the environment. Androcentric biases may be transferred to the environmental discussion if problems of structural power unbalances are not addressed explicitly. The unavailability of scientific knowledge that is sensitive to gender may make the emergence of specific interests on the environment unthinkable, even by those who could be affected.

In order to elaborate the strong power unbalances among diverse perspectives in the environmental debate I will expose preconceptions and elements of confrontation of a technical versus a cultural rationality. Those terms are used by environmental social theorists, but I will propose that they can also be found to represent the meeting between a hegemonic view on the environment in which androcentric values prevail and a "carer standpoint" perspective, as they have been analyzed in the previous chapter regarding moral and cognitive issues. In other words, the encounters between a technical and a cultural rationality can be seen as a possible materialization of discussions from feminist moral thinking and feminist epistemologists, applied to the environmental field.

By exposing the analysis brought in the field of popular epidemiology, I will discuss the difficulties of such a cultural rationality (or "carer stand") because of the weak power position it has in the public debate.

Two fundamental strategies will be set out to combat such power unbalances, which are revealed as key contributions of a gender perspective to governance processes. First of all, to highlight androcentric biases in discursive practices and rhetoric styles and to propose mechanisms to combat them. Secondly, and more decisively, to use knowledge to empower non-legitimized perspectives. Regarding that second point, a gender approach to knowledge involved in environment-related participatory processes will be assessed in relation to the expertise leading and informing the discussion, the notions of interdisciplinarity and responsible science, and the production of a gender perspective to the environmental knowledge available in the debate.

Chapter 7. Caring for the environment: from "motherhood" to feminist ethics

7.1. The maternal instinct or the androcentric construction of motherhood?

According to many authors (Badinter, 1980; Rodríguez-Magda, 2004; Knibiehler, 2000; Palomar, 2005; Castilla, 2005; Fernández-Montraveta et al., 2000), "motherhood" is the social elaboration of a biological process, for which it is not a universal or deterministic fate, but constructed by culture. In consequence, it presents historical variations.

The feminist historian Elisabeth Badinter starts her salient book *Amour en plus*: histoire de l'amour maternel (XVIIe-XXe siècle) in the following way:

1780: Le lieutenant de police Lenoir constate, non sans amertume, quer sur les vingt et mille enfants qui naissent annuellement à Paris, mille à peine sont nourris par leur mere. Mille autres, des privilégies, sont allaités par des nourrices à demeure. Tout les autres quittent le sein maternel pour le domicile plus ou moins lointain d'une nourrice mercenaire.

Nombreux sont les enfants qui mourront sans avoir jamais connu le regard de leur mere. Ceux qui reviendront quelques années plus tard sous le toit familial découvriront une étrangère: celle qui leur a donné le jour. Rien ne prouve que ces retrouvailles aient éte vécues dans la joie, ni que la mère ait mis les bouchées doubles pour assouvir un besoin de tendresse qui nous sembre aujourd'hui naturel. (1980: 7)

The feminist historical analysis of motherhood in Western socio-cultural thinking and the European context shows that social role has been present in all periods, but it has taken diverse forms and has been valued by society with different intensities.

Badinter establishes that the analysis of motherhood should consider three axes: motherhood in relation to the father, to the child and to the woman herself. In this triangular relation, the inequality between the sexes has played a fundamental role.

The history of the Western family has been characterized by the power of the husband and the father. In Athens, and also in Rome, women and children had an inferior status.

The first alternative to that patriarchal order came directly from the words of Jesus Christ, which established that paternal authority is not in the interest of the father, but the child. Men and women were considered equal and shared the same rights and duties in relation to children. However, such a message was obscured by later interpretations, and it only brought some advantages to women from privileged classes. The words of Jesus Christ were based on love, but Western society was founded on the idea of authority.

Badinter describes how the fragile rights of privileged women diminished before disappearing after the fourteenth century in France, due to the imposition of Roman law. After the sixteenth century, the authority of the father increased.

Society was founded on authority according to three intertwined discourses: authority was considered as a natural condition of males, which was a heritage from Aristotle; it was affirmed as divine by theology; and both arguments were supported in politics, in which authority translated into despotism. In the seventeenth century, paternal authority still prevailed. The ideological focus was on the father, while the mother had a secondary role in the home. Negative images of children were the norm at the time, considering them, just like women, to be inferior beings and incomplete humans.

The change to that situation would come after the eighteenth century with the foundation of the modern family. Enlightenment moral discourses on maternity would put the focus onto the child, who took a central role in the family. In that new setting women, as mothers, gained a position in the private sphere, together with social recognition. However, "new" mothers gained power inside the family, but their autonomy at a public level would be uncomfortable for both the child and the father.

Badinter places the elaboration of the current ideal of motherhood in the Enlightenment century, through the ideals of unconditional love and sacrifice. To be a mother was projected as a final and absolute desire of women, the completion of the female identity.

Although the new interest in infancy had started in the seventeenth century, during the last quarter of the eighteenth century most women still did not take care of newborn babies, who were fed by a wet nurse. Breastfeeding was not appreciated as a social activity. The nobility and bourgeoisie used wet nurses for convenience, while merchants and labourers needed it because after giving birth women had to return to work as soon as possible. The poorest farm labourers left aside their own

children to breastfeed the larger number of children from richer families (Rodríguez-Magda, 2004).

In order to understand the relevance of the modern family and the position of women in the private sphere of the new social order, we have to refer to changes in the conception of the political state. The rational thinking that evolved during the Enlightenment, which propelled the emergence of demographic sciences during the eighteenth century, discovered the relevance of population to increasing the wealth of the state. High infant mortality rates appeared as a social problem to the emerging population state (Rodríguez-Magda, 2004).

It is in this framework in which we should interpret the role of moral discourses appealing to women to take responsibility for children that proliferated in that period, with Rousseau's very influential work $\acute{E}mile$ at the top of the list. The moral thinking spread the ideals of maternal love and the domestic wife among women of the new bourgeoisie, who took to them en masse (Rodríguez-Magda, 2004).

This is a fundamental contradiction of the egalitarian ideal of the Enlightenment: while equality was claimed for all humans, women were left to the shadow of the private sphere. The ideals of equality among humans lead to some philosophers and writers of the period, like Condorcet, d'Alembert, Madame d'Epinay or Olympe de Gouges, to publicly denounce the political, economic, legal and social oppression of women. But some of the most relevant Enlightenment philosophers presented the family as the fundamental element of society, in detriment to women emancipation rights. Rousseau gave women the responsibility of participating in the social contract as supporters of the family and guardians of the private sphere, which allowed men to engage in the construction of the modern society (Puleo, 1994; Rodríguez-Magda, 2004). Even Kant's critical reason took a different orientation in the case of women: spouses had to obey their male counterparts, because in the private sphere equality could only be the cause of conflict. As Carbonell (2003) puts it, women were negated the status of citizens as women; paradoxically, however, they acquired it in their role of mothers.

Ideals of maternal love and maternal instinct continued to spread during those centuries and were closely linked to demographic policies. During the nineteenth century, hygienic discourses were orientated towards the female body, identified as the key to reproduction and, in consequence, the instrument to ensure population growth (Rodríguez-Magda, 2004). During the first half of the twentieth century, state campaigns called maternity duty to the fatherland, and condemned anticonception and abortion (Knibiehler, 2000; Palomar, 2005; Castilla, 2005).

7.2. Scientific discourses on motherhood

Whereas feminism has insistently fought biological determinism regarding women by showing the historical and cultural engagement of female identities, the idea that there is a fundamental truth about "femininity", and that it is found in female reproductive organs (as Diderot had claimed in his *Sur les femmes* in 1798), is strongly embedded in Western societies.

Still today, in our extremely cultured civilization, in which the capacity to overcome any natural constraint is seen as a sign of progress, it is generally accepted that motherhood, and the closely related ideas like "maternal instinct" and "maternal love", are atemporal, natural and biological exclusive female characteristics, attached to the female reproductive system (Badinter, 1980; Knibiehler, 2001; Castilla 2005). Nature is the most powerful source for the claims, and therefore in the case of women has been widely used to determine social and cultural assignments, veiling ideological projections and biases.

Androcentric preconceptions about men and women and their social roles have also biased archaeological studies. The argument for women's link to the private sphere and a natural dependence on men was applied when gathering and food sharing appeared as a fundamental activity in the process of "hominidization", and risked undermining the centrality attached to men as hunters in traditional interpretations (Fernández-Montraveta et al., 2000).

The consideration that women are more attached to their natural instincts and to the sphere of reproduction more than men was already present in Darwinist theories. Darwin himself considered women to be determined by motherhood and a dependency on men, who were considered more competitive, strong, vigorous and dominant. Regardless of such arguments being biased by Victorian views on gender and although they showed scientific inconsistency, they were adopted by Evolutionary Psychology at the end of the nineteenth century. However, according to Fernández-Montraveta, such traces are still present in contemporaneous science:

Desde mediados de la década de los 70 hasta la actualidad el nuevo orden natural representado por la Sociobiología, sigue recogiendo la imagen de una hembra cuidadora, contenedor temporal del futuro de la especie, impulsada por el único deseo de ser madre y forzada por este impulso a elegir para sus crías el mejor macho que (¿hace falta decirlo?) es el más grande, el más competitivo y el dominante. (Fernández-Montraveta et al., 2000: 18-19)

In the field of sociobiology, the study of animal behaviour has been another powerful source to legitimize men and women's social roles scientifically. However, biological studies in which humans and animals are compared often present serious scientific inconsistencies. Fernández-Montraveta (2000) argues that biological data is constrained to fit into preconceptions of men and women and the sexual division of labour, to the extent that species selected to establish comparisons with humans are instrumental to representing androcentric conceptions, and other species that contradict those assumptions are not cited.

Likewise, non-human primates have been studied to explain human behaviour, because from a genetic point of view they are the closest to humans. Despite the fact that the first naturalists emphasized the similarities between the maternal behaviour of non-human and human primates, later studies have demonstrated social behaviour in non-human primates shows a great variety between and within species, and are acquired through education, which contradicts the idea of natural determinism. In the case of maternity, female protection and caring are common traits, but behaviour is very variable. Diversity is also common among males of different species of primates. In some species males show aggressiveness towards their offspring. But we find also the extreme opposite: in others, males develop all the caring activities except breastfeeding (Fernández-Montraveta et al., 2000).

In contradiction to biological determinism, some biologists maintain that the significance of our natural heritage does not necessarily lead to a fate marked by biological determinism. Our behaviour is not necessarily the same as that of other species, although we may share physiological characteristics or genetic information. The function of genes or hormones is not necessarily universal, because it can vary due to the influence of the context (Fernández-Montraveta et al., 2000).

7.3. Feminist encounters with motherhood

The maternal role has been instrumental to a sexist ideology determining women's fate, female alienation and subordination in a patriarchal system. Yet at the same time, maternity is a live experience, a fundamental element in female identities, and in consequence a potential source of social power. This duality leads us to intuitively comprehend the complex, intense and controversial fight that feminism is still involved in on the issue of motherhood.

Already during the 1920s, the well-known feminist writer Virginia Woolf expressed such a paradoxical situation in a very suggestive way:

How can I further encourage you to go about the business of life? Young women, I would say, and please attend, for the peroration is beginning, you are, in my opinion, disgracefully ignorant. You have never made a discovery of any sort of importance. You have never shaken an empire or led an army into battle. The plays of Shakespeare are not by you, and you have never introduced a barbarous race to the blessings of civilization. What is your excuse? [...] We have borne and bred and washed and taught, perhaps to the age of six or seven years, the one thousand six hundred and twenty-three million human beings who are, according to statistics, at present in existence, and that, allowing that some had help, takes time. (Woolf, 2005)

Simone de Beauvoir played a fundamental role in the public denouncement of the contribution of motherhood to women's oppression. In her influential work *The Second Sex* she expressed the prohibitions and roles that little girls were taught, which limited their emancipation capacity in adulthood:

One is not born, but rather becomes a woman. No biological, psychological, or economic fate determines the figure that the human female represents in society; it is civilisation as a whole that produces this creature, intermediate between male and eunuch, which is described as feminine. [...] Up to the age of twelve the little girl is as strong as her brothers, and she shows the same mental powers; there is no field where she is debarred from engaging in rivalry with them. If, well before puberty and sometimes even from early infancy, she seems to us to be already sexually determined, this is not because mysterious instincts directly doom her to passivity, coquettery, maternity; it is because the influence of others upon the child is a factor almost from the start, and thus she is indoctrinated with her vocation from her earliest years. (Beauvoir, 2005: 184-185)

Beauvoir's words clearly pointed to the invisible prison of motherhood that excluded women from social improvement and made them dependent on male protection:

This is what happens to the little girl when, doing her apprenticeship for life in the world, she grasps what it is to be a woman therein. The sphere to which she belongs is everywhere enclosed, limited, dominated, by the male universe. [...] Because she is

a woman, the little girl knows she is forbidden the sea and the polar regions, a thousands adventures, a thousands joys: she was born on the wrong side of the line. [...] But in thus accepting her passive role, the girl also agrees to submit unresistingly to a destiny that is going to be imposed upon her from without, and this calamity frightens her. The young girl will be wife, mother, grandmother; she will keep house just as her mother did, she will give her children the same care she herself received from being young. (1952: 185-186) 1

The opposition to a fate marked by the biological weight of maternity is one of the traditional and more relevant fights of the egalitarian branch of feminism, which denounces the cultural, social and economic dimensions of motherhood. Feminist authors aimed to undermine the idea of a supposed natural feminine desire, breaking with the patriarchal idea of motherhood as a finality in the life of women. The access of women to the public domain and to education and economic, political and social power was seen as the path for women's liberation (Stearney, 1994). That view was also fundamental to feminists during the 1960s, in which reproductive control techniques and medical advances were instrumental to spreading the idea that women should separate their fate from maternity and become more autonomous beings (Castilla, 2005).

By denouncing the patriarchal idea that motherhood is the natural and biological fate of women, egalitarian feminists broken the fatalist determinism that constrained women to the private sphere. However, the egalitarian branch did not emphasize how patriarchy devaluated social roles traditionally associated with femininity. In this way, and by centring women's oppression on motherhood, egalitarian feminists implicitly contributed to the consideration of caring activities as inferior and less relevant than traditional male-dominated roles of the public sphere. Moreover, motherhood was not compatible with the desired power positions egalitarian feminists claimed for women. It was uncritically assumed that women should equate to the male patron, in which the caring responsibilities were ignored.

The feminism of sexual difference (see chapter 1) initiated in the European context during the 1960s, headed by the French group Psychoanalise et Politique, and strongly followed by Italian feminists, in particular the Libreria delle Donne of Milan and the philosophical group Diotima from the University of Verona (Rivera-Garretas, 1994), was conceived in open opposition to egalitarian feminism, which

¹ See also a similar claim in Virginia Woolf's A Room of One's Own, 2005.

was considered to uncritically assume an androcentric model for women in public life. The issue of motherhood received a central position in the debate.

That branch of feminism emphasizes difference and aims at breaking dependence on a central male patron:

In questo ha giocato il dominio sessista. La subordinazione di un sesso a l'altro è una manera practica di risolvere il problema del soggeto umano che non è uno ma due. Questa soluzione, usata tradizionalmente per regolare i rapporti tra i due sessi, è stata adottata anche dalla filosofia e dalla scienza per poter atribuire al soggetto conoscente di essere uno e semplice, cioè non toccata dalla particularità del suo corpo sessuato o come talle opposto all'ogetto molteplice e deveniente del suo conoscere [...] nella società patriarcale la donna non ha rapporto con gli altri oggetti sociali di desiderio se non attracerso l'uomo, padre, fratello o marito, cosicché il suo desiderio o si fa virile o si smarrisce nella sua estraneità femminile al sociale. (Fischer et al., 2003: 10)

The project of the feminism of sexual difference is therefore to recover a female identity not alienated by patriarchy. The proposal focused on the recognition of the value of a female transcultural specificity, in which maternity is fundamental. Maternity is seen as a clue to exploring the original female identity, not alienated by patriarchy.

In the case of Luce Irigaray, she focuses on psychoanalysis to denounce how women are subordinated in a symbolic order centred on the phallus (phallocentrism), and proposes the need to build a symbolic order specific to femininity, which is found in motherhood. The relation between a girl and her mother is seen as a specific link, a previous stage to the Oedipus complex that introduces women to the phallocentric order. Only through the exploration of that maternal link can women find an original and specific female sexuality (Turbert, 2003).

Between these two extremes of the ideological traditions in feminism, contemporary authors attached to a constructivist paradigm tread an intermediate path (Rodriguez-Magda, 2003; Guerra, 2001), engaging in a deconstruction of motherhood ideologies. However, in this process constructivists warn against throwing out the baby with the bathwater. Maternity is seen as a fundamental aspect of women's everyday lives. There is no need to neglect it or regard it as sacred. It is a fundamental element of women's identities, as well as a source of

social values to be recovered, for women as well as men (Guerra, 2001). Yet, at the same time, constructivist feminists criticize the feminism of sexual difference in the search for a female essence as impossible and undesirable. Female identity is understood as multiple, variable and complex, and the project of symbolic order based on a supposed original femininity is criticized as a handicap for women's liberation. As Turbert criticizes Irigaray:

Se puede objetar que la relación del sujeto con su propio cuerpo y con el origen está mediatizada por el lenguaje. Lo femenino no es algo dado naturalmente, sino que se constituye en una operación simbólica de división, que produce a la mujer como término negativo. No se trata de que tenga otra esencia, como sugiere Irigaray, sino que es la definición misma la que la genera como otro. Tampoco se trata de negar la diferencia entre los sexos, sino de no anclarla en los cuerpos ni confinar a las mujeres en un espacio ajeno a la simbolización, lo que no harías más que alimentar la mística de la feminidad. No hace falta postular una identidad femenina entendida como lo que las mujeres son o debieran ser, para disponer de una noción de una identidad política tal y como la requiere el feminismo. (Turbert, 2006: 44)

7.4. Women, mothers and nature

Merchant (1995) is well-known among ecofeminists for her work on the historical reconstruction of the conceptual link between women and nature in modern Western culture. The author argues that in pre-modern Europe the logic of a holistic cosmology, in which all beings are interconnected, conceived the Earth as a female entity, a nurturing mother giving and maintaining life to all beings, including humans. However, in the same pre-modern worldview, nature also represented disorder and chaos: a wild and incontrollable female force threatening humans, through violent storms, droughts and other destructive natural phenomena.

In the pre-modern worldview, the image of nature inspired respect and, to some degree, prevented its exploitation. However, the societal impact on the environment accelerated with the progressive transformation of feudal European societies into commercial oriented economies, in which subsistence production was increasingly substituted by market production.

According to Merchant's thesis, the image of a female nature was progressively transformed with the arrival of the Scientific Revolution and the development of mercantilism. Such cultural and economic advances needed a different metaphor regarding the relation between society and nature. The image of a benevolent mother was replaced: nature was conceived as a machine that science investigated. The second image of the violent nature continued existing. The combination of both metaphors justified the task of controlling nature for the benefit of civilization, in which science is allied with technology (Merchant, 1980).

Merchant's work is interpreted by the essentialist ecofeminist movement as the original supremacy of the female and nature destroyed by modern Western culture. They consider capitalism, the scientific revolution, technological development, violence and militarism as the same expression of a male obsessive attitude with destroying life, which has brought the Earth to an ecological collapse. Cultural ecofeminists recover the roots of pre-modern European cosmology and of non-Western cultures that inspire a more harmonious and respectful relationship between society and the environment. In this vision the conception of a female unity with life is crucial, which is materialized in the female body and biological processes that allow women to give birth and nurture infants.

Ecofeminists recover spiritual figures based on nature as a nurturing mother, such as Gaia,² the "Mother Earth" or "Mother Nature" (Warren, 2000). Maternal women acquire the status of goddess that will guide society towards recovering essential connections with all forms of life, including the Earth (Biehl, 1991).

Starhawk (1990) makes a spiritual proposal that departs from the concepts of immanence, interconnectivity and community. Immanence means that the Earth is alive and belongs to an animate cosmos. Interconnectivity refers to the idea that everything is connected in our bodies, and all life on Earth is communicated.

² Originally, "Gaia" is the name of a Greek goddess that liberated the Earth from chaos (Merchant, 1995). In 1974 the scientist James Lovelock used the term Gaia to refer to the idea that "the entire surface of the Earth including life is a self-regulating entity" (Lovelock, 2000: viii). Lovelock referred to a scientific basis to set out his theory, but he also used Gaia as a source of environmental ethics, in which the Earth is associated with a female entity that takes care of life, and to which humans should treat with great respect: "We need to love and respect the Earth with the same intensity that we give to our families and our tribe. It is not a political matter of them and us or some adversarial affair with lawyers involved; our contract with the Earth is fundamental, for we are part of it and cannot survive without a healthy planet as our home. [...] This book is the story of Gaia, about getting to know her without understanding what she is." (Lovelock, 2000: viii). Gaia has thus been a powerful symbol for the ecofeminist and ecologist movements.

Community stresses that we all form part of a living planet. The proposal of Starhawk considers women to be the axis of the union of life.

Ecofeminist arguments about women's closer proximity to nature, which is the basis for a spirituality founded on innate feminine qualities, is rooted in maternity: pregnancy, breastfeeding and, definitively, the biological capacity and the sociocultural role of women in sustaining life. However, radical ecofeminists ignore historical, cultural and social variations of the motherhood experience.

Some authors that are critical of cultural ecofeminism argue that, regardless of the symbolic power of the women and nature connection, it may have undesired implications for the feminine identity.

Stearney (1994) argues that the archetype of motherhood used by ecofeminism reinforces the image of women as essentially linked to a reproductive role, which obscures the access of women to other types of identities.

Biehl (1991) points out that the strategy of recovering deities related to motherhood and nature might not necessarily improve the status of women in society. If we consider religions and cultures strongly venerating female goddess, like Chinese Buddhism or the Guadalupe virgin in Mexican culture, we do not equate them with better economic and social conditions for women. Therefore, it is not the figure alone, rather the social value and autonomy recognized for women and nature that could involve ecofeminist progress.

Finally, the same author argues that the use of myths has negative consequences for the political fight of feminism, as well as environmentalism. The mythic and spiritual positions that inspire essentialist ecofeminism and other radical antimodern positions are often constructed in open opposition to rationality. Such attitudes exclude the critical thought necessary for political movements fighting for social and environmental change (Biehl, 1991).

Feminists have also been critical of the use of the image of "Mother Nature" by the ecologist movement for the promotion of environmental slogans. Roach (1991) thinks that the role of mother in the patriarchal culture has not always evoked the respect and unconditional love to which the use of that metaphor implies, and obscures the way motherhood has been used to justify women's oppression. The author indicates that mothers have to take care of our homes, feed our bodies and clean our waste, leaving us the possibility to dedicate ourselves to the responsibilities of the public domain. With some irony she evokes a kind of hypothetical relationship between Mother Nature and a pampered society: we might interpret nature as the self-sacrificing and unconditional mother that will

offer a comfortable place to live and will eliminate our waste without asking us to take responsibility for it.

However, probably the most critical aspect of the essentialist argument established by some ecofeminists to justify a women-nature connection is the reinforcement of the exclusion of women from the concept of culture that has dominated androcentric Western thought (Merchant, 1995; Stearney, 1994). Nature has served as a mirror to Western culture, identifying the characteristics that make humans unique. Civilisation is the maximum expression of humanness, while nature represents the animality to be overcome. Women, however, have represented the permanent natural side of humans.

A very influential work in this area is the article "Is Female to Male as Nature Is to Culture?" (1974), in which Sherry Ortner proposed the thesis that trans-culturally men tended to overcome their link with the inherent nature of the species, while women, because of their physiological attitudes for species reproduction, were linked to the natural world. She argued that the physiological conditions, social roles, and the physical structure implicit in the mothering role led women to hold a nature-culture intermediate position in society, which explained the secondary status of women in all cultures and societies.

I argued that the universal devaluation of women could be explained by postulating that women are seen as closer to nature than men, men being seen as more unequivocally occupying the high ground of culture. [...] The core paper was concerned with showing why women might be assumed, over and over, in the most diverse sorts of worldviews and in cultures of every degree of complexity, to be closer to nature than men. Woman's physiology, more involved more of the time with "species life"; woman's subordination with the structurally subordinated domestic context, charged with the crucial function of transforming animal-like infants into cultured beings; "woman's psyche" appropriately moulded to mothering functions by her own socialization and tending toward greater personalism and less mediated modes of relating—all these factors make woman appear to be rooted more directly and deeply in nature. At the same time, however, her "membership and fully necessary participation in culture are recognized by culture and cannot be denied." Thus she is seen to occupy an intermediate position between culture and nature. (Ortner, 2005: 249-250)

Already in the 1974 paper, Ortner insisted on the idea that the women-nature/menculture relation was not an ontological fact, but a cultural product. The reason to

explain the trans-cultural character of that idea was the "highly persuasive nature of the logic" behind it (Ortner, 2005: 243).

In order to cope with diverse criticisms that the paper had raised throughout the years, in 1996 Ortner reviewed the universalistic ambition of the thesis. Her ethnographic research and contributions from other anthropologists led her to find cultures in which egalitarianism was the rule, despite the presence of specific elements of male prestige and authority. She still insisted on the trans-cultural character of two structures: (1) how we interpret the confrontation of humanity with nature; and (2) how we relate that structural question with gender differences, as the "body" is a fundamental border between nature and culture. Ortner (1996) sees the variations in the nature/culture-female/male relation, from one society to another, as consisting in the *cultural and political* meaning given to the relation between these two structures.

In the context of ecofeminism, the cultural branch has assumed that women's proximity to nature is not a cultural construction but an objective fact. Essentialist ecofeminists accept that bodyness, reproduction and emotion are female characteristics, and uncritically accept abstract thinking, culture and reason as male. In this way they appropriate androcentric dualisms that have established and legitimated an order of domination. Ecofeminists change the balance and point to the virtues of the dualistic side represented with women and nature, but they reinforce the alienating patrons that represent such dualisms.

The essentialist thinking on motherhood espoused by cultural ecofeminists has been assessed very critically by the socio-political branch of ecofeminism. However, the relevance of the female caring experience has been also considered as a coherent explanation, filtered by a constructivist interpretation.

Some constructive ecofeminists consider caring to be a culturally biased but specific role that is fundamental in most women's lives, and which necessarily influences women's perceptions and concerns for environmental problems (Salleh, 1993). Such a specific perspective is seen as the source of inspiration for alternative human ethics that respects the environment.

In the following chapter, we shall focus on the potentialities of a feminist reading of environmental ethics.

SUMMARY OF CHAPTER 7

Chapter 7 began with the theoretical discussion derived from the empirical findings presented in part II, showing the complex expression of the theoretical basis set out in chapters 1 and 2. Conclusions from chapters 3 and 4 pointed to caring as a fundamental explanation of the values that influence female concerns for, perspectives on and interests in the environment, and chapter 7 explored the potential and risks of this idea.

In a symbolic and normative sense, female caring has been very closely linked to motherhood, considered as an attitude and form of behaviour expected of women and also essential to femininity. The theoretical discussion presented in this chapter illustrated that motherhood is the social elaboration of a biological process that presents historical variations.

The ideals of a mother's unconditional love and sacrifice were established in the Enlightenment century. Motherhood became the completion of the female identity. Moreover, during the eighteenth century moral discourses appealing to woman to take responsibility for children were instrumental politically because population was seen as strategic to increase the wealth of the state. During the nineteenth and twentieth centuries those moral discourses continued to proliferate, closely linked to demographic policies.

I also discussed scientific discourses that pointed to motherhood as a natural female instinct. In this sense, as was already discussed in chapter 1, we must consider the strategic function of discourses based on "nature" as mechanisms to sanction what is "real", which veils ideological projections and biases. Feminist perspectives demonstrate ideological biases in studies that compare human and animal behaviour in order to explain female and male human behavioural patterns. Often biological data is constrained to fit into preconceptions of men and women and the sexual division of labour. I also mentioned authors that affirm that biological determinants vary due to the influence of the context, which show the complexity of relations between biological and environmental influences, making it impossible to view motherhood as an exclusively biological process.

Chapter 7 also explored the opportunities and challenges of different feminist discourses on motherhood in relation to female identities and

gender power relations.

Equality feminism claims motherhood subjugates women and by promoting women's equality with men in the workplace and politics, implicitly contributes to disempowering and delegitimizing motherhood as a social role.

In contrast, feminism of sexual difference sees maternity as the clue to exploring the original female identity, not alienated by patriarchy. I have already mentioned, however, the problems associated with essentialist positions that overlook the diversity of women's experiences. As discussed in the chapter, we should think about a notion of female identities that is neither based on essentialism nor lost in postmodern relativism. This notion should recognize the diversity of women's identity, but also the political concern for fighting gender inequities.

Mystical images about maternity—like Mother Earth—evoked by cultural ecofeminism have also been criticized. In particular, I pointed out that they do not necessarily involve an improvement in the situation of women or nature. In addition, the mystical attitude of cultural ecofeminism is often presented in opposition to a supposed Western male rationality. Again, it is not a good strategy to separate women's concerns for the environment from the idea of "rationality", as a critical and coherent discourse is necessary to introduce a gender perspective in environmental management. In this perspective women are also radically separated from culture, which reinforces the men-reason-culture / women-body-nature dualism.

However, I pointed to the strategic relevance of emphasizing the social value of motherhood, as feminism of sexual difference and cultural ecofeminism do, although disconnected from essentialist readings. In this sense, the finding that women's concerns for the environment are biased by caring values indicates the need to explore the interest of the values that feminism of sexual difference and cultural ecofeminism celebrate in motherhood, but do so from a political and critical position.

Once we recognize that caring is culturally biased but plays a specific and fundamental role in most women's lives, which necessarily influences women's perceptions and concerns for environmental problems, we are

able to explore contributions to environmental management.

In conclusion, this chapter contributed to establishing two main lines of reflection:

- First, I explored the social and cultural weight of motherhood, which indicates that the relevance of a "carer stand" in women's concerns for the environment is not inherent to a supposed female essence, but a gendered pattern.
- Second, I presented the ideological biases that are at the basis of the subjugated position of motherhood. Once this is achieved, we are able to explore the consequences for gender power imbalances in environmental participation processes. And the other way round, from that reflection I derived argument to consider a "carer standpoint" as a strategy for making androcentric assumptions in environmental governance visible, and for introducing a gender approach to the practice of environment related participatory processes.

In the following chapter I will focus on exploring the carer stand as a basis for moral thinking and a source for the production of knowledge. In this way I will establish the legitimacy of the carer stand to develop a specific approach to environmental ethics, as well as a valid approach to the production of knowledge.

Chapter 8. The moral and cognitive legitimacy of a "carer stand"

8.1. From "women's morality" to feminist ethics

During the 1980s, Carol Gilligan's book *In A Different Voice* (1982) provoked a great deal of discussion in moral theory and feminism, to the point that her contribution has been compared to the breaking of a scientific paradigm according to Kuhn's theory (Benhabib, 2006). Her work is also at the basis of the most relevant feminist contributions to ethics.

Gilligan's original interest was scientific and empirical: "The different voice I describe is characterised not by gender but theme. Its association with women is an empirical observation; and it is primarily through women's voices that I trace its development." She does not attempt to speak about sexual differences or transcultural regularities of the moral stand of women:

The contrast between male and female voices are presented here to highlight a distinction between two modes of thought and to focus a problem of interpretation, rather than to represent a generalisation of either sex. [...] No claims are made about the origins of the differences observed or their distribution in a wider population, across cultures or through time.

She explicitly states that the different voices she distinguishes are biased by the social and cultural context in which they are constructed: "Clearly, these differences arise in a social context where factors of social status and power combine with reproductive biology to shape the experience of males and females and the relations between the sexes" (Gilligan, 1998/1982: 2).

It is worth remarking that Gilligan's empirical interest was not formulated in the theoretical framework of gender studies, although she made use of feminist theory to reflect on her findings. Gilligan aimed at reviewing Kohlberg's generally accepted theory about the development of moral judgement after observing a mismatch between Kohlberg's theory and empirical data. Gilligan noticed that the mainstream model did not allow for the interpretation of data from women, whose moral development was usually measured as inferior:

The disparity between women's experience and the representation of human development, noted throughout the psychological literature, has generally been seen to signify a problem in women's development. Instead, the failure of women to fit existing models of human growth may point to a problem in the representation, a limitation in the conception of human condition, an omission of certain truths about life. (Gilligan, 1982: 1-2)

Gilligan' argument about the specificity of women's voices in morality is well represented in a case study of an eleven-year-old schoolboy and schoolgirl reported in her work. Jake and Amy were asked a moral dilemma in order to assess their moral development according to Kohlberg's measures: "a man called Heinz considers whether or not to steal a drug which he cannot afford to buy in order to save the life of his wife. In the standard format of Kohlberg's interviewing procedure, the description of the dilemma itself—Heinz's predicament, the wife's disease, the druggist's refusal to lower his price—is followed by the question, 'Should Heinz steal the drug?'" (Gilligan, 1998: 25-26).

Jake, the little boy, soon resolves the dilemma by acquainting life with money: the application of an abstract sense of social justice leads him to answer that Heinz should steal the drug. Moreover, he also considered the possibility that if Heinz were caught by the police and were taken to court, the judge would also consider stealing to be the right think to do in Heinz's situation. Hence, according to Gilligan, Jake also assumed the law made mistakes, and that a societal consensus around moral judgements exist.

By contrast, Amy, the little girl, gave a radically different solution to Heinz's dilemma. Heinz should not steal the drug, yet neither should his wife die. For Amy, if Heinz were to steal the drug and go to prison, his wife would be alone when she would need the drug again. So the solution she gave was very different from Jake's: "just to talk it out and find a way to get the money".

Gilligan's observations on the different ways these two children faced Heinz's moral problem illustrate the two fundamental conclusions of her work. Firstly, that Kohlsberg's measures of moral maturity—which would identify Amy as morally immature because of "an image of development stunted by a failure of logic, an inability to think for herself" (Gilligan, 1982: 25-8)—implicitly identified an androcentric moral scale of measurement; and secondly, that women's morality followed different logical paths:

In this way, he [Jake] abstracts the moral problem from the interpersonal situation, finding in the logic of fairness an objective way to decide who will win the dispute. But this hierarchical order with its imagery of winning and losing and the potential for violence which it contains, gives way in Amy's construction of the dilemma to a network of connection, as a web of relationships that is sustained by a process of communication. With this shift, the moral problem changes from one of unfair domination, the imposition of property over life, to one of unnecessary exclusion, the failure of the druggist to respond to the wife. (Gilligan, 1982: 32)

Gilligan's empirical findings, supported in plenty of data collected over a decade, led her to conclude men and women's moral reasoning tend to follow different logic, which are structured along the following dichotomies:

Table 8.1. Basic moral differences between genders according to Gilligan's work

Self defined through separation / Self defined through connection Autonomy / Continuity of relations Abstract (moral responsibility) / Concrete (moral responsibility) Mathematical equation / Emphasis on relations Categorical / Contextual

Limit action according to community rules / Act according to what others count on you for Source: author's elaboration from Gilligan (1982)

Gilligan concludes that women's morality is strongly embedded in a web of relations. Self-identity is structured through establishing connection with others, instead of by separating from the world. Moral responsibility is concrete and contextual; it may vary according to the subjects involved and the characteristics of the situations. Observations for males, instead, indicate the tendency is towards abstract thinking and impersonalizing the subjects involved in the dilemma. Gilligan also points out that, just as the case of Amy shows, women solve moral dilemmas by putting social relations first. To act in a moral situation depends on how the other would benefit from your actions. Men solve moral dilemmas using mathematical logic, in which the rules limit or justify the kind of action that should be taken (also whether the rules should be transgressed or changed).

The "different voice" Gilligan's recognizes in moral thinking is the result of the gendered contexts in which women and men develop socially. For instance, in her

book she discusses psychological theories on games during childhood, and the implicit consequences they have for women's and men's attitudes towards life.

In previous parts of the present study I have already argued for the need to recognize diversity and multiplicity when speaking about gender. I have discussed how women cannot be considered as one group, and we have to be aware of cultural, social and economic differences among them. Gilligan's proposal has been criticized as lacking historicity (Kerber), but Gilligan focused on interpreting cognitive patrons, and she was not concerned with explaining the historical construction of gender (Benhabib, 2006). On the other hand, Gilligan has been also opposed for giving a positive scientific basis to a female stereotype of "good girl" constructed by a dominant heterosexual hegemonic power (MacKinnon). However, Benhabib insists on the fallacy of an ideal society concomitant to that critique, in which the elimination of the "heterosexual domination" leads to the disintegration of gender.

Yet, although Gilligan insists on the psychological development of morality and not on inherent and biological characteristics of a female caring moral stand, certainly her proposal could easily lead to an essentialist image of women as victims, limiting our comprehension about the complexity of moral stands women may show when faced with an ethical problem. Nevertheless, my interest in Gilligan's observations is not to radicalize a female sense of caring, nor to claim that moral stand as superior to other forms of morality. I consider her reflections on different moral stands highlight the androcentric biases the universal and impersonal modern moral stand implicitly contains. In this way, "difference" is the instrument through which hegemonic discourses are shown as partial, and through it a plurality of perspectives emerge as potentially valid.

Practically, Gilligan's reflections allow us to bring new reflections to some of the gendered tendencies pointed out during the empirical findings in part II. How could we interpret the two types of moral framework established by the author if we apply them to gendered tendencies in environmental concerns? How could the recognition of these moral stands shape our understanding of diverse perspectives in the environmental debate?

In chapter 3 I explored discrepancies between women and men's opinions regarding science, technology and the environment. I set out gendered tendencies regarding concerns, prioritization and framing of risks. Three salient hypotheses have significant link with Gilligan's observations: power inequalities, gendered values and the weight of the caring role.

However, the relevance of applying Gilligan's observations is not only to notice that women may show different levels of environmental concerns or diverse types of concerns; the rational thinking behind the moral stand the psychologist recognizes as gender-biased also leads to alternative forms of solving problems.

This argument is well illustrated by an empirical case I already set out in chapter 3. Like Gilligan, Boetzkes (1998) pointed out that women have shown alternative reasoning, in this case when confronted with a problem of having a child with genetic anomalies. Women did not base their decisions on probability, but on ambivalent thinking (I either may have a child with a genetic anomaly or not), which led them to explore the consequences of that situation in order to take a decision. Therefore, decisions are not based on probability but on the consequences problems may bring. That different moral stand has fundamental consequences when faced with complex environmental problems charged with scientific uncertainty.

If we transfer that reasoning logic to people's concerns about a hypothetical environmental risk, Gilligan's description of a female gendered moral stand would not be as concerned with the probability that the risk occurs as with the impact it could generate if it happened. That argument appears as an alternative explanation to the observations about higher environmental risk concerns women show in statistics. Moreover, there are other consequences of that type of reasoning. In the case of a public discussion on an environmental risk in which definitive scientific proof does not exist, a person aligned to such a moral stand would ask for prevention (as happened in case 1), instead of not acting because scientific evidence is not conclusive. That is, indeed, the thinking underlying the precautionary principle.¹

In addition, Gilligan's observations about the "concrete other" implicit in female moral thinking are also meaningful for interpreting the results concluded in chapter 4 pointing to a gendered specificity in women's concerns for health and quality of life. The web of relations that Gilligan says is at the centre of a female conception of moral responsibility, and the concrete and contextual dimensions they use to think of when reflecting on a moral problem, carefully explains the

¹ The Precautionary Principle states that "when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect are not fully established scientifically". It prescribes four norms: "1. Taking preventive action in the face of uncertainty. 2. Shifting burdens onto proponents of potentially harmful activities. 3. Exploring a wide range of alternatives to possibly harmful actions. 4. Increasing public participation in decision making." (Tickner quoted in Merchant, 2006)

"concrete" dimension women often project when referring to their sense of place and to the environment as a value for their families' future generations, as reported in chapter 4.

Gilligan's arguments also suggest an alternative view to the results introduced in graphic 4.1 on general environmental concerns. Male activists pointed in higher numbers to climate change, biodiversity and the contamination of air and water, while women were more numerous among the members of the citizens committees that expressed concern for the destruction of nature and for the expansion of urban areas in detriment to rural ones. The different concerns prioritized by men and women are not only more scientific versus more lay-based terminology, as I already discussed. The former arguments take the environment as an abstract and measurable entity. The ethical position of a subject towards that entity is highly objective, i.e. impersonal. The victims of the consequences of the environmental impacts caused by those problems, whether states, population or citizens, are also universal categories. As a consequence, certain rules—objective, impersonal, abstract—are given priority.

Instead, arguments prioritized by females point to the consequences of environmental problems, and the effects on a local physical reality: nature and rural areas. Using Gilligan's proposal, nature and the environment are part of the web of relations in women's lives. From that perspective, values derived from subjective experiences, concrete contexts and community relations are given priority.

What are the consequences of these two moral positions for ethics?

Gilligan thinks that the specific moral development shown by women is due to a caring-based approach to problems:

When one begins with the study of women and derives developmental constructs from their lives, the outline of a moral conception from that described by Freud, Piaget, or Kohlberg begins to emerge and informs a different description of development. In this conception, the moral problem arises from conflicting responsibilities rather than from competing rights and requires for its resolution a mode of thinking that is contextual and narrative rather than formal and abstract. This conception of morality as concerned with the activity of care centres moral development around the understanding of responsibility and relationships, just as the conception of morality as fairness ties moral development to the understanding of rights and rules. (Gilligan, 1982: 19)

Because Gilligan pointed to the specificity of girls and women's morality, and because she situated caring at the centre of the ethical debate, her work propelled feminists to start a critical assessment of ethics. The point was not that ethics should recognize women's specificity, but that the whole ethical tradition was androcentric (Guerra, 2001).

From this distinction Gilligan developed the idea of ethics or care and responsibility based on the attributes she had observed that are typical of the moral development of women: contextual, inter-subjective relations, focus on the "concrete other", and emphasis on empathy and sympathy. For the author that view would not substitute but complement the traditional ethical emphasis on justice:

While an ethic of justice proceeds from the premise of equality—that everyone should be treated the same—, an ethic of care rests on the premise of non-violence—that no one should be hurt. [...] This dialogue between fairness and care not only provides a better understanding of relations between the sexes but also gives rise to a more comprehensive portrayal of adult work and family relationships. (Gilligan, 1982: 174)

Interestingly, Benhabib (2006/1992) shares with Gilligan the concern for giving an ethical status to a "concrete other" (in contrast to the impersonality implicit in the consideration of subjects by traditional approaches to moral problems). Yet Benhabib insists the moral recognition of a "concrete other" is not a substitution for universalism. The author warns that caring ethics could be counterproductive if it is not able to recognize the universal principle of justice, because the naïve emphasis on a "concrete other" could justify an unconditional defence of group interests. Therefore the author sees the solutions as a combination of universalism and "the concrete other", in what she calls "interactive universalism":

El universalismo sustitucionalista desconoce al otro concreto detrás de una fachada de identidad definicional de todos como seres racionales, mientras que el universalismo interactivo reconoce que cualquier otro generalizado es también un otro concreto. (Benhabib, 2006/1992: 189)

Gilligan's ethics of care would be interpreted differently by diverse approaches in feminism. Sexual difference views would be interested in exploring women as natural carers, and would speak about a specific female ethic. Equality-based interpretations would claim ethics of care are socially relevant, aiming at recognizing but also transcending the traditional link with a female gender (Guerra, 2001). That same duality has affected the debate on ecofeminist ethics.

8.2. Ecofeminist ethics

Ecofeminist ethical proposals have a double goal: firstly, they aim to demonstrate ethno-androcentric biases in traditional ethics; secondly, they aim to create an ethics based on feminist principles.

Fundamental critiques of environmental ethics connect with a general feminist discussion about the limits of a universal ethical thought. The basic consideration is that the aspiration of reaching an ahistorical and totalizing ethic is unviable, and moreover it obscures the diversity of human, social and cultural experiences (Warren, 1998). After that common argument, authors walk diverse paths of reflection.

According to Plumwood (1991), environmental ethics have accepted uncritically the ethno-androcentric rationalism that justified the domination of women and nature, inherent in Western thinking and science. Making use of the constructivist feminist critique of Western dualisms, she criticizes Paul Taylor's idea that nature has an intrinsic value and is part of the human essence, because it reproduces the emotion (female) / reason (male) dualism. Taylor's proposal (Taylor, 1986) condemns emotion because is local, contextual and personal, and responds to individual interests. In opposition to that subjective feeling, he emphasizes that respect for nature must be universal and disinterested, and hence should be based on reason. At the same time, an image of progression from the merely particular (primitive/feminine) to an abstract morality (civilized/masculine) is evoked. In the words of Plumwood:

The final step in the process of increasing moral abstraction and generalization, part of the move away from the merely particular—my self, my family, my tribe—the discarding of the merely personal and, by implication, the merely selfish. This is viewed as moral progress, increasingly civilized as it moves further away from the primitive selfishness. (Plumwood, 1991: 6)

With a very similar orientation, Salleh develops a feminist critique to the influential deep ecology proposal of Arne Naess. She stresses deep ecology has systematically ignored the situation of the oppression of women and their potential role as agents of social change, while abstract ethics have been given priority. As an alternative, the author sets out the importance of the female experience as a source for reformulating the relation between society and the environment: "if women's lived experience were recognized as meaningful and were legitimated in our culture, it could provide an immediate 'living' social basis for the alternative consciousness which the deep ecologist is trying to formulate and introduce as an abstract ethical construct" (Salleh, 1984: 340).

Like Salleh, other authors go further from a critique of environmental ethics and propose an ecofeminist alternative. However, both essentialist and constructive productions divide the production of ecofeminists in this field.

All proposals have in common a series of basic principles: they deny the existence of an abstract human essence transcending gender, race and class; they fight against the oppression of women and nature; they negate totalizing principles and values and inspire in feminine-based values and experiences; and they conceive ethics as a means for political action (Warren, 1998). However, as I mentioned earlier, they differ in interpreting the feminist values that inspire ethics as essential to women or constructed by culture. The different approach of these two interpretations has radical consequences in practice.

On the side of cultural ecofeminism, Starhawk proposes ethics based on the three concepts introduced above: immanency, interconnectivity and community. The author argues that these three principles involve ethical thought that guides us towards political action:

When we understand that everything is interconnected, we are called to a politics and set of actions that come from compassion, from the ability to literally feel with all living beings on the Earth. That feeling is the ground upon we can build community and come together and take action and find direction. Earth-based spirituality calls us to live with integrity. Once we know we're all part of this living body, this world becomes the terrain where we live out spiritual growth and development. It doesn't happen anywhere else, and the way we do it is by enacting what we believe, by taking responsibility for what we do. (Starhawk, 1993: 74)

In the side of constructive ecofeminism, Warren (1999; 2000) makes the *care* sensitive ethics proposal based on three ethical principles: situated universalism, the ability to care and care practices.

According to Warren, we should choose between ethical principles such as self-interest, utility, duty and rights depending on the situation, with the objective of caring for, maintaining and enhancing the health and well-being of others, including nature, or at least not causing them unnecessary harm. In this way, the author sees her contribution as not competing or substituting other environmental ethical perspectives, but complementing them. At the same time, ethical principles are seen as situated universalisms: she rejects the idea of ahistorical, transcendent and absolute universals, and proposes that each ethical principal should be applied depending on the context and problem we are dealing with. Warren considers the ability to care as intrinsic to human intelligence (and therefore belonging to both men and women), and is located in the human brain together with the capacity for reasoning. Finally, she thinks that the practice of care constitutes the guide for the application of the best ethical principle (Warren, 1999; 2000).

Halfway between cultural and constructivist proposals, Salleh (1984) stresses that the experience of women's sexually determined body—for instance, the fertile cycle of women or the symbiosis of pregnancy—influences women's sense of continuity with nature. However, for the author, that experience stems from a materialist position:

Las feministas no creen que 'la biología sea el destino'. Al mismo tiempo piensan que las personas de sexo femenino, y denigradas por esto, pueden decidir reafirmar esta 'diferencia' como una manera de fortalecerse: por ejemplo, los rituales basados en la celebración del cuerpo de algunos grupos ecofeministas. Estas prácticas, que son en sí mismas creativas, ayudan a destruir las ideologías patriarcales de 'la feminidad'. Es igualmente importante el trabajo de otras ecofeministas que analizan las consecuencias sociales, políticas y económicas del sexo biológico. Esto no significa 'esencializar' la feminidad, sino entender las condiciones materiales de la experiencia vivida de las mujeres. Las mujeres que crían niños en las barriadas de las ciudades de Brasil saben bien que éste es un hecho económico. Pero los políticos no pueden despreciar lo 'biológico', pues ese desprecio es precisamente lo que lleva al capitalismo patriarcal de Occidente a un callejón sin salida ecológica haciendo necesaria una teoría ecosocialista. (Salleh, 1992: 232-233)

Other authors, however, have also been critical of ecofeminist ethics of care. Stearney (1994) considers that they reduce the political, economic and social complexity of environmental problems to the value of caring for others. According to the author, that obscures complex tensions and negotiations between politicians, diverse stakeholder and citizens that take place in real life situations.

However, one must acknowledge that the ecofeminist ethical proposal of caring should be considered as an important contribution to the environmental debate and, in practice, may lead to recognize the "caring" argument as one more among the plurality of multiple interests and values that may be involved in environmental decision-making. It is a relevant path to explore the existence of alternative perspectives to the traditional political, scientific-technical, economic and ecological views dominating the discussion.

As an alternative to caring ethics, Merchant (1995) has set out the project of partnership ethics, which aims at overcoming the gender mark of ecofeminist proposals.

The concept of partnership ethics refers to a sense of connection between people, in the family and community, between men and women, between organisms and non-organic entities, and between places at different scales and in diverse historical places. The ethical proposal of Merchant gives priority to such relations, and proposes four basic principles: (1) equity between humans and non-humans; (2) considering humans and nature to be morally relevant; (3) respect for cultural and natural diversity; (4) and including women, ethnic minorities and nature in the same ethical code.

With this proposal Merchant re-values the traditional feminine role of caring for relations; nevertheless she refuses to consider this role as a natural characteristic of women. The author sees as strategic the use of the concept of "partnership" that enables an avoidance of a feminization of the caring principle.

Finally, partnership ethics recognizes complex economic, social and political processes playing their part in environmental conflicts, as well as diverse interests involved in the decision-making process. According to Merchant, we must recognize the complexity and unforeseen consequences of environmental problems, as well as the limits of science and technology for resolving the environmental crisis. Science and technology cannot fully liberate us from the uncertainty of the impact of human society on nature and the consequences they have. From this perspective, partnership ethics considers nature as an interested agent in the process of decision-making.

Merchant asserts that the ethical proposal of partnership is materialized in the ethical code of the Women's Action Agenda elaborated in Miami, Florida, USA in 1991, discussed in chapter 2. The specific contribution of that document is the capacity to decentre the ethno-androcentric view and to integrate a critical gender perspective in the interpretation of global environmental problems:

The vision of environmental problems set out in Women's Action Agenda 21 descentres the order of the hegemonic political map by establishing a connection between causes and effects, constructing a global interpretation of social, economic and ecological issues and the linkage of impacts at different scales from the global to the personal. It presents a critical, cross-cutting analysis, which introduces a gender dimension to problems that are traditionally mapped out as independent sectors. (Bru-Bistuer and Agüera, 2004: 217-218)

In conclusion, we may consider the potential importance of ecofeminist explorations to care ethics, which can be systematized in a series of learning that is applicable to governance processes:

- 1. The consideration that a gender approach introduces "equality" and "recognition of difference" as a fundamental aspects of the environmental debate, as well as the need to establish links between economic, social and political processes in the understanding of environmental problems.
- 2. The value of a "carer stand", embodied in women's experiences, as a potential ethical contribution to the environmental debate.
- 3. The specificity of the view developed from such a care stand that places emphasis on relations, a "concrete other" and the context of problems.
- 4. The particular way of framing problems and prioritizing solutions that derives from a "care stand"; in concrete, placing weight on a web of social relations, competing responsibilities, an emphasis on the concrete and contextual dimension of problems (in contrast to rational logic, competing rights, and an abstract, objective and universal idea of justice).

5. The need to recognize such a position, as not substituting but complementing or confronting a rich diversity of interests and values in environmental decision-making.

If feminist philosophers have discussed about ethics in relation to ecofeminist ethics, they have also explored the consequences of making visible the gender biases implicit in the ideal of a cognitive subject in modern Western epistemology. Such a critical approach to the scientific production of knowledge has lead to epistemological reflections about the potential of a "female/feminist" knower and the consequences it may have for the practice and production of science. Regardless of the fact that the debate has easily been trapped in theoretical elaborations often far removed from the everyday practice of science, the epistemological reflections of "science feminists" gives important insights: firstly regarding the influence of gender in the production of knowledge; secondly in relation to gendered power positions concomitant to the production of knowledge (among disciplines, and between scientific and non-scientific knowledge); and thirdly in relation to the values and experiences of "a carer stand" as a legitimate cognitive position.

In the following sections I will set out the basic elements of the feminist critique of science, before moving on to the feminist answers to the consequence of demonstrating the relevance of gender for our conception of science, the scientific method and the practice of science. In this respect, we will depart from the softer version of feminist empiricists. Later, we will focus on the epistemological contributions of "standpoint theory" and "situated knowledge", in which the issue of objectivity and the legitimacy of a female/feminist knower are critically examined.

8.3. The androcentric footprint in science

Although feminist studies of science are contemporaneous to other sociological and philosophical studies of science, which appeared or gained intensity after the second half of the seventies, feminists scholars, mainly in the US and with less intensity in Europe, walked their own path in deconstructing science, as they

² By "science feminists" I refer to a number of authors, most of them coming from the natural and physical sciences, that have been concerned with assessing science and the modern scientific method from a feminist point of view. Their main contribution is to point to the ethno-androcentric bias in our conceptions of knowledge, the knowing subject, and practices of inquiry and justification.

focused on identifying sexist and androcentric biases in scientific knowledge, and in methodological and epistemological foundations.

The feminist health movement and body politics of the seventies aimed at recovering control, experiences and knowledge of women's own bodies, in opposition to the mechanization of female physiology by biomedical sciences. New reproductive technologies were also included in the debate. However, Rose (1994) argues that science itself was not a focus of the critique as it mainly focused on the consequences of technological advances and their applications for women's power over their own bodies, and not on the modern scientific project, science institutions or even scientific activity itself. Yet the concern extended towards the use of science for sexist, racist, homophobic and classist projects, and for most feminists that was a bad use of science and technology. In this sense, Harding (1996) states that some feminists also questioned whether science and technology could be so radically separated from values, or if values were concomitant to the scientific activity itself, which would be fundamental to the critique developed by science feminists.

According to Rose (1994), it was at the end of the seventies and during the eighties when the interest in exploring the consequences of a conspicuous male predominance in the history of science gained attention among feminists in North America. Initially, critical works developed in two clear directions. On the one hand, some works were concerned with gender imbalances in the scientific institutional domain. Male predominance in scientific power structures and low presence of women in specific academic fields were the main issues. On the other hand, some feminist publications focused on demonstrating androcentric biases in the production of scientific knowledge itself. That second-type orientation evolved from pointing out gender distortions in scientific theories, and raising epistemological questions to the modern scientific method. As a consequence, that critical view led some feminists to propose a feminist epistemology.

Since Western feminist scholars started enquiring into science, sexist and androcentric biases in all branches of scientific knowledge production have been demonstrated. Social sciences, followed by biological sciences, have been the subject of feminist studies of science. The assessment of sexist biases in the tradition of biology has been motivated by the fact that biological determinism is a traditional argument for stating the secondary status of women in society as natural (Rose, 1994). Similarly, critical readings of neurosciences, as they were considered during the nineteenth century, and as some branches have evolved until today, have pointed to ideological biases in the project of comparing male and female

brain natures, as they support the patriarchal idea of a supposed female inferiority for certain types of knowledge. Nowadays, while biological differences between male and female brains have not been definitively admitted or negated, the influence of the context appears as a fundamental aspect in moulding human abilities from birth (Vidal, 2009).

Androcentric biases in science include key methodological decisions. On the one hand, feminists have pointed to the selection of a research object, and the setting up of the boundaries of the study as a socially and politically relevant choice. The gender analysis of medical sciences revealed that they focused on a neutral body that implicitly referred to a male patron, and as a consequence female pathologies—usually linked to emotion and reproduction—were assumed as particularities or anomalies, instead of thinking globally on the specificity of a female subject and body. On the other hand, as Harding (2004) states, feminists argued that science had been directed towards problems for white male interests, and that that male-laden focus of research had impregnated all scientific activity.

Departing from questions on bias in scientific interpretation and methodological decisions, the feminist critique of science came to engage in in-depth reflections about androcentric biases embodied in modern science itself. In this way, together with other critical social and cultural studies, feminism has contributed to the deconstruction of scientific knowledge, a project that started, at least, as a consequence of Kuhn's work. However, while most critics have centred on the social, cultural, ideological and political content of science, feminists have made visible gendered values embedded in the power processes determining mainstream scientific paradigms. They have also highlighted how the gender identity of scientists is fundamental in biasing the production of knowledge itself. In this way, the feminist critical approach has been crucial to pointing to the scale of the subject (the scientific stereotype and real scientists) as the source for science bias (Fox Keller, 1992).

A feminist political outlook on the history of modern science since the scientific revolution reveals the privileged position of male white elites whose worldview biased science and technology, with crucial consequences for nature and society's imagery of the female essential (Merchant, 1995).

Natural philosophers and mathematicians in the sixteenth and seventeenth centuries materialized, through the metaphorical rhetoric that fostered the development of modern science, a new relation between humans and nature that sanctioned the exploitation of natural resources. The role of gender in that rhetoric is determinant, as demonstrated through the study of influential writings of the

fathers of modern science, Boyle and Newton (Fox Keller, 1992; Potter, 2001), and Bacon and Descartes (Merchant, 1995). That new metaphorical image allowed "men" to explore, penetrate, conquer and subdue nature, and in that sense, they materialized through their influential writings a worldview that permitted the development of an incipient capitalism in early modern Europe (Merchant, 1995).

As I have already introduced in chapter 1, throughout pre-modern times nature had been metaphorically compared to a nurturing mother and to a wild being. But the old worldview was becoming incompatible with the prevailing socioeconomic tendencies. The mechanistic and rationalist imagination that gained intensity in modern times, propelled along by the scientific revolution, undermined the idea of nature as mother. The second image of nature as a wild female fostered the idea of gaining control over the environment, leading to social security and development, underpinning the direction science and technology would take (Merchant, 1995).

The metaphor of unveiling the "secrets of nature" was at the core of the scientific imagery that prevailed in modern times, and a metaphor for the patriarchal domination of women and nature. The central metaphorical sense of "secrets of nature" included a shift of meaning of the pre-modern conjunction "women, life and nature", which came to be the niche of secrets that did not belong to God. This meant that nature could be enquired into without betraying divine laws (Fox Keller, 1992).

Figure 8.1. Illustration representing Nature unveiling "her" secrets



Source: "Nature Reveals Herself". Sculpture by Louis-Ernest Barrias (French, 1841-1905)

The relationship between God and nature was transformed through the renegotiation of a set of cultural entities—"God and father", "nature and mother" and "man and brother"—, which were fundamental to the social legitimacy of the new metaphorical order. Those pairs of renegotiated entities crafted the worldview that would give men permission to penetrate and exploit nature, as Fox Keller's (1992) accurate study of Boyle's philosophical texts demonstrates. According to Fox Keller's study, nature, despoiled from her mothering role, appeared to have no influence on men, who were beyond her boundaries. Men, privileged sons of God, should reveal nature's secrets, emulate God's work and become closer to his image. Knowledge acquired by enquiring nature would consolidate the brotherhood of men through their proximity to God, their Father.

In that new worldview the metaphor of nature as inanimate, and as a machine whose secrets could be revealed by reducing it to simple parts, gained prominence. Merchant (1995) states that the mechanistic worldview established the basis of the scientific method and fostered technological development.

Merchant's analysis of the work of Bacon—a lawyer who first systematized the basic rules of scientific reasoning and who played a fundamental part in spreading science in the seventeenth century—demonstrates that the interrogation of witches by the Inquisition became a metaphor for the interrogation of nature. An image of nature cross-examined in the courtroom and tortured through mechanical devices illustrated how the idea of reason triumphing over disorder was fundamental to the social power of the scientific method. New meanings of order and power substituted the old organic metaphor, and established the orientation of science and technology towards achieving control: "In the mechanical world, order was redefined to mean the predictable behaviour of each part within a rationally determined system of laws, while power derived from active and immediate intervention in a secularized world. Order and power together constituted control" (Merchant, 1995: 85).

8.4. Feminist empiricism

In Harding's work "Whose Science? Whose Knowledge?" (1991), the author describes the alternative reflection paths followed by feminists after they had demonstrated the androcentric content inherent in diverse scientific disciplines. Academics that have been known as "feminist empiricists" saw androcentric biases as a symptom of "bad" science. Their epistemological position stayed rooted in the modern ideal of searching for universal, neutral, objective knowledge. According

to Harding (1991), for those authors the feminist contribution to science was to clean bad knowledge for the evolution of science for the benefit of scientific progress and reaching the truth.

In more practical terms, an important number of feminist empiricists (grounded in egalitarian feminism) would oppose the idea that women's access to the maledominated institutions of science is done on the basis of recognizing female specificity (that, as we are going to see later, has been a fundamental exploration of standpoint theory). On the contrary, their objective is for female scientists to become equal to male scientists in everything: not only academic positions and salaries, but also disciplines and research fields should be genderless. Thus gender scientists endeavour to overcome any obstacle in the way of making science indifferent to gender.

Another quite different path was the one walked by authors who considered that the male predominance in the history of science had had even more consequences than leaving sexist and gendered distortions in knowledge. The ethno-androcentric footprint in science was conceived as a way of relating with nature and a specific approach to the production of knowledge, which had assumed the hegemonic white male patron as a frame of reference, which has been privileged as the unique method for answering human questions and fulfilling society's expectations.

The strong legitimacy of science is rooted in the strong antagonism between knowledge and power, with a historical origin that goes back to Ancient Greece (Foucault, 1999). That apparent separation of science from power, asserted in modern times through scientific fundaments such as objectivity, has been crucial for the honesty and progress of knowledge. Yet it also prevents science from being subject to social criticism obscuring how it is shaped by dominant views in society.

However, feminists have challenged the myth of a neutral science. They have demonstrated the gender embeddedness of the two big traditions organizing the scientific world. On the one hand, physical sciences and technological studies, which best embody the principles of the modern method. On the other hand, "soft" sciences—humanities, social sciences and, to a large extend, life sciences—more often associated with female stereotypes. As Schiebinger puts it:

We are told repeatedly that the physical sciences are "hard" and that the life sciences, like the humanities and social sciences, are "soft". It is possible to distinguish at least four meanings of the supposed hardness of physics. First and foremost, the physical sciences are considered <u>epistemologically</u> hard. As disciplines, the physical sciences

are held to be tough and analytical, yielding demonstrable answers grounded in fact, while the soft sciences and the humanities are characterised as having considerable breath, permeable boundaries, and open-ended epistemological structure. Second, physics and the physical sciences are said to be ontologically hard. They study "hard", inanimate things—matter in motion—while the life sciences and humanities study "soft", animate organisms—plants, animals, humans and their behaviours. Third, physics, chemistry and the other physical sciences are thought to be methodologically "hard" because they are difficult, requiring a high degree of abstract thinking, strong analytical skills, hard work, and long hours. Finally, the physical sciences are said to be emotionally tough. In their ethos and telos, they are thought to be "dispassionate", distant, abstract, and quantitative, while the soft sciences are considered "compassionate" and qualitative, perhaps introspective, and closer to everyday concerns. (Schiebinger, 1997: 206; emphasis in the original)

That gender bias is more than a distribution of gendered values in knowledge; it also presupposes a specific power position within knowledge production. Contrary to the strong social legitimacy of science, supported by its success, but also by its association to male values, "soft" sciences, social sciences and humanities, have traditionally encountered legitimacy problems. They have therefore evolved both by adapting to (e.g. positivistic currents) or contesting (e.g. postmodern trends) the "hard" scientific model. In this sense, we should clarify in Schiebinger's words that life sciences engage in some of the female stereotypes—namely, the study of animate beings and the recognition of "passion" in the scientific activities. But they assume epistemologically and methodologically modern scientific principles, for which they share with "hard" sciences their analytical and quantitative approach, as well as their prestige based on the need for long hours and hard work, needing abstract and objective thinking, and strong social legitimacy.

The historical association of objectivity with masculinity is an aspect that has particularly concerned science feminists, as it is in fundamental contradiction to the principle itself, at the same time putting rigid limits to the cognitive process. As Fox Keller puts it, the rule of impersonality that embodies objectivity is not only impossible, but also obscures its profoundly subjective content. Objectivity represents the myth of an androcentric patron that attempts to exclude desires and emotions, although they are implicit in any approach to knowledge:

Lo que constituye la especial arrogancia, incluso la bravura, del hombre moderno, al mismo tiempo que revela su subjectividad peculiar es la inversion en

impersonalidad, la pretension de haber escapado a la influencia de los deseos, los anhelos y las creencias. (Fox Keller, 1991: 78)

Fox Keller's critique does not negate the value of objectivity itself, understood as neutrality. Rather, it points to the androcentric character of objectivism, which presupposes impersonality and traces a strong relation of domination with the "object" of study. On the one hand, Fox Keller notices that paradoxically the project of "impersonality" has very personal content, as it has represented the social values associated with a male knower. On the other hand, the specific notion of "object" constitutes a separation of that "impersonal" knower from the study, which is already an approach subordinating nature. Therefore objectivism implicitly contains a very specific modern androcentric project of control and appropriation of the natural world.

Obviously, as Evelyn Fox Keller (1992) points out, the specific contribution of feminist thinkers does not question the successes of the scientific method in describing the regularities of the natural world. However, it considers that the social and cultural norms associated with masculinity that dominate theoretical and methodological approaches that demonstrate science cannot be separated from values, and that the dominant social group in Western culture—white masculinity—has imprinted a specific mark on science.

Androcentric biases in science implicitly exclude subjects, and more significantly determine and prioritize specific perspectives on problems, knowing attitudes, scientific communication abilities and the consideration of valid explanations. That line of critical thought assumes the social constructivist idea of science as a language community. Common practices, shared conceptions of terminology and, moreover, mutual metaphors about the relation between the researcher and the object of study, determine the scientific process and its results. To put it in the words of Evelyn Fox Keller:

Sharing a language means sharing a conceptual universe. It means more than knowing the "right" names by which to call things; it means knowing the "right" syntax in which to pose claims and questions, and even more critically it means sharing a more or less agreed-upon understanding of what questions are legitimated to ask, and what can be accepted as meaningful answers. [...] To know what kind of explanations will "make sense", what can be expected to account as "accounting for", is already to be a member of a particular language community. (Fox Keller, 1992: 27-28)

For some science feminists, critical questions derive from the finding of an androcentric imprint in the scientific enterprise.

Evelyn Fox Keller (1992) is interested in exploring the consequences of demonstrating that androcentric biases have filtered gendered values in the scientific activity: what is the strategic function played by impersonalism (objectivism) as a fundamental principle of the scientific activity?

Alternatively, Sandra Harding (2004) is concerned with focusing on the feminist critique of science to construct a feminist epistemological proposal: what would science be like if it transcended the dichotomic gender division of values biasing it (objectivity/subjectivity, reason/emotion, mind/body, and so on)? Could we conceive the idea that female/feminist values would bring a different guise to science? Is it possible to think that a scientific activity that is conscious of a value (ideological) position (anti-sexist, anti-racist) would be indeed a more objective project for science?

In the following section I will focus in the epistemological proposal of standpoint theory, in which Sandra Harding is a clear reference, and will address those questions. Also, I will focus on the strategic function of objectivism to legitimize a knowing agent, as has been discussed by authors like Evelyn Fox Keller and Sandra Harding, among others.

8.5. Feminist epistemologies

Considering the path followed by some feminist science critics as described in the previous section, it is clear they could lead to some kind of epistemological proposal inspired by women and/or feminist values and experiences as alternative to what theorists recognize as an ethno-androcentric approach to knowledge

A relevant question that leads feminists authors like Rixecker (1994) to explore the place of a feminist epistemology is how traditional ways of knowing would be influenced by a female or feminist knower. "Standpoint theory" is the answer to those questions.

The interest of that epistemological exploration is that it constructs a theoretical framework that (1) proposes alternative epistemological roots to modern science and (2) sustains legitimacy of knowing positions that in traditional epistemologies would be accused of being partisan, irrational or subjective. Interestingly, subjectivity (understood in a wide sense as ideological and personal backgrounds),

which is a sign of weakness in modern science's standards of knowledge, becomes a hard component in the cognitive process in standpoint theory.

The proposal of standpoint theory is based on two radical arguments:

- a) Knowledge is never impartial and neutral (i.e. objective) but the result of a particular social, cultural and political position.
- b) A promising source of knowledge is found in the specific experience of women's lives and struggles to resist patriarchal society and/or in feminist politics.

The former argument undermines the modern notion of knowledge, in which objectivity—understood as remoteness and impartiality—is essential. However, standpoint feminists do not abandon completely the concept of objectivity, but, following arguments similar to Evelyn Fox Keller's paradoxical impersonality, they explore it in a different way.

Science feminists state that "objectivity" is masculine-based normative behaviour that creates the boundaries and hierarchical relation between (androcentric) scientific knowledge and other (devaluated) types of knowing. They have insisted that the modern ideals of value-free, impartial and dispassionate objectivity (objectivism) are impossible.

However, once objectivism is rejected, standpoint theorists insist a specific feminist objectivity is possible, which would be based on female and feminist perspectives and experiences: "[feminist objectivity consists of] limited location and situated knowledge ...building on translations and specific ways of seeing, that is, ways of life" (Haraway, 1991: 583).

It has been pointed out that standpoint theory's reconstruction of objectivity provides a unique alternative to unblocking conceptual postmodern discussions on scientific epistemology, such as Critical Social Theory (García Selgas, 2004). Certainly, although feminists engaged in standpoint theory have somehow embraced postmodern emphasis on difference and local specificity, they have consciously resisted and openly opposed postmodernist relativism (Bracke & Puig de la Bellacasa, 2004), particularly cognitive relativism, i.e. the argument that privileged perspectives in knowledge are not possible because all knowledge is partial (García Selgas, 2004).

However, before celebrating such a fundamental contribution, we should first reflect on the critical inflection that connects the argument that knowledge is always situated with the statement that female or feminist-based knowledge is more objective than (and hence preferable to) other forms. How is feminist "objectivity"

possible? Are not the words feminism and objectivity in ontological contradiction? Moreover, why should female or feminist standpoints be more objective than those of traditional epistemologies? At best, are they not equally situated knowledge(s)? And, consequently, why should female/feminist standpoint knowledge deserve different treatment, or be preferable, to any other type of (socially produced) knowledge?

8.5.1. Objectivity: a feminist reading

In order to support feminist objectivity, standpoint theorists insist that *partiality* is not equivalent to *relativism* (García Selgas, 2004), and that specific standpoints may lead to more objective accounts of reality than others. Thus, although knowledge is seen as always depending on specific and local social, cultural and political positions, all these standpoints are not seen as equally reliable. Particularly, those who hold a position of power in society may be unwilling or unable able to provide objective accounts: they cannot detach themselves from their hegemonic and dominant worldview. In the words of Donna Haraway: "The only standpoint from which objectivity could not possible be practiced and honored is the standpoint of the master, the Man, the One God, whose Eye produces, appropriates, and orders all difference" (Haraway, 1989: 587).

The idea of more or less achieved and liberatory standpoints, hence more or less "objective" accounts of reality, has led Sandra Harding to propose the notion of "strong objectivity", in opposition to what she calls "weak objectivity"—to rename the objectivism of modern science. Both are socially situated, but only the former includes a critical outlook that can guarantee power biases are suppressed:

The standpoint epistemologies call for recognition of a historical or sociological or cultural relativism—but not for a judgmental or epistemological relativism. They call for the acknowledgement that all human beliefs, including our best beliefs—are socially situated, but they also require a critical evaluation to determine which social situations tend to generate the most objective knowledge claims. They require, as judgmental relativism does not, a scientific account of the relationship between the historically located belief and maximally objective belief. So they demand what I call strong objectivity in contrast to the weak objectivity of objectivism and its mirror-linked twin, judgmental relativism. (Harding 1991: 142)

Standpoint feminists argue women and/or feminists' knowledge stand is *more reliable* because it is the result of a struggle and liberating process. Thus, standpoint is not naturally belonging to women, but an *achieved* position resulting from fighting patriarchal oppression. Indeed, the subjugated position of women and/or feminists would naturally lead them to produce responsible accounts of reality.

Theorists also point out that the oppression concomitant with a female or feminist standpoint presupposes women have fewer interests in maintaining power structures. That evidence is seen as the guarantee that their accounts of reality will be more reliable than those of male-dominated social groups higher up the sociocultural power hierarchy. In addition, the historical experience of oppressed and dominated subjects held by all women also provides the basis for a shared female standpoint, which overcomes individual-based outlooks privileging particular interests and biased opinions. For Rixecker (1994) that argument is essential to distinguish between perspective and standpoint; while the first is contingent, the second, being a mediated position, is representative of theories of knowledge.

After setting the basis of objectivity, standpoint theorists engage in diverse arguments that explore in which sense females and/or feminist positions lead to an epistemological position. A fundamental argument is that women engaged in liberation struggles are valuable strangers to the social order (hooks, 2004; Hill Collins, 2004).

In this view, knowledge is understood as the result of a social practice, and women's experiences are seen as "empirical" knowledge. In this context, Ruddick (2004) insists on the specific and valuable experience of the caretaker and, particularly, the "maternal thinking", considered, as I expressed in a previous section, not as an alienated stereotype but as an "insurrectional" epistemological position derived from female values and the subordination of women's experiences.

8.5.2. The standpoint of the carer

One of the original, more powerful, and also contested, proposals that point to the standpoint of the carer has come from Nancy Hartsock. Her 1978 paper, "Developing the ground for a Specifically Feminist Historical Materialism", revised in later publications (Hartsock, 1998; 2004), supports the idea that women's reproductive activities attributed to the sexual division of labour are an "engaged vision of the world opposed and superior to other ways of thinking" (Hartsock cited in Ruddick, 2004: 162).

Hartsock shapes a feminist reading of the Marxist notion of privileged standpoint, for which epistemological relevance grows in a correlative opposition to class and gender oppression. She highlights how the sexual division of labour enables women to reach a specific standpoint, different from the male proletariat one, based on women's reproductive activities and on the mothering role. Each division of labour may have a specific consequence for knowledge; however, the systematic oppression related to female work, as well as the link of women's activities with deep human necessities, are the basis for a specific feminist epistemology.

For the author, the sexual division of labour is relevant to power inequalities, even to a much greater extent than class. The male proletariat suffers the oppression of the capitalist society when immersed in a waged job. Nevertheless, the male worker's position in power relations changes in the private household, where women become the oppressed subjects:

If, to paraphrase Marx, we follow the worker home from the factory, we can perceive again a change in the *dramatis personae*. He who before followed behind as the worker timid and holding back, with nothing to expect but a hiding, now strides in front while a third person, not specifically present in Marx's account of the transaction between capitalist and worker (both of whom are male) follows timidly behind, carrying groceries, baby, and diapers. (Hartsock, 2004: 41)

Arguments for stating women's standpoint in relation to the sexual division of labour are summarized in (a) the "double-day" work of women (in public and private activities), which entails women being more deeply engaged in work than men; (b) the greater dedication of women to use-value work (i.e. women, as a group, invest less time than men in producing market oriented commodities); and (c) the repetitive nature of women's work in different ways to men's work (the author points to repeated cleaning as a salient feature of female work) (Hartsock, 2004).

In Hartsock's opinion, these fundamental differences between female and male work may explain why women have a specific—according to the author, more critical and clearer—outlook on social relations and nature, since male perspectives are institutionalized in hegemonic social practices. Her point is well illustrated when paraphrasing the words from French's novel:

Washing the toilet used by three males, and the floor and the walls around it, is, Mira thought, coming face to face with necessity. And that is why women were saner than men, did not come up with mad, absurd schemes they developed; they were in touch with necessity, they had to wash the toilet bowl and floor. (French quoted in Hartsock, 2004: 43)

Specific social relations mothers establish with their children and the material world is another element of Hartsock's standpoint proposal. Women experience specific processes of growth and change throughout the years spent in bearing their children. Women are in a sense "producers" of human beings, and the relation they develop with their children is unique. However, Hartsock states, boys will build their identity in opposition to their mothers, while girls will accurately learn the skills of mothering. The specific position of women, being the producers as well as the workers of men, and their work appropriated in a male-dominated culture, gives a specific standpoint on reality (Hartsock, 2004).

8.5.3. Standpoint theory revised

At this point, I would like to argue two basic weaknesses of standpoint theory, before exploring in practice the challenging proposals derived from standpoint theory's contribution to epistemology, in order to reflect on the legitimacy of diverse approaches to scientific and non-scientific knowledge in the environmental debate.

Firstly, the emphasis placed by standpoint theorists on an "achieved" standpoint is an interesting move away from a simplistic and essentially inspired idea that women are *per se* providing a more reliable and objective account of reality (implicit in feminist traditions on sexual difference). However, it keeps a unilateral and reductionist idea of the place of feminists in power structures. Instead of defending feminists as the noble savages of knowledge, we should promote a critical reflexive position that would explore the potential but also the limits of a feminist standpoint.

Secondly, the supremacy recognized by a feminist standpoint through the notion of "strong objectivity" does not move far from a basic problem in the modern idea of objectivity, which is to sacrifice the diversity, complexity and specificity of multiple agents of knowledge in the search for a supreme form of objectivity. As Evelyn Fox Keller points out, "objectivity" understood as "neutrality" is a desirable ambition in knowledge production (and that is a fundamental argument against

epistemological relativists). That premise should affect feminist and non-feminist cognitive projects. Yet the partial approaches, the specific stands, from which all types of knowledge are produced, are valuable for reconstructing a complex and plural (but not necessarily consensual) comprehension of reality.

Thirdly, the simplistic notion of power relations implicit in the idea of a privileged standpoint of women or feminists could easily open the path towards essentialist readings. A very thin line separates the recognition of female experiences as the most valuable account of reality from the radical and deterministic conception of an ideal of female specificity, in which socio-cultural, economic and ideological biases are ignored.

In this sense, Schiebinger (1997) describes how the focus on the female question in science has easily led to the reproduction of biological deterministic arguments:

In spring 1993 *Science* magazine jumped onto the difference feminist bandwagon (probably without realising it) with its question: Is there a "female style" in science? Apparently not wanting to use the term feminist, the editors chose instead to focus on "female style"; unfortunately, in so doing they grounded gender in biology and placed the discussion in the essentialist camp. (Schiebinger, 1997: 209)

We should be able to recognize the diversity of women's experiences, this time among scientists, as well as male contributions to a feminist reading of science. However, at the same time, we should be able to make visible feminine traditional values excluded from modern epistemology, and explore, through feminist and female experiences in scientific knowledge, the potential they can bring to the advancement of science.

8.6. Situated knowledge

In the face of the weaknesses of standpoint theory discussed above, the concept of "situated knowledge" appears to be a promising alternative.

Again the challenge of objectivity exists, and knowledge is considered as culturally, geographically, economically and/or ideologically situated. As Haraway puts it:

Objectivity turns out to be about particular and specific embodiment and definitely not about the false vision promising transcendence of all limits and responsibility.

The moral is simply: only partial perspective promises objective vision. All Western cultural narratives about objectivity are allegories of the ideologies governing the relations of what we call mind and body, distance and responsibility. Feminist objectivity is about limited location and situated knowledge, not about transcendence and splitting of subject and object. (Haraway, 1988: 582-583)

However, neither a superior perspective exists, nor is situated knowledge exempt from critical examination:

The positioning of the subjugated are not exempt from ethical re-examination, decoding, deconstruction, and interpretation; that is from both semiological and hermeneutic modes of critical enquiry. The standpoints of the subjugated are not "innocent" positions. [...] How to see from below is a problem requiring at least as much skill with bodies and language, with the mediation of vision, as the "highest" techno-scientific visualizations. (Haraway, 1988: 584)

Situated knowledge recognizes a complex reality in which the subjects and the places from where they speak constitute a valuable perspective on the production of knowledge:

It is better to look for a social, material and fictional entity like situated knowledge, where we can see and experience how meaning and body join together in the so-called human nature and how vision can be considered as social and carnal embodiment. Of course, these transformation on the concept of objectivity, now filled with flesh and blood, entail different qualifications for our idea of knowledge: it is neither universal nor relative; it will always be partial and responsible. That means the end of "innocent politics of identity" and strong transformations in our idea of the subject of knowledge. (García-Selgas, 2004: 304)

However, situated knowledge is not about mere opinions, but community visions:

Situated knowledges are about communities, not about isolated individuals. [...] Its images are...the joining of partial views and halting voices into a collective subject position that promises a vision of the means of ongoing finite embodiment, of living within limits and contradictions—of living from somewhere. (Haraway, 1988: 590)

Haraway's theoretical approach offers an interesting base to interpret the "carer stand" both as a moral and cognitive position. The experience of care, derived from a cultural, ideological, social and personal position, leads to the possibility of a collective female outlook. Such a common experience allows us to transcend mere individual opinions and develop (female experience-based) community visions.

SUMMARY OF CHAPTER 8

Chapter 8 analyzed, from the point of view of morality and knowledge, the potential of identifying a "carer stand" in order to explain gendered biases in women's opinions about the environment.

The first part of the chapter focused on discussing the principles underlying a carer's moral thinking, and to explore ecofeminist ethical proposals based on care. The second part of the chapter dealt with feminist critiques of the epistemology of modern science, and through them explored a carer stand as a legitimate source for the production of knowledge.

This analysis links with the empirical findings about gendered concerns for the environment presented in part II. In chapter 4 I pointed to the local and social dimension of environmental problems revealed in the opinions of female activists from the cases studies that hold experience-based arguments. Female testimonies in these cases also demonstrated the specific value women placed on the landscape as a projection for personal memories and sense of belonging and their concern for local environmental problems. Women also mentioned concrete subjects when they referred to environmental concerns as the loss of quality of life or their concerns for the legacy left to future generations.

However, results from the case that showed ideology-based arguments also demonstrated female activists whose opinions were closer to male tendencies than to the female gendered concerns observed in grassroots movements holding experience-based arguments. This demonstrates that female morality is linked to gender, and not to innate female qualities.

According to Gilligan's studies, women and men's morality present different characteristics. Women's morality:

- Is concrete and contextual. It may vary according to subjects and situations.
- Is strongly embedded in a web of relations. Women establish strong connections with others, instead of wanting to separate from the world, and solutions involve putting social relations first.

Instead, men's morality:

- Is based on abstract thinking and impersonalized subjects.
- Solutions follow mathematical logic, and rules limit or justify the action that should be taken.

The description of female morality is not necessarily applied to all women, as they may also support attitudes closer to the morality described for men, and vice versa. A carer stand is a gender-biased moral perspective because—as has been largely discussed in this chapter—it is based on the moral values traditionally attributed to women and in fact often held by women.

The consideration of such a carer stand would have consequences for the environmental debate because it introduces new perspectives and ways of framing problems. As was discussed, a female gendered morality described by Gilligan, which is at the basis of the "carer stand", is less concerned with the probability that the risk occurs and more with the impact it would generate if it happened. This reasoning leads to prevention, rather than acting because scientific evidence is not conclusive, which is the logic behind the precautionary principle.

Gilligan's analysis revealed that female morality lead to an ethic of care, based on non-violence, while male morality is at the base of an ethic of justice, in which equality is given priority.

None of these perspectives is necessarily better than the other. Abstract and impersonal aims of an ethic of justice do not consider concrete situations and people. On the contrary, exclusive attention to a moral stand based on care could lead to the partisan defence of group interests.

This discussion illustrates the potential and limitations of the ecofeminist ethical project to inform environmental governance. In this chapter I once again referred to ecofeminist proposals focusing their attention on presenting the diversity of ecofeminist ethical proposals. Ecofeminism criticizes environmental ethics for the limits of a supposed universal ethical thought, and the aspiration of reaching an ahistorical and totalizing ethic, because it obscures the diversity of human, social and cultural experiences. It also points to the importance of the female experience as a source for reformulating the relation between society and the environment. At this

point, different ecofeminist proposals have been set out. Although relevant differences exist, we can derive two basic arguments that are based on the morality of a carer stand in which all the ecofeminist ethical proposals are based:

- First, to recognize the contextual and personal dimension of environmental problems, in contrast to universal values and abstract subjects that are a feature of environmental ethics.
- Second, to value the environment from a caring stand, instead of pointing exclusively to arguments based on justice, as environmental ethics does.

A carer stand leads to a specific moral approach to problems. It is an alternative perspective to consider the human-nature relation that leads to different orientations in the environmental debate. However, it is also a partial view. The carer stand could lead to a NIMBY, or more precisely to a NIABY (Not In Any BackYard) position (Nel·lo 2003). Therefore, an ethic of care that does not consider other approaches to problems would reduce the political, economic and social complexity of environmental problems to the value of caring for others and obscuring interests in the tension of real life situations. We should recognize and empower the carer stand as a specific contribution to the environmental debate, but also to consider it as one more among the plurality of perspectives and values involved in environmental decision-making.

In this sense, I pointed out the relevance of Benhabib's proposal of combining both moral standpoints, which is also the reasoning at the basis of Merchant's proposal of "partnership ethics" set out in the chapter. In relation to environmental management, it would involve addressing concrete experiences of environmental impacts, at the same time that the local reality is transgressed and connected with a global justice perspective.

In conclusion, we may consider the potential importance of ecofeminist approaches to care ethics, which can be systematized in a series of learning that is applicable to governance processes:

1. The value of a "carer stand", embodied in women's experiences, as a potential ethical contribution to the environmental debate.

- 2. The consideration of "equality" and the "recognition of difference" as fundamental aspects of the environmental debate, as well as the need to establish links between economic, social and political processes in the understanding of environmental problems.
- 3. The specificity of the view developed from such a care stand that places emphasis on relations, a "concrete other" and the context of problems.
- 4. The particular way of framing problems and prioritizing solutions that derives from a "carer stand"; specifically, emphasizing a web of social relations, competing responsibilities, the concrete and contextual dimension of problems (in contrast to rational logic, competing rights, and an abstract, objective and universal idea of justice).
- 5. The need to recognize such a position, as not substituting but complementing or confronting a rich diversity of interests and values in environmental decision-making.

The second part of the chapter explored the carer stand as a legitimate source of knowledge. To do so, the discussion started by presenting feminist critiques of modern epistemology.

The most relevant contribution of the feminist critique to modern science is to demonstrate that social and cultural norms associated with Western masculinity has imprinted a specific mark on science. For feminist epistemologists knowledge is never impartial and neutral, but the result of a political and socio-cultural standpoint. Hence they criticize modern science for the ambition (or illusion) of objectivity, which is a fundamental aspect of the social legitimacy of scientific knowledge.

After that consideration, they claim that women's gendered experiences and feminist struggles are a valid source to approach knowledge. However, two alternative interpretations exist: standpoint theory and situated knowledge.

In the face of gendered biases in the modern scientific project, standpoint theorists affirm that feminist objectivity is possible. They argue that all knowledge is produced from a concrete standpoint, but that not all standpoints are equally reliable: those holding a position of power in society may be unwilling or unable to provide an objective account. In concrete, we discussed Harding's critique of (modern science's) "weak

objectivity" and her proposal of a (feminist) "strong objectivity". Harding and other standpoint authors affirm that the perspective of the subjugated is more valid because it guarantees a critical outlook in which power biases are suppressed. In this sense, I also introduced the exploration of the caretaker and "maternal thinking" as approaches to knowledge contributed by standpoint theorists.

However, a fundamental problem of standpoint theory is the weak critical reflection on power relations. In chapter 1 I set out the Foucauldian critique of a simplistic approach to power implicit in much modern feminist production, which considers it exclusively as a master/victim relationship. In contrast, I discussed postmodern approaches that reflect on complex hierarchical power relations biased by gender and other socio-cultural and economic variables. Standpoint theorists' consideration of knowledge is based uncritically on the dominant/victim idea and ignores the biases inherent in knowledge produced from a subjugated position. Objectivity understood as neutrality is a desirable ambition for knowledge production, and we need to critically assess all types of knowledge, including that produced from a feminist or female standpoint. But certainly the partial approaches from which all knowledge is produced are valuable. We should recognize the value of feminine values traditionally excluded from science, and the potential they bring to the advancement of knowledge.

Situated knowledge is a second alternative. In line with the abovementioned critique, in this perspective all knowledge stands are considered partial and not necessarily better than any other. The aim is not to bring a unique perspective to problems, but to legitimate all potential views in order to address the complexity of knowledge. It is from the idea of "situated knowledge" that we may explore how the experience of a feminist or female perspective on knowledge is possible, and that may lead us to consider alternative perspectives to problems, knowing attitudes and consideration of valid explanations.

The following chapter will continue exploring the relevance of knowledge from a feminist/female standpoint, but this time focusing on its contributions to environmental governance practices.

Chapter 9. Power and legitimacy in environment-related participatory processes

In the previous chapter I discussed the specific contribution of feminism to ethics and science, and established standpoint theory as a theoretical base to sustain the validity and interest of a carer standpoint, not exclusive to but very much linked to women's experience of femininity. In the present chapter my aim is to deduce the consequences of that discussion to reflect on the governance of the environment.

In order to situate the debate, the first section will briefly introduce the main elements of Habermas' discursive ethics as a robust theoretical exploration of the deeper forms of democracy that governance processes aspire to, at least from a theoretical point of view.

Habermas' theory is also the theoretical reference of post-normal science, which will be set out in section 2. Post-normal science scholars have elaborated a comprehensive theory to explain the challenges that Western governments have to face in order to fight the environmental crisis, which implies new forms of relations, communication and consensus among politics, science and the public in decision-making processes.

Departing from the post-normal science proposal, section 3 focuses on the "new" scenario opened up by governance processes emerging in relation to environmental issues, in which traditional legitimacy and power relations in decision-making processes are challenged, a transformation that is propelled by the high level of uncertainty and complexity inherent in many environmental problems. Such a scenario is also a suitable context to explore the existence of technical and cultural rationalities underlying the disagreement commonly found between official standpoints (represented by politicians and official experts) and activists (often citizens) in local environmental conflicts. Those rationalities come from different standpoints as regards conceptualizing the origins, consequences and possible solutions to deal with environmental problems. In this sense, sections 4 and 5 will explore epidemiological studies as cases in which a "carer stand" is at the basis of cultural rationality represented by the view of citizens, particularly women, who oppose official views to deal with an environmental problem. In this section I will contrast the assumptions of that rationality and contrast it with a technical rationality embodied by scientific experts. The discussion continues until section 6, in which rhetoric styles and discursive practices are also discussed as elements determining the legitimacy status of participants in a discussion, and

therefore which also represent elements of unequal power relations when a participatory deliberative process takes place.

Finally, section 7 focuses on the feminist production of knowledge. On the one hand, in that section I will discuss and bring examples of the epistemological and practical contributions of a feminist/female standpoint on environmental issues. In this way the section links with the theoretical elaborations of chapter 8. On the other hand, I will propose a female/feminist standpoint on environmental knowledge as a strategic tool to fight gendered unequal power relations in participatory processes, one of the most relevant challenges in mainstream environmental governance.

9.1. The feminist potential of discursive democracy

How do feminist reflections bring contributions to the ideal of a deliberative process implicit in governance theory? How is that practically useful for environment-related participatory processes?

Habermas' discursive ethics is fundamental to understand the profound transformations of contemporary democratic societies. The philosopher assesses as an intensification of modern principles the complex process through which Western societies created a plurality of autonomous public spaces in which diverse interested authors are legitimated.

His contribution has been essential to establishing the theoretical discussion on the potential and also the limits that may guide such a proliferation of public spaces from a rational discursive point of view.

Habermas assesses the possibility of dialogue in a public discussion according to the criterion of a "practical discourse". The space of public discussion is open to all those affected by social norms and political actions, who may engage in the formulation, definition and adoption of those social norms and political actions. Even what is potentially an object of debate and what is not, in other words the limits and implicit norms of discussion, are subject to open consideration. Hence Habermas puts the Kantian ideal of a critical and reflexive reason into practice.

Departing from that Kantian-inspired idea of reason, Habermas (2002) defines the following key elements to guarantee the possibility of communicative action:

- 1. The supposition of a world of objects that are external and independent from humans.
- 2. The reciprocal presumption of rationality or responsibility among participants.
- 3. The acceptance of an unconditional validity of truth and morality that transcendent particular contexts.
- 4. The rational discourse as the only possible way of legitimation.

According to what we have discussed in the previous chapter, there is a fundamental opposition between feminist approaches to morality and the third principle proposed by Habermas in the theory of communicative action. Indeed, Habermas' theory links with Kantian ethics and aims at building a concept of rationality in opposition to the postmodern claims about subjectivity that have opposed modern social theory, like feminism (Habermas, 1987).

In this sense, Benhabib criticizes Habermas' discursive ethic because it does not transcend the basic dichotomic categories that underlie modern moral thinking: public/private, norms/values, interests/needs. Central to her critique is the assumption of modern morality that excludes the private sphere as object of moral discussion, because it is identified as a private (not collective) problem. Benhabib thinks feminism has demonstrated that what Kantians qualify as matters of the "good life" are indeed social problems of moral consideration. Benhabib also considers it anti-intuitive to admit that aspects related to caring are considered as subsidiary and inferior to a moral discussion that places justice at the centre. In her view caring, together with justice, must be placed at the centre of the moral discussion. Indeed, complementarity between the ethics of justice and ethics of care is seen by the author as a path to transcend the limitations of traditional ethics.

The limits of an ideal situation of practical discourses are universal moral respect and equal reciprocity. Such discursive norms are fundamental to avoid moral paradoxes and practical pitfalls, such as the fact that the result of a deliberative process goes against basic moral principles, that participants decide anything or that they do not reach any decision (Benhabib, 2006).

In this way, theorists of communication and discursive practice recognize a tension between traditional liberal restrictions to public dialogues and the fact that to suppose no limit to public discussion procedures could also be counterproductive for basic human rights. In this sense, Benhabib (2006) insists it is fundamental we acknowledge that discursive practices are part of democratic processes, in which

discussion and reflection about democratic norms is possible and desirable, only once the fundamental elements of a democratic dialogue are accepted and adopted.

Benhabib sees a theoretical and strategic interest in establishing linkages between feminism and Habermas' discursive ethics. First, she states that the feminist compromise of renegotiating norms that rule our societies and that are negative for women are a practical application of the ideal of discursive practices. Second, she considers that communicative action theory should be adopted by feminism as a theoretical framework that empowers feminist contributions to society. Third, and from a practical point of view, she asserts that discursive democracy offers the path for the full recognition of the "concrete other" (taking Gilligan's sense):

Ni lo concreto ni la otredad del "otro concreto" pueden conocerse en ausencia de la voz del otro. El punto de vista del otro concreto emerge como distinto sólo como resultado de la autodefinición. Es el otro el que nos hace conscientes tanto de su concreción como de su otredad. Sin establecer contacto, confrontación, diálogo e incluso "una lucha por el reconocimiento" en el sentido hegeliano, tendemos a construir la otredad del otro por proyección y fantasia o la ignoramus con indiferencia [...] el modelo de la ética discursiva o comunicativa es preferible porque institucionaliza un verdadero diálogo entre seres reales que son tanto "otros generalizados", considerados como agentes morales iguales, como "otros concretos", es decir, individuos con diferencias irreductibles. (Benhabib, 2006: 192-193)

I agree with Benhabib that discursive democracy is a challenging path for feminists that aims at penetrating public policy. In the case of environmental governance, the proliferation of participatory processes opens the possibility of bringing gender equality and a gender perspective to environmental issues into decision-making processes, as for the first time multiple actors and a diversity of experts are potentially having a place in the discussion.

In this chapter I will explore participatory processes as currently the most suitable institutional framework for the application of a gender approach to environmental issues. In chapter 2 I already warned of the negative consequences of environmental governance practices failing at being inclusive, and I indicated basic challenges such as political commitment and transparency as fundamental guarantees of participatory practices.

This time I will centre on the theoretical elaboration of post-normal science, a solving-strategy for complex environmental problems that applies Habermas' ideal of communicative action, as a multiplicity of interested rational actors are recognized in the environmental debate. A gender assessment emphasizes power and legitimacy as fundamental elements of the post-normal discursive model, contributing to the advancement towards an inclusive ideal in participatory practices.

9.2. The failure of modern science as a solving strategy for complex environmental problems and the deliberative alternative to post-normal science

Already during the 1990s, sociologists such as Ulrike Beck (1992) or Anthony Giddens (1991) pointed to the changing relationships between science, society and politics in a post-industrial society strongly threaten by risks.

Beck (1992) argued that Western post-industrialized countries are witnessing the emergence of a "risk society": a society in which problems of the distribution of resources are being substituted by problems of risk management. In that new situation, science and technology take on a complex and controversial role: they are involved in producing societal risks, while at the same time they are also our instruments for producing knowledge and a fundamental part of the solving-strategy to address those risks.

Risk society is also characterized by the emergence of interested actors affected by conflicts related to risks. Like the ideal of Habermas' discursive ethics defined above, in the public debate about risks, even the establishment of what risk is itself becomes a matter for social debate.

Civil society affected by a risk—individually or through organized groups—often uses scientific information in order to sustain specific interests. Beck (1992) describes the emergence of "two" sciences: science provided by institutions and science appropriated (or even produced) by civil society. Fundamental to that phenomenon is the existence of scientific uncertainty and complexity, which undermine the basic modern principles of universalism, objectivity and simplicity. Interestingly, scientific uncertainty and complexity are therefore instrumental to legitimize the emergence of a plurality of visions around the environment, which would have very limited opportunities to participate in traditional decision-making processes, strongly dominated by scientific and technical approaches. This is a fundamental part of Beck and Gidden's reflexive modernization concept: an ultra-

modern democratic system characterized by an intensification of discursive practices featuring a plurality of rational actors.

Similarly to Beck's arguments, other theorists argue that as a consequence of high uncertainty related to complex environmental and technological problems, value choices cannot be excluded from practical solutions, and hence the argument that an oligarchy of experts will provide solutions to the problem contradicts democratic principles (Pellizzoni, 1999).

Therefore, as a result of scientific uncertainty and high complexity there is a transition from decision-making processes guided by (scientific) facts to processes in which value-discussions take centre stage.

That transition is implicit in the increased political interest in governance processes and the proliferation of participation mechanisms. The crisis of confidence affecting politics at all scales—in many senses related to the consequences of environmental degradation—is at the basis of the increased relevance of governance rhetoric, as described in chapter 2.

The European Commission's White Paper on Governance, for instance, starts by pointing out that:

Today, political leaders throughout Europe are facing a real paradox. On the one hand, Europeans want them to find solutions to the major problems confronting our societies. On the other hand, people increasingly distrust institutions and politics or are simply not interested in them. (EC, 2001: 3; emphasis added)

The relevance of combining expert knowledge and public debate is addressed as a strategy to combat the lose of citizens' confidence:

Build public confidence in the way policy makers use expert advice. The EU's multidisciplinary expert system will be opened up to greater public scrutiny and debate. This is needed to manage the challenges, risks and ethical questions thrown up by science and technology. (EC, 2001: 33)

However, we should acknowledge that the application of governance principles and the implementation of participatory mechanism is still a very young practice, and important geographical variations exist. In the case of Catalonia, environmental conflicts are often increased by a lack of political transparency and

communication strategy (Nel·lo, 2003), as well as expert uncertainty not being openly recognized (as case 1 illustrated), and multiple perspectives on the environment being poorly considered when social conflicts arise around environmental problems. In general, participatory practices tend to be strongly institutionalized, and do not achieve political commitments or offer a real opportunity to transform traditional power balances. As a consequence, in some cases they have the negative effect of increasing discontent among citizens (as I reported in chapter 5).

Independently of the pitfalls and negative effects of the practice of governance and participatory processes, scholars bring interesting and challenging outlooks to the democratization of decision-making practices.

With a clear focus on policy-making, Funtowicz and Ravetz (2000; 1994) have discussed the legitimacy crisis of scientific knowledge in the decision-making process of complex problems characterized by uncertainty, and the resulting discredit of public authorities. They have proposed post-normal science as a necessary mutation of the problem-solving strategy used to deal with the sort of issues in which applied science or professional consultancy have appeared to fail to provide solutions. The types of problems referred to are defined as complex: there is a high level of uncertainty, different value-framings are in dispute, there is much at stake and the solutions needed are urgent.

Core science, "curiosity-driven" or "investigator-chosen", in which social values at stake and scientific uncertainties are very low or nearly inexistent, uses journal referees for the quality assessment process: a community of peers certificate the validity of the scientific process and the results.

In the case of applied science, apart from referees, managers and end-users assess the quality of the product according to their own purposes.

Regarding professional consultancy, the personal prestige of the professional also takes part, which is an added form of quality assurance.

However, in the previous cases scientific uncertainty is technical (e.g. data errors) or methodological (e.g. differences between research models). In both cases science offers methodological solutions to calculate and minimize such types of uncertainty. In contrast, post-normal science is applied to problems characterized by epistemological or ethical uncertainty¹ (e.g. indeterminacy, ignorance,

¹ E.g., "It is impossible to produce a simple rationale for adjudicating between the rights of people who would benefit from some development, and those of a particular species of animal or plant that would be harmed" (Funtowicz and Ravetz, 1994: 1884).

assumption and value-loadings) in which, in some cases, scientific knowledge may be close to ignorance (Funtowicz and Ravetz, 1994). In those cases, the high level of uncertainty causes the hierarchical relation between "hard facts" and "soft values" in traditional decision-making processes to be reversed. Moreover, facts and values cannot be considered independent anymore—as they used to be considered in modern science. It follows that for post-normal science, "all policy issues of risk and the environment involve new forms of equity, which had previously been considered as externalities to the real business of the scientifictechnical enterprise" (Funtowicz and Ravetz, 2000: 331; emphasis added).

Inspired by Habermas' idea of discursive democracy, the innovative solving-strategy proposed by post-normal science consists of a extension of the traditional peer review community that would assess scientific knowledge playing a role in the decision-making process, by an "ever-growing set of <u>legitimate</u> participants" (Funtowicz and Ravetz, 2000: 332; emphasis added).

A case of legitimate participants in a post-normal science problem-solving strategy would be people affected by an environmental risk. They would have pressing concerns and specific perspectives on the problem (Funtowicz and Ravetz, 2000). In addition, as the general public co-evolve with the local place they inhabit, they develop unique expertise that scientists ignore (Pellizzoni, 1999).

Significantly, the authors argue that "post-normal science is indeed a type of science, and not merely politics or public participation" (Funtowicz and Ravetz, 2000: 330). Such a claim places emphasis on the central role of scientific knowledge in the deliberative process in the sort of problems addressed by post-normal science. In such processes, the scientific framework of the problem becomes a key issue of negotiation and consensus for the extended peer review community (Funtowicz and Ravetz, 1994). At the same time, social actors involved in the peer review process are not expected to be mere representatives of specific interests submitted to a hegemony of experts. It is argued that expert knowledge of complex problems (undermined by epistemological uncertainty) is often not superior to other forms of knowledge, and thus social actors and experts must interact on an equal basis also in relation to the cognitive approach to problems (Pellizzoni, 1999).

Funtowicz and Ravetz already notice that: "Within such extended peer communities there will be the usual tensions between those with special interest demands, and the outside activists with a more far-reaching agenda, along with the inevitable divisions along lines of class, ethnicity, gender and formal education" (Funtowicz and Ravetz, 2000: 333). However, although they point to the need to

recognize legitimate perspectives in the discussion of complex problems that have been ignored in traditional science-based policy making, they do not pay explicit attention to how to ensure the participatory process is inclusive (Pellizzoni, 1999). At the same time, they do not comment on the closely linked issue of (im)balances of power between actors and arguments in a deliberative process. Nevertheless, that is a fundamental issue from a gender perspective. Yet Pellizzoni argues that power is a fundamental element of Funtowicz and Ravetz's proposal, as the prevalent position of science in decision making process is normative, and not necessarily the consequence of having more reliable knowledge. Thus, when conflicts emerge, "the confrontation between different knowledge claims is shaped by power relations" (1999: 113), and not by cognitive superiority.

Encounters between scientists and laypeople in cases of controversial environmental and technological risks have been dominated by the discrediting of the general public's claims by public authorities and scientists. Often, problematic relationships between science and citizens have been seen as a consequence of either public ignorance or public irrationality (Irwin, 1995). To discuss issues of power and legitimacy is therefore basic for the application of participatory processes.

The science-centred worldview implicitly assumes that the public is ignorant, that they need to be taught about science in order to understand that what they perceive as risky is unfounded, and that science is the only legitimate actor to support the decision-making process. Underlying this idea is the belief that science is value-free, and that time and resources invested in research are inevitably leading to a major comprehension of the world and to the control of society's fears (Irwin, 1995).

Challenging the traditional approach to that type of policy-science/society encounters, some researchers have proved that problem definition is a key element for the establishment of legitimate perspectives, and it marks who will dominate the discussion (Craye et al., 2005; int'Veld and Verheij, 2000). In that sense, the traditional prevalence in environmental decision-making of a focus towards technical solutions has limited the actors involved in the discussion, and has implicitly manipulated the demands of knowledge about the issue. Moreover, the science-centred worldview that tends to dominate policy-making environments has obscured the assumptions of its own agenda, which sees development as inevitable because progress is assumed to be an ideal condition for the improvement of society. All these circumstances mean that in traditional science-centred environmental decision-making, not all the scales of the problem are

recognized, and that the norms and values of the major players usually dominate the discussion (int'Veld, 2000).

The situation described is very appealing to gender and feminist analysis on environmental issues in which power imbalances take centrality. Irwin (1995) explains how in the science-centred worldview the public is understood as homogenous and passive.

9.3. Complexity and uncertainty: opportunities for changing power and legitimacy balances

Citizens' involvement in the assessment of scientific knowledge involved in highly complex and uncertain issues, like those addressed in the post-normal science strategy, has been explored in practice (Darier et al., 1999; Craye et al., 2005). The case of climate change has been used in some comparative research into citizens' participation between the cities of St. Helens (UK) and Venice (Italy). The controversy of climate change is inherently complex (e.g. the definition of the scale of the problem and relation between scales) and there are many uncertainties associated with it (e.g. the relative importance of anthropogenic factors is not clear).

Although, as expressed above, the proposal of post-normal science does not directly address the issue of legitimacies and power balances in participatory processes, the discussion implicitly emerges in the case of St. Helens and Venice. The authors report the tension between expert and lay knowledge: in contrast to the specialization-driven sort of expert knowledge, citizens' knowledge is mainly holistic and centrality to values is given freely. The case illustrates that when experts are not able to provide "certain" knowledge as traditionally "expected", the consequence is that the use of values in the discussion becomes legitimate. Thus citizens are empowered when experts show errors or explain transparently their uncertainties on the topic (Darier et al., 1999). The example demonstrates that changes in power balances benefits value-centred arguments whose legitimacy would be questioned in traditional scientific and technical-oriented discussions of the topic.

The consequences for power balances when complexity and uncertainty are openly discussed in participatory environments are also implicitly assessed in the test case documented by Craye et al. (2005). Researchers applied in a deliberative environment the concept of "pedigree of knowledge" developed by Funtowicz and Ravetz (1990) as part of the NUSAP system for the assessment of uncertain

information in scientific knowledge supporting policy-making. The context was a conflict around a health risk allegedly provoked by an incinerator in the region of Flanders in Belgium. The pedigree scheme was conceived as an alternative to the sterile discussion in which policy makers, scientists and citizens' groups had involved during years and in which still remained stuck. Their objective was to stimulate a reflexive deliberation around the epistemological uncertainties of scientific information related to the problem.

The discussion focused on a controversial epidemiological study that had found no statistical relevance for making a link between the incinerators' emissions and the cluster of diseases observed. The approach and methodology used by the study had been criticized by other epidemiologists. Some critical experts and members of citizens committees disagreed with the "level of significance" considered in the study, which was considered value-laden. Even the incinerator's manager thought that the project was prejudiced when focusing on the incinerator as the main problem, and not considering other sources of pollution. The pedigree scheme, consisting of a two entrance matrix with value-increasing scores to assess phases related to the study, helped the participants in the deliberative session to discuss the framing of the problem, the data-definitions and collection, the analysis (e.g. reliability of the chosen method), and the review (i.e. quality control of the research) considered in the study (Craye et al. 2005).

Apparently, the scientific rationalization of the problem of uncertainty and multiple perspectives, as well as the maintenance of a schematic diagram of a numeric system, based around the "pedigree scheme", could be perceived as still keeping a strong adherence to traditional "scientific" legitimacy. Indeed, the authors reported that "some participants argued that the method was still quite science-centred, thereby limiting and sometimes devaluing the contributions of citizens and other lay knowledge providers" (Craye et al. 2005: 233). Although in the opinion of the authors, "this point of criticism was perhaps a misjudgement of the tool's objectives as 'the one and only way to involve stakeholders and citizens in risk policy processes" (Craye et al. 2005: 233), the point raised by some participants deserves specific consideration as it denotes the rhetorical power of "technically-framed" discussions, and their implicit influence in excluding arguments that are not scientifically-coded.

However, the "pedigree scheme" appears as a valuable tool to promote deliberation on "the framing of the problem, the choice of methods, the design of the strategy to gather the data, the review and interpretation of results, the distribution of roles in knowledge production and assessment, the functions of the

results in the policy arena, etc." (Craye et al., 2005: 218). The explicit discussion about the "robustness" of the epidemiological study allowed the participants to discuss the assumptions and choices inherent to the framing of the problem, which was seen as a fundamental reason for the future controversies that the problem had raised. The researchers reported that the issue of framing was the one for which participants deserved more time of the discussion, and it also empowered the non-scientists who felt their contribution was more relevant (Craye et al. 2005). Therefore, the case illustrates that the discussion around the uncertainties linked to scientific information does not discredit science *per se*; instead it strengthens a dialogue that is broader than the traditional technical-focused discussion and in which different value-framing can play a role.

Craye et al. see reflexivity as a key element of the deliberative process developed around the "pedigree scheme", which they describe as follows:

Reflexivity, then, refers to a state and/or attitude, created by an ensemble of processes, events, actions and measures, through which what is mostly accepted and not questioned is made the subject of study, discussion and deliberation leading to more openness, more possibility for societal debate and dialogue between policy, science and involved groups. (Craye et al. 2005: 221-222)

Thus reflexivity becomes a mechanism to disclose new legitimacies in the scientific and political debate on issues characterized by complexity and uncertainty, which underpins a change of traditional power imbalances between techno-scientific and "lay" arguments in such controversial environments. As Beck puts it, "only when medicine opposes medicine, nuclear physics opposes nuclear physics...can the future that is being brewed up in test-tubes become intelligible and evaluable for the outside world" (Beck, 1992: 234).

From this point of view, the participation model proposed by post-normal science offers a promising strategy to introduce a gender perspective to environmental governance.

Moreover, deliberative processes proposed by post-normal science open practical explorations to feminist intellectual and political interests in science. In chapter 8 I argued that feminist epistemologies supporting the specific knowledge position of marginalized views have opened an alternative to sterile postmodern discussions on knowledge falling into the relativistic tangle (García Selgas, 2004; Bracke and

Puig de la Bellacasa, 2004). However, at the same time, they have remained trapped in theoretical discussions, and a practical application of standpoint theory and/or situated knowledge(s) is very limited. The added handicap is that the feminist academic discussion becomes hermetic, as it is elaborated far from influencing the real day-to- day life of most people.

Post-normal science's insistence on the relevance of different values enables us to explore the notion of situated knowledge in practice. Extended peer review communities appear as environments in which identifying situated arguments and their knowledge production (or lack of it), as well as the legitimacy and power balances among different actors. In this sense, it has been already pointed out that the diversity of local actors that may bring a contribution to participatory processes reflects different social, economic and cultural backgrounds, which leads to specific values and a particular sense of threat to these values. In that context, and contrasting with modern epistemology, local interests and values and the experience of local problems are not seen as distortions of knowledge, but as sources of knowledge themselves. They are indeed, as suggested by Irwin (1995), a particular epistemology that is based on complexity, attachment to the object of enquiry and the mixing of values in the knowledge process.

However, it is worth being alerted to the consequences for the participatory process and the results of the traditional hierarchic relation among different types of knowledge and the scientific, if that problem is not openly addressed during the debate. As argued by Pellizzoni (1999), power imbalances between experts and laypeople could mean that great uncertainty regarding the cause of the problem and its possible solutions leads to an "authority effect", in which the public accepts expert knowledge not because of a free reflexive reasoning process but because the expert has more prestige. Pellizzoni also warns against the perverse effect that powerful technical rhetoric could have in a deliberative process: the process could take a dramatically different turn if experts start encoding "extended facts" in a technical language, and citizens adapt their knowledge and concerns to the dominant rhetoric style.

In this sense, a gender approach to participatory process ought to openly address differently power balances resulting from legitimacy positions, which could be ignored regardless of the scientific legitimacy and complexity, setting up the possibility for dialogue between different interests and values in the discussion.

9.4. Who are legitimate actors? Technical versus cultural rationalities

Some scholars who speak about deliberative democracy from a socio-political approach point to the legitimacy of citizens in a plural sense. The proposal is to involve a random representation of population in the discussion process (Dahl as cited in Pellizzoni, 1999). This type of participation is identified in the participatory model as a "citizens' jury". However, that interpretation is not valid for local conflicts. In those cases, a random representation would ignore specific views on the problem. In the science-centred model of post-normal science, legitimate participation in the extended peer-review process is limited to those affected by the problem (Pellizzoni, 1999).

Post-normal science, therefore, proposes that legitimacy is derived from the linkage of social actors with the problem. In other words, as Darier et al. argue, "the objects of enquiry and/or legitimate actors are shaped and constrained by the specific contexts from which they emerge" (1999: 104). A priori, the recognition of diverse perspectives emerging around a specific controversy guarantees pluralism in the discussion. Nevertheless, that strategy ignores power imbalances implicit in socio-political structures that mediate the recognition of legitimate perspectives.

Women and their views have tended to be unrepresented in social, political and scientific bodies. On the one hand, the androcentric bias that dominates public forums has involved many women engaging in the hegemonic male public patron (Walsh, 2001). Women themselves underestimate their gendered interests and perspectives because they become "out of place". On the other hand, women have shown a low level of politicization and much of women's political action has been traditionally limited to the private sphere—e.g. through neighbours' associations—, and has remained invisible or secondary to the various parties taking part in public decision-making. In addition, we have already suggested how scientific knowledge has shown scant concern for addressing women's interests, for which there is an important lack of gender-sensitive scientific information.

The discussion then leads to a series of key questions that transcend the ideas of random representation or the legitimacy of affected agents, and points to the election and exclusion of participants in the participatory process biased by structural power balances in an ethno-androcentric society.

² However, Dahl's proposal and citizens' juries differ in the techniques used for presenting scientific expertise: in the first, a group of experts are invited to provide neutral and balanced technical training and advice, while in the citizens' jury model, different expert opinions are shown in confrontation (Pellizzoni, 1999).

Are some agents and specific arguments implicitly excluded from the participatory process because they represent interests that do not have a place in the public debate? How do traditional power imbalances inherent to public environments benefit specific arguments and discursive mechanisms, or are they detrimental to or even exclude others? And, if focusing on the post-normal science proposal, how are gender power inequalities biasing the legitimacy opportunity opened by scientific uncertainty and complexity in participatory processes?

A basic approach to solve problems of exclusion in participatory processes has already been mentioned in chapter 2, and it is related to the idea of "inclusiveness". Participatory processes like the citizens' jury mentioned above are conceived according to "openness", in other words all possible actors have to be allowed to participate. In the case of post-normal science that openness is restricted to the actors that are affected by the problem. However, in both views traditional structural inequalities may be reproduced in participatory processes, as groups that are systematically underrepresented may not be recognized or may not "naturally" emerge as interested participants, and moreover, they do not have the knowledge to have their interests recognized.

For instance, in chapter 2 I described the low level of female presence in expert committees, informative agents and among stakeholders and citizens participating in regional and issue-based discussion meetings in the Catalan Agenda 21 process. A21Cat was open to all interested groups, but the lack of a gender approach in the organization of the participatory process led to a strong under-representation of women. By contrast, the strategy of inclusiveness would mean developing a specific strategy to include traditionally unrepresented groups, such as women.

Inclusiveness, however, should not be understood exclusively as gender balance in sex representation. It should address questions related to legitimacy and power imbalances among participants and different points of view.

Feminist critics of modern moral theory and science described in the previous chapter show gender power relations have determined unequal legitimacy status to values associated with masculine and feminine stereotypes. At the basis of a feminist critique is the need to transcendent the androcentric dualistic order rooted in Western thought:

Table 9.1. Legitimacy status derived from the association of dualisms in Western thinking³

Legitimate / Delegitimate

Source: author's elaboration

A moral and cognitive agent associated with or displaying the concepts on the left of the dualisms enjoys a stronger legitimacy than a moral and cognitive agent embodying concepts from the right. Proposals from care ethics, standpoint theory and situated knowledge derive from the idea of giving legitimacy to concepts on the right, representing values associated to femininity. These are not exclusive to women but are fundamental to a female gendered experience.

Environmental social theorists (Fischer, 2005; Brown, 2000; Krimsky and Plough, 1988) have reported encounters between citizens and political and scientific authorities in environmental conflicts, arguing that they represent two different types of rationality: a cultural and a technical one. Authors argue that cultural rationality is displayed when people are actually threatened by a risk, which is perceived as involuntary. Very often women have been identified as citizens defending cultural rationality (Brown and Ferguson, 1997; Krauss, 1993; Hamilton, 1990). My hypothesis is that the technical versus cultural rationality encounters reported by those authors often materializes the dualistic order expressed above, and cultural and technical rationalities enjoy diverse legitimacy status not because of the validity of their arguments, but because the power status of the socio-cultural position they hold. Ultimately, they represent an opposition of moral and cognitive standpoints associated with masculine and feminine stereotyped values respectively.

³ Feminist authors have proposed a diversity of lists of Western dualisms (see for example Plumwood, 1993 or King, 1992). In the table I have opted to include some of the most cited ones that are directly related to the issue of legitimacy.

At this point it is relevant to stress two aspects before the discussions continues:

Firstly, when I refer to cultural rationality I do not intend to propose it as simply equivalent to a female or feminist perspective. The point is that a carer stand that helps to explain women's perspectives on the environment, as I demonstrated in previous chapters, is often implicit in the cultural rationality that opposes technical rationality when an environmental conflict emerges. Such rationality may receive a deprived legitimacy position in power relations since it is associated with "delegitimated" links to femininity in Western dualisms. Nevertheless, cultural rationality may express other arguments not necessarily developed from a carer stand, and can obviously be supported by men as well. In addition, we may find other expressions of a female or feminist perspective, which are not necessarily representing a carer stand, and which are not found in cultural rationality, as I will set out in section 9.7. when exploring the potentialities of a female/feminist scientific knowing subject.

Secondly, when I discuss the legitimacy imbalances that negatively affect the chance for a cultural rationality to influence the debate, I do not intend to argue that cultural rationality is right and technical rationality is wrong. The discussion is not dealing with real arguments in specific environmental problems but with power relations. As I set out before, in situations of scientific uncertainty (such as the ones that take place in many environmental conflicts) the interest of the discussion focuses on the process, the openness to consider the views of all agents involved, the quality of the information supporting the discussion and the opportunities for an equal, fair and transparent debate. Nevertheless, we may consider that both supporters of a technical and a cultural rationality should be open to criticism and self-reflection if a real deliberative process is to take place.

Keeping in mind the abovementioned considerations, the case of popular epidemiological studies are interesting sources to explore legitimacy imbalances in environmental conflicts as they have widely documented the controversial encounters between technical and cultural rationalities, and because they are testimony to the fundamental role played by women as activists opposing politicians and scientific officers.

Traditional epidemiology is a scientific discipline concerned with the distribution of a disease, and the factors causing that distribution. By contrast, popular epidemiology is a variation from that scientific method in which scientific experts are substituted by local observers:

Popular epidemiology is the process by which laypersons gather scientific data and other information, and also direct and marshal the knowledge and resources of experts in order to understand the epidemiology of disease. [In addition], it emphasizes social structural factors as part of the causal disease chain. Furthermore, it is involved in social movements, utilizes political and judicial approaches to remedies, and challenges basic assumptions of traditional epidemiology, risk assessment, and public health regulations. (Brown, 2000: 303)

The definition and framing of problems, the prioritized cognitive stands, and standards of proof and risk perceptions are major differences between technical and cultural rationalities. Those differences are the reason for the conflicts and mutual incomprehension between the two perspectives. At the same time, they also indicate the diverse and unequal legitimacy associated with each rationality, as they point to the concepts on each side of the dualisms from box 9.1.

1. Definition and framing of risks

Environmental social theorists describe the definition of the problem, the establishment of the relevant factors for analysis, and the recognition of authority in the debate in such a way that a technical rationality profoundly differs from a cultural one.

Krimsky and Plough (1988) maintain that technical experts will tend to simplify elements taking part in the problem, while laypeople will tend to amplify them. For a technical rationality the problem can be separated from the context; rather the context is a fundamental element of the problem itself in the cultural rationality point of view.

Similarly, experts see risks from an impersonal position, while affected people tend to emphasize the personal costs affecting the family and the community. On a more abstract level, technical rationality appears to trust scientific methods and science-proved facts, while cultural rationality trusts political culture and democratic processes. Thus, in the first worldview authority is placed in science, while in the second case authority is identified with popular wisdom and "common sense".

Table 9.2. Synthesis of basic differences between technical and cultural rationality as described by Krimsky and Plough (1988)

Technical rationality	Cultural rationality		
Simplification	Amplification		
Problem-context separation	Context central to the problem		
Impersonality	Emphasis on personal and community costs		
Authority: science	Authority: "common sense"		

Source: Source: author's elaboration from Krimsky and Plough (1988)

2. Prioritized cognitive stands

Technical and cultural rationality suppose different approaches to knowledge, as well as diverse forms of recognizing a legitimate knowing position. Irwin (1995) argues that cultural rationality leads to local knowledge, a sort of knowledge that—contrary to the modern scientific approach—assumes complexity as part of real-life problems, and is developed from the cognitive position of the subject in a concrete world he/she is profoundly engaged in: "the gas workers recognized the polluted nature of the environment because they worked there" (1995: 132). Local knowledge is therefore characterized by a practical basis and instrumental orientation, and lacks theoretical and methodological grounds.

The different approaches to knowledge shown by technical and cultural rationality derive from an "abstract" and "personal" interest in problems, as illustrated by the example used by Brown: "Professionals generally concern themselves with disease processes, while laypeople focus on the personal experience of illness" (2000: 301). Those different interests may involve the knowing approach of each group leading to incompatibilities with the other. Medical professionals may find one explanation for the illness that should aim to be universal. Patients, instead, show their cultural and social diversity when presenting a broad range of symptoms and illness experiences; they expect medical analysis will provide answers to each individual's suffering (Brown, 2000).

3. Standards of proof and risk perception

Cases of popular epidemiology have shown strong disagreement between representatives of technical and cultural rationalities regarding standards of proof and, consequently, degrees of risk perception.

Brown argues that scientific proof is a consequence of the process of internal verification of the scientific method: "Epidemiologists prefer false negatives to false positives, i.e. they would prefer to falsely claim no association between variables when there is one than to claim an association when there is none" (Brown, 2000: 310).

However, scientific standards may not be accepted by a local population whose health and well-being may be at stake. This is well illustrated in the following quotation from Charlotte Bullock, a female working-class activist fighting against an incinerator in Los Angeles, USA: "I did not come to the fight against environmental problems as an intellectual but as a mother... People, say, 'But you are not a scientist, how do you know it's not safe?' I have common sense. I know if dioxin and mercury are going to come out of an incinerator stack, somebody's going to be affected" (Hamilton, 1990: 216). Once personal values and interests are involved in the conflict, some proof considered insignificant in scientific terms becomes relevant for laypeople's concerns.

9.5. Cultural rationality, women and the "carer stand"

Because of the gender socialization, roles and responsibilities of women, and because the home has been a traditional female domain, many women appear to be "experts" in the local sphere (Hamilton, 1990). Women do not necessarily support cultural rationality, and nor is a "carer stand" necessarily found in cultural rationality. Nevertheless, women have been observed as common claimers of cultural rationality, as popular epidemiology cases show, and their role as carers has been relevant to explain their perspective.

Female leadership and activism in the majority of toxic waste organizations has been reported throughout a number of studies (Brown and Ferguson, 1997; Krauss, 1993; Hamilton, 1990).

We may also view gender differences as representative of differing rationalities. Women are the most frequent organizers of lay detection, partly because they are the chief health arrangers for their families, and partly because they are more concerned than men with local environmental issues. (Brown, 2000: 313)

The specific approach of women to local knowledge in the case of toxic waste conflicts is reported as being characterized by an emphasis on relationships

between people at the local level, and concrete and everyday concerns (Brown and Ferguson, 1997).

In that gendered perspective, the healthy and a safety of the environment gain priority over other values such as economic development: "People's jobs were threatened, the minister was threatened...but I said 'I'm not going to be intimidated'. My child's health comes first...that's more important than my job" (Bullock quoted by Hamilton, 1990: 217).

Female involvement in the local environmental activism of citizens identified by popular epidemiology researchers is even more significant if we consider women's sociological background. Housewives from middle and lower class groups and with no previous experience in political action are common among such activists (Brown and Ferguson, 1997), as the well-known case of Lois Gibbs' fight in Love Canal illustrates (Gibbs, 1995). Women tend to have little experience in organizing and collecting information at the local level, and they also have limited access to economic and scientific resources.

Legitimacy problems women face in making their arguments public are well documented. Their claims are received with aversion by authorities and scientists involved in the conflict, and their legitimacy is questioned because "women, particularly as housewives, activists cannot know or understand the issues" (Brown and Ferguson, 1997: 242). In addition, women's arguments may also be viewed with incredulity by men from their family and local community networks: "[Anne] Anderson [whose son, Jimmy, had been diagnosed with acute lymphocytic leukaemia] sought to convince the family minister, Bruce Young, that the water was somehow responsible, although he at first supported her husband's wish to dissuade her" (Brown 2000: 304).

It has been pointed out how the female character, and particularly the "mothers in action" content of women's cultural rationality in cases of waste toxic conflicts, is the main reason to explain the low legitimacy those arguments receive. However, it is exactly that specific view based on women's experiences that brings a specific approach to the problem, which differs from scientific and technical assessments. Interestingly, the relation between legitimacy and the gendered character of dualisms described above, as well as the arguments used by standpoint theorists set out in the previous chapter, are very similar to the analysis by authors of popular epidemiology studies, as we can see from the following quotation:

Smith (1987) explains how experiences within a traditionally female domain—the everyday—are often excluded from the realm of scholarly enquiry, because of the specific expression of gender inequality in academic disciplines. She argues that women do maintenance work—they perform the vast majority of housekeeping, childcare and other tasks of daily living—and that such work is devalued because of its mundane nature. But this work enables male professionals to work as if they are detached from material reality and the constraints of daily tasks, a structural expression of the platonic duality between mind and body. Men's work is accorded a higher rank and considered more serious, in part because it is not concerned with the everyday. (Brown and Ferguson, 1997: 251)

The case of cultural rationality illustrates the argument I set out below in relation to powerless perspectives in deliberative processes. First, we may fail to recognize views that are not aligned to existing social organizations and not consider them part of the participatory process. And second, even when those actors belong to groups represented in the public discussion, we may fail to offer an equal basis for dialogue because in normal conditions they have little legitimacy. Some interests may be obscured or ignored by other arguments that have a more legitimate status and fit better in a technical and scientific discussion.

Yet the emphasis given the recognition of diverse perspectives does not invalidate the relevance of scientific knowledge in the participatory process, and neither does it suggest that the public's (or women's) views are more objective or superior to a technical approach (as standpoint theory stated). On the contrary, it insists on the need for a dialogue between diverse perspectives in which scientific knowledge (also, as I will explain shortly, that produced by gender studies) plays a fundamental role in legitimizing actors and making rational discussion possible.

Cases of cultural versus technical rationality reported in popular epidemiological studies find strong parallelisms with cases described in the second part of the present research.

On the one hand, in chapter 3 I argued that the two different worldviews coexisted in relation to European and Spanish surveys about citizen's perception of science and technology: a scientific and economy based worldview, and an ethical and social based one. These views correspond to the established definitions of a technical and cultural rationality. The former values economic and technological development in detriment to the environment, is in favour of decisions taken on expert advice legitimated by scientific methods, has a high level of confidence in the benefits that technological development can bring to society, tending to

undervalue the possible risks they carry, and sees technological progress as a natural destination of society (scientific and technological development is seen as synonymous with social development). The second has a high concern for health issues, doubts the social legitimacy of environmental exploitation, considers moral and the ethical issues relevant to decisions about science and technology, disapproves of various technological applications for their ethical and social implications (such as animal cloning, genetics, growing meat from cell culture or genetically modified crops), and is sceptical about the social benefits of scientific and technological development. Such results are coherent with the definition and framing of problems described for technical and cultural rationalities.

On the other hand, cases of cultural rationality show similarities with the citizens committees described in chapters 4 to 6. In particular, the "experiential" content implicit in a cultural rationality links directly with arguments used by activists that opposed the high tension power line, case 1. Women's strong concern for health, even being shared by their male counterparts, was not brought into the public political discussion on the environmental conflict. In chapter 5 we also observed for the same case study the low power status women have in the organization at a decision-making level, regardless of their relevant role in the everyday fight on the ground against the construction of the high tension power line.

Both examples illustrate that although deliberative process like those proposed by post-normal science may help in shaping traditional environments of decision-making, and in turn offer a way to bring a cultural change necessary for a dialogue between "different knowledge styles, values and identity definitions" (Pellizzoni, 1999: 115), legitimacy is a necessary issue to be addressed in an inclusive deliberative agenda. Pellizzoni argues that "the experts/laypeople relationship is marked by a lack of (and a struggle for) recognition" (1999: 115). This is exactly the challenge of feminist theory in a deliberative process of environmental decision-making as proposed by post-normal science. In this sense, Pellizzoni refers to the ideas of Wynne when stressing the powerful role of expert systems that "operate on people, forcing them to adapt to debatable models of social behaviour and relationships. As a consequence, what happens in the cultural system is first and foremost responsible for the unfair power distribution between experts and laypeople" (1999: 114).

9.6. Gender legitimacy in rhetoric styles and discursive practices

In chapter 5 I already suggested the relevance of gender in biasing the discussion and negotiation stages in a participatory process, by pointing to different power positions of men and women and their discursive styles inside the organizations.

Gender studies has addressed the question of women's legitimacy in public environments from two different perspectives. First, it has been suggested that structural gender inequalities affect the opportunities for some women to participate in public discussions. According to that position, socio-economic resources are an important factor for explaining gender trends in political participation. Female disadvantages in education, income and occupational status result in less opportunities for women to engage in policy-related activities. As such resources also give the skills that allow one to be more fluent in discussions and to attract the interest of the audience, structural inequalities among women and men affect women's competitiveness in public environments (Burns et al., 2001). Although this argument is relevant, I have already pointed out in chapter 5 that it does not fully explain the diversity of situations women may face in participatory processes.

Second, and complementary to this, it has been suggested that gendered normative behaviours could be relevant for rhetoric styles and for the public acceptance of specific actors and their arguments. Consequently, to openly address power imbalances related to gender biases in the discursive norms of public spaces is another challenge to introduce a gender equality perspective in participatory decision-making processes.

For instance, the observation of a case of LA21 in West London (Buckingham-Hatfield, 1999; Buckingham-Hatfield and Matthews, 1999) found that those participants expressing their interests in the "proper" expert-inspired terminology (which coincided with young males) were more legitimized in the discussion. As a result, their contributions were prioritized. Instead, participants who expressed in "local" or "parochial" terms (which in this case were older women) were less successful in the negotiation process.

In this sense, socio-economic inequalities cannot be the only interpretation for explaining women's lower advantage positions for influencing the debate. We should also point to socio-cultural attributes typical of men and women, gender norms and power relation in the public sphere.

Sociolinguistic studies have argued that the traditional predominance of men in diverse public spaces leads to the rhetoric of white middle-class male speakers being taken as the norm (Bucholtz, 2003; Walsh, 2001; Cameron, 1998). The style of male speakers is perceived as gender-neutral due to common use, but as a result feminine-based public

rhetoric becomes less competitive. In the case of public debates, this may affect the way the opinions of women are perceived by others (Walsh, 2001).

Besides, gender studies that focus on the specific characteristics of female political activism indicate that the structure and rules of mainstream policy-related environments may not be appealing to (many) women. As I have already commented in chapter 5, in comparison with traditional political organizations, women are largely involved in citizens' committees and in grassroots organizations that promote the politicization of the private sphere. This trend has been observed in civil groups emerging from environmental issues (Brown and Ferguson, 1997; Seager, 1993). The study of female activism in these contexts suggests that a specific trend exists among women that favours alliances and cooperative attitudes instead of competence and hierarchy (Denche-Morón, 1998). This argument is well illustrated by Clare Walsh's comparative study of two grassroots environmental organizations, Friends of the Earth (FoE) and the femaleoriented organization Women's Environmental Network (WEN). According to the author, WEN represents a "femininity-inspired alternative to the hierarchical structure of FoE because it places emphasis on "fluidity, networking and collaborative working practices" (Walsh, 2001: 139). WEN's egalitarian organizational structure could be seen as a source of inspiration for enhancing gender equality in policy-related participatory environments.

In this sense, a fundamental contribution of applying a gender perspective to environment-related practices is to develop mechanisms for empowering female rhetoric and discursive styles in participatory sessions.

As in Walsh's examples, the case study of Salvem l'Empordà has shown that the assembly style and the cooperative environment of that organization, together with the presence of women in leading roles, stimulated female participation. If we apply such reflections to the case of public participation, we may deduce that:

- (1) the proportion of women in the organizing and expert teams, and in the group of participants,
- (2) as well as the format and atmosphere in which the discussion of a participatory process is developed, are strategic decisions to empower female participation.
- 3) Alternatively, and considering the example provided by female organizations like WEN, the celebration of specific female discussion groups or
- (4) the development of gender expert consultation could be another valid strategy for bringing a gender perspective to an environmental participation process

9.7. Feminist and gender contributions to environmental knowledge

As introduced above, knowledge is a strategic tool in participatory processes. It is a fundamental aspect to guarantee the quality of the participatory process, and it also plays a crucial role in empowering traditionally non-legitimated perspectives in the environmental debate. In a previous section I mentioned that post-normal science practitioners have demonstrated that the transparency of scientific uncertainty is a key strategy to empower different perspectives in the environmental debate. From another perspective, and taking reflections from feminist epistemologists, the production of knowledge is also a strategy that allows the emergence and empowering of perspectives on the environment that would not be recognized as such.

In this final chapter I will systematize the relevance of knowledge in order to introduce a gender perspective in environmental governance perspectives, exposing three strongly related arguments that go from the subjects producing knowledge to the knowledge underlying the participation process, and to the availability of specific gender studies on the environment.

Firstly, I will argue that a gender perspective is necessary in the selection of experts that take part in a participatory process. Gender is relevant both in relation to the technical experts in charge of the management of the participatory process, as well as in relation to the members of the scientific committee informing the debate. Such a need is not only a matter of social justice: using again the arguments of standpoint theory and situated knowledge I will argue that the presence of female experts is basic to establishing the possibility of complexity and diversity in relation to knowledge informing the debate.

Secondly, knowledge itself is strategic to inform groups traditionally unrepresented in the environmental debate, and a gender approach allows us to orientate the need for that knowledge. As I already discussed in chapter 3, although environmental knowledge is apparently gender-neutral, science is often produced according to the interests of a Western white male patron that has traditionally dominated the scientific domain. I will expose a feminist perspective on interdisciplinarity and responsible science to fight gender biases in scientific knowledge.

Thirdly, it is fundamental to develop scientific information on the environment that applies a gender perspective, and that allows us to explicitly introduce gender into the environmental debate. As I will argue, the gender perspective is strategic not only to empower women, but also to bring innovative methodological

contributions, namely a differently focused, micro-scale and everyday approach; it offers a specific methodology that provides an alternative to traditional scientific and technical approaches; and it facilitates themes and epistemological orientations that enhance the communication between science and society.

9.7.1. Gendered expertise

As I argued in chapter 8, a fundamental argument of standpoint theorists is that feminists and/or female scientists are "outsiders within" knowledge institutions (Smith, 2004). In this case, in order to explain the specific character of a female/feminist stand, emphasis is placed on the insurrection instinct or desire that emerges from the unequal social and political context of female/feminist cognitive subjects immersed in a male-dominated scientific environment, rather than from the carer role linked to femininity that I explored in previous sections. As powerless subjects in traditional androcentric institutions, feminists and women are seen as having little interests in ignorance, which guarantees—according to standpoint theory—the reliability and commitment of their knowing standpoint. Standpoint theorists maintain that this fact leads to women and feminist scientists being able to offer a more objective account of society, since they have a perspective that is a near yet remote, and concerned yet indifferent. Women and feminists would also be less dependent of maintaining the dominant status quo. In the case of feminists, the shared interest in female emancipation constitutes a joint group looking critically at reality.

In the previous line of argument the notion of political struggle is determinant. Indeed, some theorists state women *per se* may not produce a legitimate standpoint for the production of knowledge, but only those committed to female emancipation. That idea is found, for instance, in Nancy Hartsock's work: "I use the term 'feminist', rather than 'female' here to indicate both the achieved character of standpoint and that a standpoint by definition carries a liberatory potential" (2004: 40).

Schiebinger sees this as a fundamental point to avoid essentialist readings of the female question in science: "To make women the agents of change essentializes gender differences (even when those differences are said to be culturally produced) and unnecessarily excludes men as potential allies. It is not women *per se*, but women and men who have cultivated a critical awareness of gender, who are making a difference" (1997: 210).

I have already discussed the basic weaknesses of standpoint theory, of which I will discuss that view taking the notion of situated knowledge. From this point of view, I venture to say that the feminist critique of science should certainly be seen as a strategic tool for making visible the epistemological obstacles—using Bachelard's terminology⁴—that impede the knowledge to explore unthinkable dimensions. The extent to which the principles of science could be, in some aspects, a limit to its own evolution, and to the development of other types of knowledge, becomes clear from the experience and reflexive account of those who recognize themselves as "outsiders within": as women excluded, but—as scientists—part of science at the same time.

That specific situated critical perspective for revisiting science is very clear in a biographical paragraph from Fox Keller, when reflecting on her own career, going from a physician who "believed not only in the possibility of clear and certain knowledge of the world, but also in the uniquely privileged position of access to that knowledge provided by science" (1992: 21), to a feminist philosopher of science who pointed out that "perhaps the most important limitation to the success for women in science derived from the pervasive belief in the intrinsic masculinity of the scientific thought." (1992: 23). That second idea, Fox Keller explains, was impossible from her original physician's worldview: "From my earlier vantage point, they were unthinkable. In that mind-set, there was room neither for a distinction between sexual identity and beliefs about sexual identity [...], nor for the possibility that beliefs could affect science" (1992: 24). The passage from a practitioner to a critical observer of science was the result of an immersion in feminist theory. However, her feminist interest also emerged from the specific experience of being a woman in a particular social, economic, ideological and historically determined scientific environment.

Such a line of argument, in addition, opens a radical question to the scientific institution (in the broadest sense of the word): if androcentric biases exist in the epistemological and methodological base of science, is it women who should adapt to scientific norms, or is it science that should be submitted to a gender mainstreaming process?

⁴ The philosopher of science Gaston Bachelard (1888-1962) proposed the term "epistemological obstacle" to describe the instincts, cultural inertia, intellectual habits and other pitfalls that impede objective knowledge to progress. As a result of his investigations into the psychoanalysis of scientific knowledge, he affirmed scientists should experiment with an intellectual and affective catharsis. Only in this way a real reform of scientific understanding would be possible, and make science open to the arrival of new understandings and previously unthinkable interpretations.

That is a radical critical path for reflecting on women scientists' status and their low level of representation in specific "hard" disciplines. Inspired by the views of liberal feminists, most public initiatives aiming at promoting gender balances in science have concentrated on finding practical arrangements to facilitate women's incorporation into university departments and research institutions. The policy of gender quotas in public institutions illustrates that type of practices. Other political actions concentrate on encouraging young women to take up scientific careers. Although those sorts of initiatives are necessary for fighting gender imbalances in science, they have proved to be insufficient if applied alone. The important issue is that women's access to science is disappointing when androcentric biases in scientific institutions are not transformed. As the authors of the European Commission ETAN report put it, "in the name of equal treatment, women tend to be treated the same as men, rather than equal to them. This may sound pedantic! The crucial point is that men are taken as the norm: women are expected to behave like them and to have the same characteristics and life pattern" (Osborn et al., 2000: 24). As far as science is considered genderless, science itself is not questioned as a possible explanation of the problem. Feminist critics of modern science that show the central role played by gendered male norms in the modern scientific method indicate women may adapt to a male scientific patron if they aim for a successful scientific career.

On the other hand, the assertion that science is gender biased opens a second radical question: if science is male-centred, should we expect a kind of female-centred science to exist? Moreover, should the access of women to research automatically lead to a change in the practice of science?

Some authors argue that the existence of (human) qualities traditionally assigned to femininity could potentially—but not necessarily—lead to new and alternative approaches to science. The specificity of that approach is that it does not only recognize feminists as potential sources for the exploration of knowledge. At the same time, it does not suggest women *per se* bring a new and alternative view of society. However, it recognizes female gendered qualities (that do not belong exclusively to women, but which women tend to have) constitute a specific standpoint and value-system. Therefore, they are seen as sources for the innovation of science, and not as a kind of female or feminist-centred scientific elaboration.

Fox Keller's analysis of the life and work of the cytogeneticist Barbara McClintock illustrates the thesis that "different" metaphors may open new explorative paths for the advancement of science. According to Fox Keller, McClintock looked further

from her scientific convictions, and that was fundamental to her successful career as a scientist:

That there are valid ways of knowing other than those conventionally exposed by science is a conviction of longstanding for McClintock. It derives from a lifetime of experiences that science tells us little about, experiences that she herself could no more set aside than she could discard the anomalous pattern on a single kernel of the corn. Perhaps it is this fidelity to her own experience that allows her to be more open than most other scientists about her unconventional beliefs. (Fox Keller, 1983: 203)

In addition to such an open-minded attitude, she had a vision of science premised on "feeling for the organism" instead of "dominating nature"—on which modern science is founded. She considered herself as an observer of nature's "capacities" and not a searcher of nature's laws. Fox Keller argues that this assumption led McClintock to dissident observations that brought new conclusions to science: while mainstream science had considered the same observations and conclusions as mistakes or errors, McClintock's approach led to the discovery of the instability of genes (Fox Keller, 1983).

Observations from authors in the field of environmental management have lead them to consider that gendered views, values and experiences could involve (some) female researchers and practitioners bringing alternatives to business as usual issues, scientific frameworks and methodologies.

In a qualitative study that compared diverse Local Agenda 21 (LA21) processes in Australia, in which gender-related patterns were reported, the authors concluded that female planners were giving priority to social integration and participation. They aimed at strengthening the political commitment with the community, valued equal participation, and developed tools for getting close to local interests. By contrast, male planners emphasized the technical dimension. They focused on developing strategies for particular environmental problems (e.g. bush conservation or water management), addressed big picture issues (e.g. greenhouse effects, biodiversity) and during consultation processes gave priority to the knowledge of experts (Buckingham-Hatfield and Matthews, 1999).

Similarly, a study exploring gender differences among physical geography scientists concluded that:

Women described themselves as integrative, well-rounded and integrative researchers. Men described themselves as scientists, logical, applied, philosophical, and reflective. Thought important to men and women, a significantly higher proportion of women considered the interdisciplinary nature of physical geography research a factor attracting them to the field. (Luzzadder-Beach and Macfarlane, 2000: 421)

The cases explored point to the relevance of considering a gender balance in the expertise involved in governance processes and participatory activities in more detail. In addition, even if the presence of women does not guarantee gender is addressed, it is a basic step to set up the environment for a gender approach. The equitable presence of women and men throughout the hierarchical positions in the organization and management of a participatory process may favour the acceptance of introducing a gender perspective to the development of the process, and may also empower women participating as stakeholders and citizens.

9.7.2. Epistemological contributions: interdisciplinarity and responsible science

While to involve women on an equal basis to men in the expert team engaged in the participatory process may facilitate alternative perspectives to knowledge involved in a participatory process, there is also the need to implement the epistemological basis that makes it possible to recognize and empower diverse perspectives and the emergence of a gender approach.

Schiebinger (1997) has developed the concept of "sustainable science" to describe the need to recognize the interdependency of scientific discourses and the different and complementary epistemological approaches to science. The author has conceived that concept as a way to term responsible and environmentally grounded science, inspired by feminist contributions to the science debate:

My notion of sustainable science reassembles other new directions in feminist science theory, such as Donna Haraway's "situated knowledge", Sandra Harding's "strong objectivity", and Carol Merchant's "partnership ethic". One element common to these various initiatives is emphasizing gender as one analytic among many required for creating socially and environmentally responsible science. (Schiebinger, 1997: 211).

Like Schiebinger, feminist scientists consider the present situation of science to be artificial: the highly specialized scientific map in which the "hard" sciences—that more accurately reproduce the male stereotype—are seen as the more robust approach to reality, and in which each specific discipline, guided by the ideal of specialization, addresses clearly marked aspects of reality.

The problem is not only the gender bias implicit in the scientific tradition, but that the inter-communication among disciplines of the so-called "hard" and "soft" sciences has lead to serious difficulties in approaching the multiple dimensions that form part of real-life problems. In addition, apart from formal deontological questions, such a reductionist view of knowledge has excluded "hard" disciplines from ethical considerations.

There is a need for a fundamental change in the scientific approach, including the use of a diversity of research subjects and a move from the dominant research questions. To achieve sustainable science, the studies called for interdisciplinarity and transdiciplinarity research and methods aimed at unifying natural, technological and social sciences. Sustainable science requires recognition of socio-economic elements to provide entry-points for the identification of gender impacts. (Laurila and Young, 2001: 13)

From that perspective, the contribution of feminism to science—and environmental science is a promising example—is not only to point to the need for gender equality in the production of science. Feminism itself asks for science that recognizes the complexity of problems, the need for communication among disciplines, the relevance of the profound links with society, the impact on everyday life, and that it embraces equality and responsibility.

One might argue that feminism has to do only with women's equality and that once that is achieved the problem is solved. Most feminists, however, would disagree. Feminists are rarely advocating only for women. What in the past has been advanced as "feminist science" offers strong elements of environmentalism and humanitarianism that have little to do with women's equality *per se*. (Schiebinger, 1997: 212)

As an example, table 9.3 summarizes the approach taken in the gender impact assessment of the European Commission's Fifth Framework Programmes,

particularly in the Sub-programme on Environment and Sustainable Development. The assessment has taken Schiebinger's notion of sustainable science as a basic approach.

Table 9.3. Consideration of gender in the "Gender Impact Assessment of the specific programmes of the Fifth Framework Programme of the EC"

Definition:

"A true integration of gender into research would profoundly affect the way in which scientific knowledge is *defined*, *valued* and *produced*, the *methodologies that are invoked*, and the *theoretical reflections to which such new modes of knowledge give rise*" (Laurila and K. Young, 2001, emphasis added).

Indicators used for assessing the Sub-programme on Environment and Sustainable Development:

- Women's participation.
- Understanding of gender issues.
- Inclusion of women's issues and needs in the research agendas.
- Recognition of gender impacts together with risk impact and ethical issues of sustainability.
- Positive consideration of interdisciplinary and trans-disciplinary methods.
- Attention to the scientific, political and ethical dimensions of sustainable development.
- Inclusion of women's role as changing agents.

Source: Author's summary from Gender in Research. Gender Impact Assessment of the specific programmes of the Fifth Framework Programme (Laurila and K. Young, 2001).

The example shows that the contributions of a feminist perspective to environment-related research are to assess (1) the scientific framing of the problem, (2) the definition, collection and analysis of relevant data, and (3) the epistemological and methodological roots of the research. Specifically, the assessment methodology considered as evaluation criteria multidisciplinarity, the participation of social scientists in research teams, the integration of socioeconomic dimensions in the research approach, and the inclusion of a variety of actors and users. All these aspects were considered as fundamental for a complex, multi-sectorial and responsible scientific approach, basic elements for the mainstreaming of gender in environment-related research.

Finally, feminists ask who produces scientific knowledge and for whom. In so doing, they introduce key methodological aspects in the research activity: the interest implicit in the establishment of research questions, in the framing of problems, and in the decisions about the analytical tools used and the data collection samples.

Key questions include: Science for whom? How is our knowledge influenced by who is included in science and who is excluded, which projects are pursued and which ignored, whose experiences are validated and whose are not, and who stands to gain in terms of wealth or well-being and who does not? And for how long? It is precisely in the choice of questions, in the priorities set for science, that much is determined. The questions we pose often determine the kinds of solutions we determine (Schiebinger, 1997: 212).

9.7.3. Gender studies on the environment: empowering women and enhancing communication between science and society

Along with feminist epistemological reflections come methodological innovations, through which we can distinguish practical contributions to the gender perspective on the environment.

The emphasis gender studies places on "difference"—understood as determined by gender, sexual orientation, class, race, ethnicity, occupation, family composition, and so on—is a very particular outlook for society, which has been largely ignored by science, including the social sciences. In feminist thinking, the recognition of such diversity affects the subjects of study, as well as the subjectivity of the knower. That point is fundamental to recognize the political embedment of the research activity. It also makes diversity among citizens more visible.

In addition, gender perspectives on social sciences, particularly in the field of geography, have shown the relevance of the micro-scale, with intense relations between the global and local. For instance, using the gender perspective applied to the study of scale interactions, Massey challenges traditional notions of place, with a conception in which diversity, social relations and subjectivities are given priority.

The uniqueness of a place, or a locality, in other words is constructed out of particular interactions and mutual articulations of social relations, experiences and understandings, in a situation of co-presence, but where a large proportion of those

relations, experiences and understandings are actually constructed on a far larger scale than what we happen to define for that moment as the place itself, whether that be a street, a region or a continent. Instead then, of thinking of places as areas with boundaries around, they can be imagined as articulated moments in networks of social relations and understandings. And this in turn allows a sense of place which is extraverted, which includes a consciousness of its links with the wider world, which integrates in a positive way the global and the local. (Massey, 1993: 66)

In this way, the methodological orientation of gender studies leads to a specific outlook on environmental problems and their impacts on people. The specific contribution of gender studies is to reduce the concept of scale, from the community to the home, the subject and the body. For feminist geographers, the body, understood in a physical sense, is the place of the subject's identity, dynamically constructed in connection with an abstract scale of social norms and power relations. It is therefore that inter-scale relation that explains values, interests, social roles and experiences projected towards the environment.

That methodology brings an approach to environmental knowledge, relevant for women's empowerment, but also for the diversity of citizens that may be engaged in the environmental debate. In this way, gender perspectives offer a promising and explorative source for the development of mechanisms for stimulating the communication between science and society.

As I already argued in a previous section, it has been said that the environmental crisis calls for new solving-strategy methods in which science engages with the public in a discussion about the definition of problems and the search for solutions. Cases of incomprehension between technical and cultural rationalities illustrate the need for communication between science and society. As Fischer puts it:

Cultural rationality and its emphasis on case-specific social processes is not only fundamental to citizen decision-making but also the essence of rationality of certain types of decisions, especially those involving scientific and social uncertainty. Such rationality in this view has to become a part of risk assessment. Thus the challenge ahead is not just more science but rather how to better understand the interactions between science and ideological belief systems—technical facts and cultural values—and most importantly how to integrate them in a more comprehensive analysis. (2005: 88; emphasis added)

In this sense, gender perspectives on environmental issues—which traditionally have been received a techno-scientific approach—offer three promising contributions:

- (1) firstly, they allow the production of knowledge to support perspectives traditionally not considered to be scientific knowledge;
- (2) secondly, they place emphasis on the diversity of interests and views among citizens, and allow them to be identified;
- (3) and finally, and as a consequence of the previous contributions, when they produce knowledge about the environment, they stimulate the debate between science and society by introducing interests that emphasize the everyday and connect with people's concerns.

An example of that contribution is provided by Roehr's gender study of the energy sector in Germany. The author combines the search for gender equality with sustainability as basic principles of the study. The table includes some major findings, which systematize the specific effects of sustainable energy policies on populations considered to be diverse, by discriminating according to gender and lifestyles. They indicate that single parents and elderly women are major and minor energy consumers respectively, and the author points to socio-economic gender-linked reasons to explain this pattern. She also finds a female-sensitive strategy in relation to the energy cost system is necessary, and proposes women as "experts" and target groups for the development of energy-related policies oriented towards the household.

Table 9.4. Example of the contribution of gender studies to energy-related politics: "Gender and Energy. A Perspective from the North" (Roehr, 2001)

An analysis of the German energy sector showed gender as a very significant variable for interpreting patterns of consumption. In particular, single parents (of which 90% are women) were found to consume more energy than other social groups. Their daily household and professional responsibilities hampered the adoption of saving attitudes. In addition, single parents were a social group suffering from economic deprivations, which could be aggravated by environmental strategies pushing the energy cost system. By contrast, elderly women were found to be low energy consumers. Their traditional gender values and their economic limitations helped explain this tendency. Such gender behavioural patterns call for political programmes that handle the over-consumption of single parents without burdening their financial constraints. At the same time, they may reward the saving behaviour of elderly women by having a positive impact on their low

incomes.

Besides, women continue to have the chief responsibility for everyday caring and household work. Political programmes that promote saving attitudes in water and electricity consumption, inform citizens about food quality labelling, or perform garbage collection, and so on. might consider women as a main target. Moreover, women are social agents in educating family members about day-to-day behaviour. The design of policies may involve gender expertise. Programmes may also consider their potential influence for fighting gender inequalities in the distribution of domestic work.

Source: authors' summary from the information provided by Roehr (2001).

The example shows that a gender perspective can: (a) show a social reading of a traditional "hard" sector such as energy, (b) demonstrate the social impacts of energy politics, (c) illustrate the interest and way to introduce an approach to difference in the study of population, (d) address multiple sectors and recognize social actors involved in the energy issue—which otherwise would be ignored—, and (e) make the relevance of gender equality and the complexity of gender mainstreaming in the energy sector more visible.

SUMMARY OF CHAPTER 9

Chapter 9 focused the theoretical discussion on environmental participatory decision-making and guided the discussion developed in the previous chapter towards the elaboration of practical proposals in order to introduce a gender perspective in environmental governance processes.

The chapter started by highlighting the potential of Habermas' deliberative democracy to create the context for the introduction of a gender perspective in participatory decision-making. A key opportunity is through discursive democracy, in which the rules of environmental management and even political participation itself are open to deliberation, which allows those gendered biases in political "business as usual" situations of environmental decision-making to be open to revision. Moreover, in practical terms, the involvement of a diversity of actors enables it to address the interests and perspectives of subjects in relation to concrete issues.

Afterwards, I explored in-depth the opportunities and challenges of Postnormal science as a specific perspective that focuses on the idea of deliberative democracy in the case of environmental issues. Post-normal science is applied to decision-making problems characterized by complexity (multiple and diverse factors are involved) and scientific uncertainty, which includes ethical and epistemological uncertainties. I described how in this context there is a transition from decision-making processes guided by scientific facts to processes in which value-discussions take centre stage.

Because values play a fundamental role in the discussion, the legitimacy of non-scientific perspectives increases. Post-normal science authors state that in this context scientific experts become one more actor in the discussion process, and the scientific framework of the problem is open to negotiation. Different case studies are cited in order to demonstrate that this brings the opportunity to change power relations, which is a strategic scenario for the introduction of a gender approach. In this way, Post-normal science's insistence on the relevance of different values enables us to explore the notion of situated knowledge discussed in chapter 8 in practice.

However, I argued that Post-normal science does not pay attention to the role played by legitimacy imbalances and power relations in deliberation processes. In concrete, the idea that participation is "open" to "those affected" does not fully help us to consider traditionally underrepresented views on the environment because diverse values do not always hold the same social legitimacy and power status, and even traditionally unrepresented perspectives could not "naturally" emerge as they had not been considered to be "interested participants" in the environmental debate before.

In gender terms, the unequal legitimacy status of values is associated with masculine and feminine stereotypes and ethno-androcentric dualisms. The confrontation of a technical versus a cultural rationality discussed by environmental sociology illustrates this situation. Indeed, epidemiological studies have demonstrated practical cases in which women support cultural rationality, and the legitimacy problems they have encountered when faced with the technical rationality represented by the government or official scientists. In this context, it is relevant to observe the differences between these two rationalities, which are related to the definition and framing of problems, the prioritization of cognitive stands and risk perception and standards of proof necessary for taking decisions. The confrontation of these two rationalities has also been related to the gendered biases described in chapter 3, and to the analysis of the Catalan case studies. In a participatory environment in which power and legitimacy imbalances between these two rationalities are addressed, the discussion is easily biased by the authority effect produced by the social legitimacy of the technical rationality.

Problem definition is also critical to the establishment of legitimate perspectives and it frames who will dominate the discussion. The traditional stronger position of technical rationality has implicitly manipulated the demands of knowledge. As a consequence, the production of knowledge also allows that the perspective of technical rationality to dominate the discussion.

These reflections served to introduce a gender perspective into environmental participatory processes in the second part of the chapter.

First of all, I highlighted the need to consider "inclusive" instead of "open" participation, which involves combining gender balance in the participation process with mechanisms to transform gender imbalances in power relations and legitimacy.

Second, in relation to the organization of the participation process, the following should be considered:

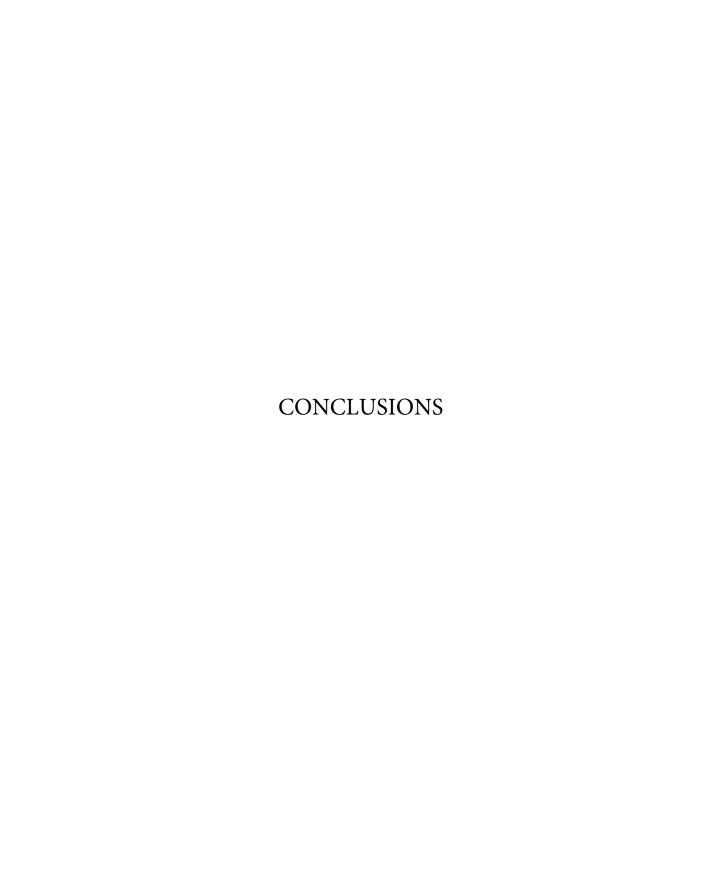
- Gender balance in the involvement of participants.
- The open consideration of gender power imbalances before the environmental discussion starts.
- Giving the opportunity for the participants to establish the definition of the problem, considering different types of discussion groups, as we expect different results from different types of group (e.g. female discussions groups and small groups with a different sociological composition in terms of gender and other variables such as age, education, ethnicity, professional background, etc.). Because power imbalances are also related to the implicit androcentric norms of public discussion that establishes as more legitimate the stereotyped male speaking and rhetorical styles, the attention to the gender composition and the types of discussion groups also marks the dynamics of the debate.

Finally, the last part of the chapter focused on reflecting on the key role played by expert knowledge in order to fight gendered power imbalances. Proposals were focused on:

- The selection of experts participating in informing the debate. According to feminist perspectives on knowledge, the specific gendered experience of women "could" bring alternative expert interpretations to environmental problems.
- To consider interdisciplinarity and responsible science as being fundamental knowledge for informing the debate. I argued that the integration of a gender perspective in environmental participatory decision-making calls for an approach to science that recognizes the complexity of problems, the need for communication among

disciplines, the impacts of environmental problems on society and everyday life, and also embraces equality and responsibility. This is critical because the epistemological basis of knowledge informing the discussion determines the scientific framing of problems and the definition, collection and analysis of data.

- Last but not least, I pointed to integrating knowledge from gender studies on environmental issues into the debate, because it brings alternative topics of discussion and alternative methodological orientations. Gender studies on the environment may empower interests represented by cultural rationality and are also instrumental in enhancing communication between science and society.



10. Final conclusions

The final conclusions are organized into two parts.

In 10.1 I set out a brief summary of the contents of each chapter. I leave aside empirical findings and theoretical discussions that can be read in every chapter, and I focus on systematizing the main contributions of the thesis.

In part 10.2 I work out a practical proposal about how to introduce a gender perspective in environmental governance. Under the umbrella of the broad concept of "gender mainstreaming", I systematize a comprehensive application of the research findings in order to introduce a gender approach in participatory processes dealing with environmental issues.

10.1 Summary of conclusions of parts I, II and III

The thesis has been organized in three parts. The first one consists of chapters 1 and 2, and is an introduction to the main theoretical backgrounds of the study. Part II, chapters 3, 4, 5 and 6, is the empirical elaboration of the study. Finally, part III, made up of chapters 7, 8 and 9, focuses on a theoretical discussion of the empirical findings.

Because the two main issues that are brought together in this study—gender and environmental governance—are of a very different nature, in the introductory chapter each issue is approached separately. Afterwards, connections between them are set out.

Chapter 1 focuses on the theoretical background to gender studies. It sets out the fundamental elements of gender theory and refers to gender contributions to an analysis of the environment.

Regarding gender theory, the discussion starts by pointing to the relevant role played by "nature" in determining a supposed female identity. Basically we have explored the arguments of Enlightenment authors that reveal how "nature" has been a powerful argument to establish the social assignation, role and "virtues" of femininity, which, in addition, determines an inferior social status of women. The discussion of Enlightenment authors is fundamental to conceptualizing the power relations up to the present.

Afterwards, Chapter 1 focuses on the key idea of "gender", and discusses the use of it in contrast to "sex". This is a basic epistemological reflection that sets out the theoretical basis of the thesis. In the study I refer to sex as a biological quality of women and men. Gender, on the other hand, is a social and cultural understanding of femininity and masculinity. Moreover, as far as any social representation is biased by a specific culture, our understanding of the biological roots of women and men—sex—is also to some extent biased by our comprehension of genders. This leads us to think of sex not only as an objective concept, but also as something that presents social, cultural and historical variations.

In the first chapter I also refer to gender as "power relations". "Ethnoandrocentrism" is a concept used in gender theory to refer to a social hierarchical order that determines power relations in terms of gender and ethnicity. Ethnoandrocentrism evokes the figure of an ideal and stereotyped white male pattern, which draws the borders between normality and difference in society. The white male patron also works as a reference to identify positively or differentiate negatively other social groups. Therefore, according to gender theory, power relations between genders are structured according to such an ethno-androcentric hierarchy, for which women and non-white women and men have a prior inferior status in social relations. Such a basic theoretical structure is a point of departure for empirical analysis, which has to be tested and nuanced by research findings.

Chapter 1 also sets out ecofeminist theory, and points to the constructivist branch of ecofeminism as the theoretical reference of this study. The basic contribution of this approach is a hypothesis of the study, which is that the specific life experiences of women—which in social and cultural terms are different from men's—may lead them to have specific perspectives on and interests in the environment. In addition, the study also considers that these different perceptions may not be the result of the biological characteristics of women (as cultural ecofeminism does), but of gender, in other words the social and cultural projections about femininity and masculinity and the part they play in determining the life of real women and men.

Finally, in the last section, the main contributions from gender studies on the environment are set out and systematized. They are necessary to set out the diversity of approaches of gender studies on the environment, pointing to the ones that are most relevant to the present research. Specifically, the section includes a brief summary of the following areas: women and sustainable urban planning and mobility; women, consumption and health; women, contamination and security; women's participation in environment-related grassroots movements; gender,

climate change and energy; gender and landscape; women and sustainable development; and women and global environmental governance.

Chapter 2 deals with the second issue that is fundamental to the thesis: environmental governance. This leads us to consider both governance and environmental management separately.

The first part of the chapter focuses on governance. I set out the ambiguity of the concept of governance and the diverse ideological goals attached to it. Governance often describes a new model of governing that transforms traditional power balances, responsibilities and mechanisms to influence the decision-making process. However, critical voices also warn us that it can be used instrumentally under very different ideological guises. Therefore, we cannot think of governance in terms of ideological neutrality. Rather, it is a conceptual umbrella that opens political decision-making to a broad social dialogue. The extent to which such a dialogue is really transforming power balances and responsibilities and really involving a wide commitment of the social, economic and political actors involved can vary enormously.

In the context of environmental politics, the discourse of governance has been very closely linked to the idea of "sustainable development". Therefore, when we refer to environmental governance, we are dealing with the goals of sustainable development. It is in this sense that in chapter 2 I also focus on demonstrating that "sustainable development" has more of a political than a technical meaning. I argue that in the context of the global environmental problem, which involved a crisis of the whole Western model of economic growth, sustainable development worked as a global remedy. However, far from being a scientific or technical proposal, it is also a conceptual umbrella under which many different ideological projects fit, each one with its specific scientific and technical solutions.

Environmental governance, therefore, takes the meaning of both concepts. It refers to political decision-making open to public involvement, and also to a project for future development of the environment. Yet the content of environmental governance has to be filled out and depends to a large extent on the orientation given by the political, social and economic actors that may be engaged in it.

Finally, chapter 2 explores real examples of global environmental governance, pointing to the contributions of women's groups to international politics on the environment and to the case of Agenda 21 as a practical example in which gender has been addressed.

A form of feminism with an internationalist orientation became consolidated and played a fundamental role in lobbying inter-governmental agendas, also in the field of the environment (Prülg and Meyer, 1999). Women's groups saw governance as the way to empower women on a local scale, and that vision has also been included in United Nations recommendations for development and environmental policies. However, dissatisfaction can be seen in the assessment of international environmental politics made by women's groups and other civil society stakeholders.

Thanks to the contribution of women's groups to the Rio de Janeiro Summit, the UN framework document of Agenda 21 includes recommendations to address gender and women's interests in environmental decision-making. However, a detailed analysis of Local Agenda 21 in Europe and for the case of Catalonia demonstrates that in practice a gender perspective continues to be largely ignored in environmental politics.

Newman argues that generally speaking governance theory has tended to have a "thin" conception of the "social", considered to be "otherness' to the state and economy, as an entity to be governed, a resource to be mobilised or the site of social reproduction" (2005: 1). That conception has prevented a more fine-grained analysis of the social dimensions of governance.

Due to that situation, governance theory has remained relatively immune to a theoretical analysis from a gender perspective. However, as Newman (2005) puts it, governance is relevant to gender politics for at least the following reasons:

- Firstly, because governance transfers decision-making responsibilities from governmental authorities to public agents, such as civil society organizations, in which women's interests are much better represented.
- Secondly, because it recognizes the possibility of engaging in politics from outside formal institutions, where most women participate: "It recognises that processes of government take place in and through families, workplaces, communities, schools and other sites beyond the domain of institutional politics" (2005: 81).
- And thirdly, because the transformation of power relations and the agency of subjects and groups are not necessarily involving a reconfiguration of traditional gendered relations in political environments. On the contrary, if an equal opportunities view is absent, they tend to reconstruct forms of exclusion on the grounds of gender, race or class that are common in dominant traditional political environments.

According to Font (2003), in practice participation processes are mainly considered necessary for instrumental reasons. Local authorities view participation as a way to overcome situations of political dissatisfaction, while from the point of view of citizens participation may be a strategy to make their voice heard. All these strategic views bias participation processes in specific ways, and such influence may be stronger if participants are affected.

That instrumental description is enriched by Newman, who argues that in the practice of participatory processes identities are not fixed, but reconfigured and negotiated as instruments for legitimizing agency: the worker, the environmentalist, the businessmen, the farmer, the citizen, and so on. Each identity helps in recognizing potential actors included in governance practices, in other words "affected" participants are the result of a negotiation process.

Often participation processes assume that gender is meaningless to the deliberation process. Nevertheless, gender is a transversal category that cuts across all potential identities, and imprints specificities on each of them. At the same time, to consider "women" as a single and independent group in governance practices could also be problematic, as the diversity of experiences under the label "woman" may be obscured.

The relevance of gender in participatory processes is not only for reasons of social justice. The hypothesis that gender biases men's and women's interests and perceptions on the environment indicates women—as social actors—and gender studies—as knowledge informing deliberation processes—are "significant" for the participatory process. Otherwise those processes may be androcentric.

Departing from the concern of demonstrating this assertion, the second part of this study, which is the empirical elaboration of the research, has focused on the "content" of a gender approach to environmental decision-making in two senses:

- 1. By analyzing three cases of environment-related grassroots movements, to work out the activists' interests, values and expectations regarding the environment and politics that can be considered as shaped by gender (chapters 3 to 5), and;
- 2. By analyzing power relations between men and women engaged in the grassroots movements, to extrapolate aspects that may be relevant for participatory processes (chapter 6).

In chapter 3, women's concerns and perspectives on the environment have been systematized by exploring results from large statistical studies and data from North America, Europe and Spain.

Generally speaking, results from North American studies point out that women have a stronger concern for the environment, particularly in the case of local environmental problems. Gender is also relevant to interpret different tendencies in men and women's opinions regarding the prioritization and the framing of problems and the perception of risks.

Studies based on North American statistics about women and men's opinions on the environment have also explored diverse hypothesis to explain the differences women and men show. Overall, the hypothesis with the strongest support indicates "caring", considered as a gender ideology rather than as a mere female role as mother, is at the basis of women's concerns for health and safety in relation to environmental problems. We may establish relations between that finding and the one from other successful studies pointing out that women tend to hold altruistic values more often than men. In contrast, it is relevant to point out that neither the mother nor the homemaker status of women, nor the low technical and scientific education that women tend to have, have been shown to explain women's concerns for the environment.

Finally, power inequalities have managed to explain gender differences in environmental concerns, particularly for the case of the "white male effect", in which gender and ethnicity have been used as variables of analysis. According to that approach, North American white males are the social group with lower perceptions of risk related to technological and environmental issues. The authors of that finding explain it by pointing to the power status that group has in society, which would prevent them from critically assessing the negative consequences of current growth trends. In relation to that finding, some studies point out that women tend to show a lower level of confidence in formal institutions, such as the government and scientific and technological institutions. This is also proposed as an explanation of women's higher risk perception rates.

The analysis of statistical results from polls of European and Spanish populations has allowed us to draw some basic elements of gender differences in environmental concerns and risk perception, and to establish some comparisons with the American case. In the case of the European data, results indicate that differences between men and women's opinions are not radical. Nevertheless, I have proposed distinguishing two biases in the opinions of the European population: one that would be more in favour of scientific and economic development, and another that would be more concerned with ethical and social aspects. Such different basic stands lead to a lesser and greater concern, respectively, for environmental problems. Men tend to be more biased by the former, and women by the latter.

Finally, data from the European statistics and also from a Spanish poll on science and technology perceptions have been explored to draw some interpretations about the gender tendencies of the two biases observed. One of the hypotheses considered has been women's lower level of interest in technological and scientific information, and also their limited knowledge of it. In this sense, it is relevant to point out that even though women show a rather low level of interest in scientific and technological information, and hence obtain lower marks than men in scientific quizzes, they claim to be very interested in information related to medicine, health, food and consumption. They also claim to use science in practical aspects like patient information leaflets or food product labels. After exploring this issue more deeply, I have proposed considering the existence of a gender bias in the production of scientific information, in the sense that the everyday life interests of women (and of much of the general public) tends to be hardly addressed by scientific information, or it is not communicated properly. That same argument has been used to oppose the idea that the scant interest in and the lack of knowledge about technological and scientific issues explains the concerns of people holding a social and ethical stand towards environmental problems. Alternatively, we may consider that mainstream information on the environment is produced far from the personal and daily life interests of most people, which is a real handicap for ensuring a fair and quality debate on environmental issues.

Last but not least, other results from European statistics suggest that women's strong religious, philosophical and social motivations should be explored further in order to identify the role they may play in shaping the values that lead women more often to support a social and ethical stand on environmental issues.

Throughout chapters 4 to 5, the relevance of gender to explain people's interest in, concern for and perspectives on the environment has been explored further by presenting results from qualitative analysis undertaken by the author. In this case, we have focused on the opinions of activists from three environmental grassroots movements taking place in Catalonia (Spain).

The qualitative orientation of the empirical research, the differences among the fights of the three grassroots movements considered, and the total numbers of activists interviewed (108) indicate that this is not statistically-based analysis. Rather, the objective is to explore women's interests in the conflicts and the environment in-depth, and to establish comparisons with the interests of their male counterparts.

The analytical perspective has used the argument discussed in chapter 1 about the problems of considering "woman" as a universal category. Therefore, while gender differences between men and women have been given priority, to stress the differences among women themselves has been also relevant. As a consequence, as much effort has been placed on acknowledging common features of women's views and interests, as well as demonstrating that women show open and complex identities and that simplistic and deterministic approaches to female views should be avoided.

In order to study the significance of gender in the opinions of the activists, I have proposed distinguishing between life experience-based versus ideology-based arguments for campaigning. In a grassroots movement with life experience-based arguments, personal and collective negative experiences concerning local environmental issues are the motivation for mobilizing citizens. By contrast, in the case of grassroots movements in which ideological arguments prevail, activists are much more motivated by political and ideological perspectives: an ideal of development model that they would like for the region and for which they fight for.

From the three cases observed, case 1 (Coordinadora Antilínia de les Gavarres) can be clearly seen as a life experience grassroots movement, while case 3 (Salvem les Valls) seems to be an ideological one. Interestingly, case 2 (Salvem l'Empordà) has included elements from the two types of arguments: the movement started with political and ideological perspectives about the region's development, but very soon took up and integrated the interests of people who did not have an ideological project but were concerned about the environmental degradation they were experiencing in their everyday life.

To distinguish between life experience and ideological reasons for mobilization has been relevant for interpreting the results of the study because it allows us to explain different gender tendencies. At the same time, the tendencies observed have been connected with the sociological profile shown by women in each type of movement.

All in all, results indicate that the grassroots movements that include life experience reasons for campaigning (cases 1 and 2) are more appealing to women. In the case of the grassroots movement showing an ideological orientation (case 3), there were fever women involved and they also appeared to be younger and better educated.

In addition, in cases 1 and 2 women identify more with life experience-based reasons for campaigning or having environmental concerns in general than their

male counterparts. By contrast, in case 3 it is women more than men who give more importance to ideological arguments.

A further exploration of cases 1 and 2 also indicated that women express a strong concern for social issues related to environmental problems and that they often frame and argue their concerns through their gendered roles and experiences. In particular, health and quality of life have proved to significantly motivate female activism.

Case 1 has offered us a detailed exploration of women's concerns for health, as that was a fundamental reason for the grassroots movement to oppose the construction of the high tension power line. Women's testimonies demonstrate that their concern is shaped by their experience as family carers, and that they extend it to the whole community, for instance when informing people from other areas crossed by a high tension power line.

The quality of life argument has been explored in-depth, as it is connected to other arguments often expressed by women from the two organizations. Firstly, women express their concern for the loss of a landscape considered both as a historical memory to which they identify personal and familiar experiences and currently as a fundamental element of the everyday life of them and their family. Secondly, women also think of the environment as a legacy left to future generations, which are identified in their sons and daughters and nieces and nephews, and their future opportunities and quality of life. As I argued, such a line of argument rather differs from the abstract idea of "generation" used in official definitions of sustainable development (such as the Brundtland Report) and gives a specific social meaning and strong local and everyday life roots to the idea of sustainability.

In contrast to the analysis provided in cases 1 and 2, case 3 has helped to stress the diversity of women's opinions and to relate it to their social profiles. In cases 1 and 2, women reveal more common opinions. Despite having relevant differences in their educational and professional profiles, they are of a similar age. Their gender assignments are interpreted as the elements that bias their interests in the environment. In case 3, however, women are young and highly educated. Their strong support for ideological reasons for campaigning is explained because their gender assignments are weaker. Complementary, their high education explains their support for ideological arguments.

Yet the similarity found in the opinions of women and men in case 3 does not necessarily indicate that the organization is gender equal. On the contrary, the low representation of women in this organization, as well as their youth and high level

of education and their preference for ideological reasons for campaigning point to women having strongly adopted the androcentric values that traditionally dominate public spheres.

The empirical analysis was also concerned with men and women's interests in environmental issues generally, i.e. not related to the grassroots movement's reason for campaigning. Although the sample considered for analysis does not allow us to draw final conclusions, results indicate the possibility that men often point to concerns that are expressed in abstract and scientific terminology ("contamination", "biodiversity" or "climate change", for example), while women tend to point to environmental problems expressed in concepts that are linked to social and local issues (e.g. women point to worries about "the destruction of nature" and "the fact that there are ever more urban and less natural areas").

Finally, according to the opinions of the grassroots activists, we may conclude that gender roles and responsibilities in household activities allow women and men to take on different environment-friendly attitudes in their everyday life. Women are more often responsible for shopping, which explains their strong role and interest in consumption, particularly food consumption. By contrast, men more often take decisions on resources and technological equipment. They are also more interested in sustainable technologies, such as solar energy. Significantly, if the activists express which environment-friendly attitude they would be more likely to assume, women point to buying environment-friendly products, while men indicate installing solar energy and other sustainable technologies at home.

As long as the loss of confidence in traditional decision-making processes has been identified as one of the fundamental handicaps to manage environmental conflicts politically and find solutions to them (Nel·lo, 2003), and because comprehensive statistical analysis tends to indicate that women have less confidence in political and scientific authorities (see chapter 3), chapter 5 has explored whether gender is relevant to the level of confidence shown by the activists from the three grassroots organizations. Case 1, in which scientific uncertainty has played a fundamental role in the conflict, has been used to explore the issue further.

Grassroots movements tend to publicly declare that they are apolitical, a strategy to attract new activists to improve their popular acceptance. Nevertheless, they are extremely linked to politics, as much as they use political means to express their concerns, and as much as they implicitly defend an ideological project for the territory they fight for. Indeed, the reason for which grassroots movements like to present themselves as apolitical movements is related to the profound dissatisfaction with official politics. A loss of confidence that increases because of

the role political parties play in the environmental conflicts the grassroots movements are engaged in. Similarly, the representatives of the grassroots movements also express a strong negative view of participatory processes considered as mere strategies to maintain business as usual interests.

Within that general critical scenario, if we consider the opinion of the activists about politics, very few gender tendencies can be observed. Political discontent affects both men and women in similar numbers. Yet, although some differences among the grassroots movements could be observed, results indicate that women may more easily lose confidence in politics after the conflict happens. Similarly, there were no marked differences between men and women regarding their level of confidence in science. Nevertheless, results regarding confidence in technical expert knowledge in relation to case 1, in which scientific uncertainty played a relevant role, demonstrated women tend to lose confidence in higher numbers than men. Such a result indicates it could be promising to further explore the issue of gender tendencies in trust in expert knowledge whenever conflicts hinge on scientific uncertainty. Finally, results from the enquiries also suggest the importance of exploring the significance of gender in the confidence of diverse social actors related to the establishment of alliances in the debates about the conflicts, such as local inhabitants of the affected areas or the mass media.

Finally, chapter 6 explores gender power relations in the grassroots movements. As set out above, gender theory affirms that gender determines different power positions in society. Political feminists have shown the implicit norms that govern politics and public environments are androcentric. However, gender theory also teaches us that power relations are not fixed and can be transformed if we recognize them as social constructions. In this sense, the aim of chapter 6 is also to point to cases in which women have real opportunities to make their voices heard in the public debate. The analysis is focused on the case of grassroots movements, but can be extrapolated to deduce good and bad practices in relation to power relations in participatory environments generally.

Gender unequal power relations are demonstrated in cases 1 and 3, Coordinadora Antilínia de les Gavarres and Salvem les Valls. In both groups men tend to engage in leading activities while women are mainly participating in supporting ones. Education and well-regarded professions are elements that explain why people engage as leaders. However, regarding gender, it is the predominance of men in public environments (for instance, men's greater presence in local politics or their preeminent role in the local economy) that explains the leading role they take in the grassroots movements, as well-educated women in well-regarded professions are

present in the groups and yet they take a supporting role. Overall, the study of power relations among men and women in cases 1 and 3 demonstrates that the unequal distribution of roles dominating public environments are transferred to the organization, although women and men perceive the grassroots movement as gender-neutral. In addition, as pointed out by Walsh (2001), the gendered attitudes and behaviour that are displayed in deliberation dynamics tend to reduce the opportunities of women to make their voice heard in discussions.

By contrast, the observation of the grassroots organizations has shown cases in which traditional power relations between genders are challenged.

A specific female participation dynamic is shown by a group of women from case 1, Coordinadora Antilínia de les Gavarres. Regardless of what is described above, a gender unequal distribution of power positions dominated the grassroots movement, and women organized themselves into an improvised subgroup that was responsible for stopping the work of the cranes that had started to build the high tension power line. The analysis of that subgroup demonstrates the organization and the participation dynamic centred in female interests, roles and responsibilities. It showed an alternative organization structure based on time flexibility and adaptability, and lacking formal leadership. In addition, it demonstrated the interest of women in establishing links between family responsibilities and their role as environmental activists.

In case 2, Salvem l'Empordà, it is the general structure and participation dynamics of the group that is different from the grassroots movements analyzed previously. The case illustrates an organization that tends towards a gender equal form of participation, in which women are clearly empowered. Such a tendency has been explained by a number of factors:

- 1. The profile of the members: in average women are older and more highly educated than their male counterparts, and have a plenty of experience in other organizations.
- 2. The internal organization of the grassroots movement and the collective decision-making environment: tasks are distributed among small groups and important decisions are taken collectively in a weekly assembly.
- 3. The role of women as representatives and in the technical expert support: this breaks with the general tendency of male leadership in public environments and serves as models to inspire other women in the organization to take a more active role.

4. The change of implicit rules of behaviour and of competing in deliberative contexts: mainly favoured by a general lack of ambition for taking a leading role, this is an attitude shared both by men and women members of the group.

Finally, in case 2, in contrast to cases 1 and 3, the members show an open and self-critical assessment of the grassroots movements in terms of gender inequalities. In this respect, I have suggested the relevance of promoting a critical reflection about gender inequalities in power relations as a strategy to empower women's position in participatory deliberative environments.

Both cases demonstrate that specific variations in the structure, mechanisms of participation and composition of the group members leads to more gender equal environments, in which women's participation is empowered.

While part II has focused on presenting the empirical contribution of the research thesis, part III focuses on providing a theory-grounded discussion. In this part I reflect on the results obtained linked to ecofeminist ethics, feminist epistemological studies and environmental social theory. As a result, fundamental aspects for the introduction of a gender perspective into environmental decision-making are elaborated in-depth.

The hypothesis of a carer stand has been widely discussed in part III to explain findings presented in part II. Such a hypothesis allows us to point to an alternative moral and cognitive perspective on the environment.

Yet, although I propose that the carer stand explains women's concerns for the environment, I have also persistently affirmed that it would be simplistic and naïve to consider it as part of women's nature. I have commented on the risk of assuming a deterministic point of view that would consider caring as an inherent female capacity, instead of analyzing it as a social role presenting contextual and historical variations. In this sense, chapter 7 focuses on analyzing motherhood as the female stereotyped association of femininity with caring roles and values, with the aim of dismantling the deterministic connection between femininity and a caring stand. The discussion has taken two directions. First of all, the social and cultural dimension of motherhood is demonstrated by an analysis of the role of mothers throughout history. Secondly, the diverse and contradictory feminist perspectives on motherhood are discussed. The discussion helps to present, on the one hand, the opportunities and limitations of the women-carer connection, as well as the negative consequences of both, a perspective that sees women's caring roles as a prison, and on the other, a view that idealizes caring and motherhood as the clue to a supposed female essence.

Chapter 8 discusses feminist contributions to ethics and epistemology, linking theory with some of the results presented in part II.

The first part of the chapter starts by focusing on the analysis of the consideration of the moral specificity of a carer stand. To do so, I refer to the work of Gilligan (1982) regarding the moral specificity of women. According to the author, women's morality develops from the carer stand. Therefore, moral standards considered part of ethics, such as rights and rules, and the pre-eminence of the interest in fairness, abstract thinking and universalism, would not be valid to assess female morality. For Gilligan this would be ethical standards centred on the male pattern. She affirms that, in contrast, women's morality is strongly embedded in a web of relations. It is based on establishing connection with others, instead of placing emphasis on autonomy and a separation from other people and the context. As a consequence, female moral judgements would be very much dependent on specific subjects and situations. The relevant contribution of Gilligan is that female morality has been traditionally underestimated because moral standards have been androcentric. From this perspective, we may ask about the opportunities of a carerbased moral stand in androcentric public environments for the case of environmental issues.

This question, however, is addressed in more depth in chapter 9. Beforehand, the discussion evolves from Gilligan's contributions to morality to explore in detail feminist discussions on ethics, particularly environmental ethics. Indeed, Gilligan's analysis has allowed feminist authors to suggest alternative feminist-inspired ethical proposals. In concrete, feminist ethics have been very prolific in the ecofeminist movement.

The second part of chapter 8 focuses on feminist contributions to epistemological reflections about science. The aim of the discussion has been both to establish the main elements of the feminist critique of science, and to reflect on alternative epistemological proposals developed by feminists. A fundamental aspect of the feminist critique of science concerns the principles of objectivity and universalism. According to feminists, knowledge is always partial and contextual and what they term "objectivism" (for the objective principle guiding modern science) works as a mechanism to obscure the interest and specific perspective of where knowledge is produced. Such a critique has two fundamental contributions: firstly, it invites the consideration that there are a diversity of standpoints for the production of knowledge, and secondly, it demonstrates the privileged status of certain forms of knowledge and knowledge producers.

Chapter 8, therefore, ends by setting out standpoint theory and situated knowledge as the two proposals produced by feminist epistemologists. The two main arguments used by standpoint theorists to claim a specific female/feminist cognitive stand are (1) the specific subjugated social, economic and political position of women, and (2) the "maternal thinking" (Ruddick, 2004) or the sexual division of labour (Hartsock, 2004). The first argument relates to the fight for women's liberation and the second again links in with the argument of the carer stand.

Regardless of the theoretical power of standpoint theory, three main criticisms of the proposal have been set out. Firstly, women tend to be considered the noble savages of knowledge, instead of considering not only the potential but also the weaknesses of a female/feminist standpoint. Secondly, the notion of "strong objectivity" proposed by Harding (1991; 2003) unnecessarily rewrites the modern idea of a hierarchy of knowledge that had been strongly criticized by feminists. Hence the complexity, diversity and plurality of different coexisting forms of knowledge is undermined. Finally, standpoint theory could also lead easily to essentialist readings that uncritically argue for an ideal female privileged specificity.

It is in this vein that chapter 8 concludes by setting out the alternative proposal of "situated knowledge", which dispels the critical views summarized above. Situated knowledge considers all knowledge to be culturally, geographically, economically and ideologically situated, and its legitimacy and validity should be critically examined. Yet it offers the possibility to discuss the legitimacy—as well as the potential and limitations—of different forms of knowledge, produced from different standpoints.

Finally, chapter 9 brings the discussion about a specific female/feminist morality and knowledge position initiated by feminist authors, which has been discussed in depth in chapter 8, to the more practice-oriented field of environmental social theory. In this chapter, feminist conceptual elaborations are used as instruments to discuss the introduction of a gender perspective on the participatory proposal of environmental governance. Hence empirical observations from part II are supported with feminist theory in order to reflect on theoretical works on environmental governance.

Chapter 9 starts by presenting the basic elements of Habermas' discursive ethics. The reference to the work of Habermas is essential, as it is at the basis of the intensification of deliberative processes in an advanced democracy to which the ideal of governance refers. Afterwards, the discussion focuses on post-normal science, a concrete application of discursive ethics in the field of the management

and decision-making of problems characterized by high complexity and uncertainty, including environmental issues.

Post-normal science is presented as a strategic means for the introduction of a gender perspective in environmental governance. A fundamental contribution is the emphasis placed on participatory processes in which a problem's complexity and scientific uncertainty are fundamental issues in the deliberation process. Significantly, once complexity and uncertainty are openly admitted, the traditional weight of scientific and technical perspectives on the environment is weakened, and value-based argumentations can take part in the debate. Therefore, post-normal science implicitly suggests the possibility that power relations among the different actors involved in the discussion are challenged, as some of the case studies presented in chapter 9 illustrate.

However, I suggest that implicitly there is a different legitimacy status between a technical and a cultural rationality in a public discussion concerning an environmental issue, for which *a priori* the power between the two stands is balanced in favour of the technical one.

The legitimacy status of technical and cultural rationalities is compared with ethno-androcentric dualisms, which establishes connections with feminist theory on gender power relations. Such a discussion also links with previous reflections on morality in chapter 8. I suggest that even when scientific uncertainty is admitted, arguments in favour of the values of abstract and universal reason may receive stronger support than those that prioritize emotion and subjectivity, and that are contextual and concrete-based.

To give equal weight to both stands is necessary because they imply a different definition and framing of problems, a different prioritization of cognitive stands (e.g. local knowledge is based on practical means and empirical orientation, while scientific knowledge contributes with theoretical and methodological bases), and different standards of proof, which are basic elements for environment-related decision making processes.

The discussion is illustrated by the case of popular epidemiology, which also allows us to relate the carer stand to cultural rationality. Cases of popular epidemiology have proven that women tend to be supporters of cultural rationality, as they are experiencing directly a local environmental problem leading to some kind of disease among people close to them. The low level of legitimacy of their arguments has been a fundamental aspect of their power positions in meetings with political and scientific representatives. Nevertheless, the study of these cases

demonstrates that they may bring different values and cognitive approaches to problems, which may also guide scientific analysis into alternative directions.

I argue, therefore, that we need to consider inclusiveness instead of openness in participatory processes. Openness, as the case of post-normal science illustrates, refers to the participation of all actors affected by an environmental issue in the decision-making process. Alternatively, inclusiveness insists on making visible and empowering perspectives that are traditionally ignored, and that may not emerge naturally in the discussion.

In terms of gender, inclusiveness refers to gender balance among the participants, but also to the consideration of the different arguments supported by the actors and the legitimacy status and power relations among them. In order to improve power balances between different arguments, chapter 9 ends by referring to the following strategies:

- Empowering female rhetorical styles and discursive practices. We have to consider in which sense structural inequalities (e.g. education, income and occupational status) affect the opportunities of some women to participate in the public discussion, and also how normative behaviours could be relevant for the public acceptance of the rhetorical styles of specific actors, and hence their arguments.
- Involving female and feminist experts as a mechanism to put into practice the argument of situated knowledge according to which not only formal knowledge but also life experiences bring a different standpoint to the comprehension of problems.
- Supporting different values taking place in the discussion by including interdisciplinary studies and responsible science. In particular, there is the need to approach the multiple dimensions that form part of environmental problems from the perspective of the life experience of people affected by them.
- Introducing gender studies on the environment, bringing new focus to problems and methodological innovations (e.g. micro-scale and interscale relations). This focuses on personal and community aspects of environmental problems, making them a tool to foster science-society communication.

10.2. Gender mainstreaming environmental governance

A final goal of the present research is to propose practical recommendations for the introduction of gender in environmental governance practices. Those recommendations are defined from the theoretical and empirical analysis presented in the thesis.

Gender mainstreaming is a wide strategic umbrella that establishes the basis that should guide the application of a gender perspective in politics, and it is also suitable for the case of a gender approach to environmental governance.

The European Commission defines "gender mainstreaming" in the following way:

Gender mainstreaming is the integration of the gender perspective into every stage of policy processes—design, implementation, monitoring and evaluation—with a view to promoting equality between women and men. It means assessing how policies impact on the life and position of both women and men—and taking responsibility to re-address them if necessary. This is the way to make gender equality a concrete reality in the lives of women and men, creating space for everyone within the organizations as well as in communities—to contribute to the process of articulating a shared vision of sustainable human development and translating it into reality. ¹

Considering the issues discussed throughout the thesis, I propose that in order to gender mainstream environmental governance we should channel actions through three basic parts of that process:

- The organization of the participatory activities;
- The deliberation dynamics;
- The production of knowledge informing the discussion.

Referring to sustainable development, Fusco and Nijkamp (1997) indicate four levels that go from conceptual reflection to action proposals, which allow for the systematization of the participatory process for a local sustainability plan: the metastrategic, the strategic, the tactical and the management levels.

¹ http://ec.europa.eu/employment_social/gender_equality/gender

I have adapted Fusco and Nijkamp's methodology to propose the gender mainstreaming of environmental governance. In the following lines, I will focus on the discussion of the meta-strategic, the strategic, the tactical and the management levels of gender mainstreaming environmental governance including for each level a reflection on the three basic parts of the process as set out above: inclusive participation, deliberative content and knowledge support. As a summary, the discussion and proposals are systematized in table 10.1 at the end of the chapter.

10.2.1. Meta-strategic level: challenges

A livello metrastrategico si colloca la reflesione su i principi generally dello sviluppo di una società ("perché" cambiare) e quindi i problemi generally connessi alla valutazione che, in questa prospettiva è uno strumento per la comunicazione e per promuovere la vitalità stessa dello svilupo e della democrazia. (Fusco & Nijkamp, 1997: 19)

The process of gender mainstreaming environmental governance should start as a wide reflection on the androcentric character of environmental management and decision-making. Only after recognizing the social, cultural, political and scientific mechanisms that implicitly determine specific perspectives on the environment and exclude others will we be able to derive practical strategies to overcome them.

Inclusive participation

Inclusiveness indicates the need to guarantee a gender balance in relation to all sectors involved: political representatives, scientists and technical experts, stakeholders and citizens. However, gender balance is insufficient if it is not complemented with "recognition", to identify and fight androcentric biases in the participatory process and empower women's contributions to the environment.

Although not exclusive to gender issues, a fundamental pitfall of governance processes is the scant political commitment that leads to the discrediting of participatory activities. People's image of governance processes and participatory mechanisms is strongly damaged when they fail to be inclusive and to lead to real political changes. In chapter 5 I set out some elements that indicate the damage brought about by bad praxis in participatory process has a specific impact on

women's confidence in politics. In general, women and men tend to show critical views on politics, but women more often claimed they had lost confidence in politics and technical experts involved in the local conflicts they were engaged in.

A basic consideration is to guarantee a gender balance throughout all the participatory activities. In chapters 3 and 6 I have pointed to structural social, economic and political inequalities between women and men as one of the reasons that explains women's low presence in politics, scientific spheres, economic sectors and civil society organizations. Strategic positions in public spheres, hence economically and socially privileged positions, are mainly dominate by men, which reduces female opportunities to take a leading position in public discussions.

On a more practical level, women's participation in politics is constrained by the burden of household and family responsibilities plus paid work, and in the case of many young women, time consuming maternal responsibilities.

Finally, in chapter 5 I also pointed to the diversity of women's opinions on the environment and indicated the need to recognize their rich sociological profile: age, education, occupation, family responsibilities and personal experiences in politics, ecologist and civil society organizations are some of the factors that explain women's different perspectives. In this respect, I pointed out that although gender tendencies in environmental concerns and interests regarding the land exist, we should acknowledge women are not a single group and that diversity has to be addressed.

Other observations on women's participation on environmental citizens' committees are relevant to reflect on deliberative practices. In this sense, women's experiences as activists are characterized by the way families, particularly children, are involved. Although as a result of time constraints and responsibilities, women implement a participatory model in which the separation between the private and the public is weakened, leading to alternative organization practices. At the same time, women also encompass their caring role with their environmental activism when involving children in the everyday activities of the grassroots group, and consider this an extension of their educational responsibilities.

Deliberative content

Sociological studies and data from statistics presented in chapter 3 point to the existence of gender differences in degrees of environmental concerns and risk perceptions about science, technology and the environment. Gender differences

are also observed in the prioritization of environmental problems and in the reasoning process when faced with an environmental risk. The different framing of problems, cognitive stands and standards of proof also separate technical and cultural rationalities, with the general public, particularly women, usually represented in that second type.

A more fine-grained analysis, like the one developed in chapter 4 in which I explored local environmental conflicts, shows specific and qualitative aspects of women's concerns. Female gendered responsibilities and values are relevant in what I have called "life experience-based" arguments: perspectives on environmental conflicts that rely on a collective and individual negative experience of environmental degradation, rather than on an ideological perspective. Female concerns focus on the social dimension of environmental problems, impacts on the family and community members, health risks, quality of life, environmental heritage left to future generations and landscape degradation (a sense of belonging).

Life experience-based arguments also channel a major engagement of women in local environmental conflicts, while organizations with an ideological orientation have a lower level of participation from women. Such tendencies indicate women's interests in environmental politics are better channelled through emphasizing the everyday and the affective perceptions of environmental problems.

In chapters 7 and 8 I entered into a theoretical discussion on the characteristics of that female gendered tendency in environmental concerns, referring to the specific values and worldview of a carer stand. This is not exclusive to women, but strongly associated with feminine roles, responsibilities and values. Nevertheless, in chapter 9 I described the confrontations between technical and cultural rationalities demonstrating the legitimacy problems of an ethical and cognitive stand based on that carer stand. A fundamental challenge is, therefore, to introduce strategies and mechanisms in the deliberative process that break with the unequal legitimacy status of cultural and technical rationalities, which may implicitly lead to addressing gender power relations.

On a more practical level, in chapter 6 I pointed to the relevance of gender in the roles assumed by men and women in the everyday management of the home, which have direct links with local environmental issues. In addition, such roles are also the mechanisms through which individual pro-environmental attitudes are channelled, for instance, women's responsibility and concern for family consumption, and men's stronger involvement and interest in taking decisions on resources and technological equipment. However, the recognition of men and

women's different experiences of and interests in the environment in relation to the roles they play in the private sphere should be accompanied by a reflection on the inequalities many such roles perpetuate. Without a gender reflection, there is a risk of neglecting unequal power relations and perpetuating them when addressing men and women separately as target groups of specific environmental political initiatives.

Finally, in chapter 6 I pointed out that in the two organizations in which power relations between genders were clearly unequal, there is no reflection on gender inequalities. In contrast, I pointed out that in the grassroots group of case 2, in which women play a leading role, activists show a high concern and reflexive attitudes in relation to gender inequalities inside the organization. In this sense, I concluded, we should consider the reflection on gender inequalities as a mechanism to empower women in participatory decision-making initiatives.

Knowledge support

Knowledge is a key aspect of the participatory process. The availability of knowledge supporting specific views on the environment is fundamental to the legitimacy of such perspectives. In this sense, unequal legitimacy between a technical and a cultural rationality depends also on the availability of knowledge informing the diversity of values and interests on the environment that take part in the discussion.

Likewise, the lack of certain knowledge also plays a key role in relation to legitimacy balances. Technical and cultural rationalities have shown fundamental differences in the framing of problems, reasoning logics and the standards of proof necessary to support a specific position in relation to an environmental risk marked by scientific uncertainty. Interestingly, case studies proposed by post-normal science openly address scientific uncertainty changes due to power balances. However, I pointed out that it is necessary to use knowledge to empower traditionally unrecognized perspectives on the environment or they risk being ignored even when scientific uncertainty leads to a democratic openness of the decision-making process.

In relation to knowledge, in chapter 3 we saw women's sceptical perception of science and technology, as well as their critical assessment of the possibility that science and technology will bring solutions to the environmental crisis. Women also show a higher concern than men for ethical commitments of scientific activity. In general, I pointed out that women are more often of the "ethical and social-

based worldview" rather than the "scientific and economy-based" one. People espousing that worldview are very concerned about health issues, have doubts about the social legitimacy of environmental exploitation, consider moral and ethical issues to be relevant to decisions about science and technology, disapprove of various technological applications for their ethical and social implications, and are sceptical of the social benefits of scientific and technological development.

In addition, women's distance from science is increased by the lack of influence of female interests in shaping scientific research. Women self-report a low interest in science, a low level of scientific knowledge, and a feeling of disempowerment in relation to policy-making. However, rather than considering women's critical perception of science and high environmental and risk concerns to be the result of a low level of scientific knowledge, I propose considering that science tends to fail to address women's interests and to communicate with them. In relation to the environment, the prevalence of a "hard" disciplinary tradition in environmental sciences applied to the analysis of environmental issues has also prevented the consideration of social issues that would connect scientific approaches to the environment with citizens' concerns, particularly in the case of women.

A basic challenge is related to facilitating science-society communication as a strategy to increase women's influence on science and empower their perspectives on the environment.

In this sense, the specific practice-oriented relationship activists establish with scientific information shows a learning process regarding scientific, technical issues and political procedures, which is particularly significant for empowering women.

At the same time, environmental activism also demonstrates the emergence of other forms of knowledge production, which are alternative and complementary to "conventional" scientific research. Women's traditional values and experiences have been identified as a potential source of local knowledge. For feminist epistemologists, the cognitive strategic position of a "carer stand" privileges a specific and alternative perspective on knowledge. However, a fundamental challenge is to develop mechanisms to enable fruitful communication between that local knowledge and sensitivity and scientific expertise.

Communication is also necessary among the diversity of disciplines bringing different perspectives on the environment. The predominance of a "hard" scientific and technical approach to environmental management has implicitly reduced

contributions from social disciplines. That, in turn, has also prevented the emergence of a gender approach to environmental issues.

Interdisciplinarity has been identified as a strategic paradigm to address feminist critical perspectives on science: recognition of local knowledge, communication between science and citizens, interaction between physical and social traditions in science, and consideration of the ethical responsibilities of the scientific activity.

10.2.2. Strategic level: objectives

A livello strategico, si pongono i problemi connesi alla scelta di "cosa" una comunità vuole diventare. Le valutazione si referiscono in particolare alla scelta degli obiettivi di lungo periodo ed alla loro gerarchizzazione (Fusco & Nijkamp, 1997: 19)

Whereas in the previous section the main challenges have been set out, the strategic level focuses on the objectives that may lead to gender mainstreaming environmental governance. Such objectives would vary depending on the reflection and analysis developed for a specific environmental governance process. In the following lines, a list of the basic objectives based on the research findings of the present thesis is systematized. At the end of the chapter, table 10.1. organizes this information, allowing for a wider and clearer view of the connection between challenges and objectives.

Inclusive participation. Objectives:

Objectives related to inclusive participation go from ensuring political commitments to the practical arrangements of the participatory activities. They are summarized in the following list:

- 1. To guarantee political commitment with the development and results of the participatory process.
- 2. To promote gender balance within all the groups involved in the participatory process.
- 3. To empower women to take leading roles.

- 4. To guarantee women and men's participation is not constrained by occupational and personal responsibilities.
- 5. To guarantee a diversity of sociological profiles of women are involved in the discussion.
- 6. To address the personal interests of participants in the participatory processes, considering the process also as an educational mechanism for a collective.

Deliberative content. Objectives:

The objectives related to the deliberative content also stress practical aspects that should be considered in the organization of the discussion sessions:

- 7. To generate an open deliberation about the focus and delimitation of the problem, values and interests of the agents involved, and the availability and quality of scientific knowledge involved in the discussion.
- 8. To introduce and give legitimacy to life experience-based arguments and the values associated to a carer stand. Overall, it is necessary to work out mechanisms to change power imbalances between technical and cultural rationalities.
- 9. To make visible gendered behaviours and roles in the everyday management of the environment.
- 10. To assess environmental politics considering the impacts of possible actions on people considering gender differences.
- 11. To reflect openly on gender inequalities in political and participatory spheres.

Knowledge support. Objectives:

Finally, objectives related to "knowledge support" stress the information guiding the discussion and how it addresses gender as content and as a mechanism to

empower perspectives that have traditionally had low levels of legitimacy. It is thus also a way to reach the objectives indicated previously.

- 12. To promote interdisciplinarity, particularly between natural and social traditions, at epistemological, methodological and practical levels.
- 13. To develop a gender assessment of knowledge produced to support the discussion.
- 14. To stimulate science communication with citizens, also by addressing the specific interests of citizens in the environment.
- 15. To produce gender studies on the environmental issues addressed, also as a mechanism to enable science-society communication.
- 16. To empower women as providers of local knowledge shaped by gendered roles and experiences.

10.2.3. Tactical level: agents involved

Al livello tattico si considera il ruolo dei vari attori (imprenditori, propietari di aree, istituzioni pubbliche, soggeti del terzo settore, ecc.) che entrano nelle scelte relative al "come" fare per attuare certe decisioni, mettendo a fuoco specifiche strategie di coalizione. (Fusco & Nijkamp, 1997: 19)

The tactical level recognizes that the agents that should be involved in the participation process in order to gender mainstream it. Their role is fixed according to the objectives and actions planned, as systematized in table 10.1.

As indicated at the metastrategic level, when determining the agents involved and their roles, it is necessary to guarantee a gender balance among participating representatives of political authorities, scientific and technical experts, stakeholders and citizens. This is a basic action that must be complemented with more qualitative considerations. The presence of women with a leading profile and their inclusion in strategic areas of the participatory process is also fundamental for women's empowerment.

Apart from fostering the presence of women, a gendered strategy is critical throughout all the activities of the participatory process, with particular attention

paid to coalitions that may lead to empowering women and/or a carer stand, or otherwise their contribution would be difficult.

In a practical sense, that means that as part of the organization of the participatory process we should make a careful analysis and systematization of the arguments, and interest groups or individuals defending those arguments, with a projection of coalitions and potential legitimacy difficulties.

Last but not least, a specific effort should be made in the area of expert participation. The involvement of women who could take the role of local experts, which also includes local women's groups, should be considered.

We should also reflect on the diversity of disciplines that may bring a specific approach to the environmental debate, with specific concern for all the potentially relevant dimensions: ecological, social, economic, ethical and governmental. In addition, gender knowledge produced in each of these dimensions should be included in the process.

10.2.4. Management level: actions

Infine, a livello attuativo/gestionale si considerano gli strimumenti per attuare e controllare la sostenibilità nel territorio, a partire dalle scelte relative alla migliore scansione nel tempo degli interventi ("quando intervenire"). (Fusco & Nijkamp, 1997: 19)

At a management level, a plan of action for the introduction of gender in the environmental governance process is designed. This is the practical intervention derived from the metastrategic discussion, the objectives designed and the agents involved. Obviously, as mentioned above, actions should be decided in relation to a specific participatory process. In addition, they should be prioritized and established in a calendar. In the following lines a list of potential actions, derived from the discussion set out above, is systematized.

Inclusive participation. Actions:

1. The establishment and public recognition of specific commitments by political authorities to the development and results of the participatory

- process. The inclusion of political authorities in specific activities of the participatory process
- 2. The attention towards guaranteeing a gender balance throughout all the phases and issue-based discussions of the participatory process.
- 3. The inclusion of women with a leading profile—particularly as political, scientific and stakeholder representatives—that serve as models and empower other women engaged in the participatory process.
- 4. The inclusion of women's groups in the participatory process.
- 5. The study of time availability and infrastructural arrangements necessary to facilitate compatibility with work and family responsibilities during the duration of the participatory activities.
- 6. The invitation of women with diverse profiles (age, education, careers and family responsibilities) to the participatory process.
- 7. The strategic distribution of women with different profiles throughout the participatory process. Paying attention to the inclusion of women with leading profiles in strategic discussions of the participatory process.

Deliberative practices. Actions:

- 8. In an initial stage, to focus the debate on:
 - a. Problem definition;
 - b. Values and interests involved and excluded;
 - c. Legitimacy and power balances between different values;
 - d. Limits and uncertainties of the scientific knowledge available.
- 9. Experts engage in providing transparent information and deconstructing available knowledge (with emphasis on limits and uncertainties) rather than giving definitive solutions.
- 10. The inclusion of gender expertise on the environmental issues addressed in discussion sessions.
- 11. The introduction of issues of deliberation on discussion sessions connected to life experience-based arguments: health risks, quality of life, environmental heritage left to future generations and landscape degradation (a sense of belonging) throughout the participatory process. For instance, to channel the debate by focusing on the landscape as a

- "material entity" through which a diversity of environmental concerns and values are expressed. Specific focus on local impacts of environmental problems.
- 12. Deliberation on gender impacts of the environmental actions considered in the deliberation process.
- 13. Deliberation on gender inequalities related to political representation and deliberative mechanisms, as well as participant's reflections on gender inequalities in the participatory activity itself.

Knowledge support. Actions:

- 14. The identification and empowerment of different forms of local knowledge.
- 15. The integration of women and women's groups as "local experts" informing the scientific discussion on the environment and as sources to determine research priorities.
- 16. The organization of female discussion groups with scientific expertise (female scientists involved).
- 17. To engage scientists and experts from diverse disciplines in deliberative processes regarding problem definition, methodological orientations, the research process and scientific uncertainties.
- 18. To recognize and openly discuss scientific uncertainty in the deliberation process. Also to openly address issues of ethics and the responsibility of science.
- 19. The promotion of science directly linked to citizens' interests. In particular, the production of scientific knowledge that informs concerns expressed by participants showing cultural rationality and a caring stand.
- 20. The production of gender studies on environmental issues addressed in the deliberation sessions. In particular, gender studies may bring new insights into research areas (energy, water and agricultural management, hazardous toxics, consumption, etc.) and also methodological contributions (inter-scale analysis, introduction of the micro-scale, and emphasis on diversity).
- 21. Gender assessment of knowledge informing the discussion sessions.

10.2.5. Evaluation

A final step of gender mainstreaming environmental governance is the evaluation of the process from a gender perspective. It refers to assessing the effectiveness of the gender strategy both in the implementation of the participation process (organization and development) and in the results obtained. The evaluation mechanisms have to be established according to the objectives and actions implemented. However, a general recommendation is to include quantitative data (indicators) and qualitative assessments including the evaluation from the groups involved.

According to proposals made in the previous section, some examples of indicators are:

- The percentage of female and male participation according to organized discussion groups along the participatory process.
- The percentage of female and male participants with a high hierarchical position in the organization they represent.
- The percentage of women and men involved in the discussion, classified by age, education, occupation and previous experience in politics or ecologist and civil society organizations.
- The number of female discussion groups organized.
- The number of women's groups involved in the participatory process.

Other examples of issues referring to the qualitative assessment of gender mainstreaming of the participatory process are included below. They can be obtained through enquiries or in-depth interviews, and the results should be sex-disaggregated. The opinions of participants (politicians, scientists and stakeholders) and of the organizers are both of interest.

- A qualitative assessment of the level of satisfaction with the political commitment during and after the participatory process.
- A qualitative assessment of the infrastructure and facilities and how they have allowed them to engage in the participatory process.
- A qualitative assessment of the participatory process regarding how the participants have been involved in the definition of the problem.

- A perception of power balances among diverse agents and arguments involved, and qualitative assessment of the values and arguments considered and the legitimacy of life experience-based arguments in influencing the discussion.
- A consideration of the positive/negative consequences of openly dealing with scientific uncertainty.
- A qualitative assessment of the availability of gender knowledge on the issues discussed and the role played in the participatory process.
- A qualitative assessment of the reflections on gender inequalities and their role in empowering women in the participatory process.
- A qualitative assessment of women's involvement as local experts in participatory activities with scientific expertise.
- A qualitative assessment of the use of gender studies to facilitate sciencesociety communication
- Etc.

Below is a table summarizing the contents mentioned above according to the four levels of proposal (meta-strategic, strategic, tactical, management/action, evaluation) and the three main contributions of a gender perspective (inclusive participation, deliberative content and knowledge support).

Table 10.1. Gender mainstreaming environmental governance: Synthesis

	Meta-strategical	Strategical	Tactical	Management/ Action	Evaluation
Inclusive participation	A fundamental pitfall of governance processes is the scant political commitment that leads to the discrediting of participatory activities. People's image of governance processes and participatory mechanisms is strongly damaged when they fail to be inclusive and to lead to real political changes.	1. To guarantee political commitment with the development and results of the participatory process.	Political authorities	1. The establishment and public recognition of specific commitments by political authorities to the development and results of the participatory process. The inclusion of political authorities in specific activities of the participatory process	A qualitative assessment of the level of satisfaction with the political commitment during and after the participatory process.
	To guarantee a gender balance in relation to all sectors involved: political representatives, scientists and technical experts, stakeholders and citizens; and throughout all the participatory activities. To identify and fight androcentric biases in the participatory process and empower women's contributions to the environment.	2. To promote gender balance within all the groups involved in the participatory process. 3. To empower women to take leading roles.	Women's participation through political and public institutions, scientific and technical experts, stakeholders, civil society organizations (specific emphasis in women's groups), and citizens	2. The attention towards guaranteeing a gender balance throughout all the phases and issue-based discussions of the participatory process. 3. The inclusion of women with a leading profile—particularly as political, scientific and stakeholder representatives—that serve as models and empower other women engaged in the participatory process. 4. The inclusion of women's groups in the participatory process.	The percentage of female and male participation according to organized discussion groups along the participatory process. The percentage of female and male participants with a high hierarchical position in the organization they represent.

Women's participation in politics is constrained by the burden of household and family responsibilities plus paid work, and in the case of many young women, time consuming maternal responsibilities	4. To guarantee women and men's participation is not constrained by occupational and personal responsibilities.	Political and public institutions, scientific and technical experts, stakeholders, civil society organizations, and citizens	5. The study of time availability and infrastructural arrangements necessary to facilitate compatibility with work and family responsibilities during the duration of the participatory activities.	A qualitative assessment of the infrastructure and facilities and how they have allowed participants to engage in the participatory process.
To recognize the diversity of women's opinions on the environment and their rich sociological profile: age, education, occupation, family responsibilities and personal experiences in politics, ecologist and civil society organizations.	5. To guarantee a diversity of sociological profiles of women are involved in the discussion.	Analysis of the profile of female participants	6. The invitation of women with diverse profiles (age, education, careers and family responsibilities) to the participatory process. 7. The strategic distribution of women with different profiles throughout the participatory process. Paying attention to the inclusion of women with leading profiles in strategic discussions of the participatory process.	The percentage of women and men involved in the discussion, classified by age, education, occupation and previous experience in politics or ecologist and civil society organizations.

	citizens' committees are relevant to reflect on deliberative practices. Women implement a participatory model in which the separation between the private and the public is weakened, leading to alternative organization practices. Women also encompass their caring role with their environmental activism when involving children in the everyday activities of the grassroots group, and consider this an extension of their educational responsibilities. Existence of gender differences in degrees of environmental concerns	6. To address the personal interests of participants in the participatory processes, considering the process also as an educational mechanism for a collective.	Citizens	Analysis and inclusion of the personal interests of participants in the participatory process, considering the process also as an educational mechanism for a collective. 8. In an initial stage, to focus the debate on: Problem definition;	A qualitative assessment of women's feeling of engagement in the participatory process
Deliberative content	and risk perceptions about science, technology and the environment. Gender differences are observed in the prioritization of environmental problems and in the reasoning process when faced with an environmental risk. The different framing of problems, cognitive stands and standards of proof also separate technical and cultural rationalities, with the general public, particularly women, usually represented in that second type.	7. To generate an open deliberation about the focus and delimitation of the problem, values and interests of the agents involved, and the availability and quality of scientific knowledge involved in the discussion.	Analysis and systematisation of arguments, and the interest groups or individuals defending those arguments	○ Values and interests involved and excluded; ○ Legitimacy and power balances between different values; ○ Limits and uncertainties of the scientific knowledge available. 9. Experts engage in providing transparent information and deconstructing available knowledge (with emphasis on limits and uncertainties) rather than giving definitive solutions.	of the participatory process regarding how the participants have been involved in the definition of the problem, which values and interests have been involved and excluded, legitimacy and power balances between different values, and consideration of limits and uncertainties of the scientific knowledge available.

Female gendered responsibilities and values are relevant in "life experience-based". Female concerns focus on the social dimension of environmental 10. The inclusion of gender problems, impacts on the family expertise on the environmental and community members, health issues addressed in discussion risks, quality of life, environmental sessions heritage left to future generations Analysis and and landscape degradation (a 8. To introduce and systematisation of 11. The introduction of issues of sense of belonging). give legitimacy to arguments, and deliberation on discussion A perception of power life experienceinterest groups or sessions connected to life balances among diverse Life experience-based arguments based arguments individuals experience-based arguments: agents and arguments and the values channel a major engagement of defending those health risks, quality of life, involved, and qualitative women in local environmental associated to a carer arguments environmental heritage left to assessment of the values conflicts, while organizations with stand. Overall, it is future generations and landscape and arguments an ideological orientation have a necessary to work Identification of degradation (a sense of considered and the lower level of participation from belonging) throughout the out mechanisms to gendered legitimacy of life women. Such tendencies indicate participatory process. For change power perspectives on the experience-based instance, to channel the debate by women's interests in imbalances between environmental arguments in influencing focusing on the landscape as a environmental politics are better technical and problem the discussion. "material entity" through which a channelled through emphasizing cultural diversity of environmental the everyday and the affective rationalities. Involvement of concerns and values are perceptions of environmental gender expertise on expressed. Specific focus on local problems. environmental issues impacts of environmental problems. To introduce strategies and mechanisms in the deliberative process that break with the unequal legitimacy status of cultural and technical rationalities, which may implicitly lead to addressing gender power relations.

Relevance of gender in the roles assumed by men and women in the everyday management of the home, which have direct links with local environmental issues. Such roles are also the mechanisms through which individual proenvironmental attitudes are channelled. However, the recognition of men and women's different experiences of and interests in the environment in relation to the roles they play in the private sphere should be accompanied by a reflection on the inequalities many such roles perpetuate.	9. To make visible gendered behaviours and roles in the everyday management of the environment. 10. To assess environmental politics considering the impacts of possible actions on people considering gender differences.	Involvement of gender expertise on environmental issues	12. Deliberation on gender impacts of the environmental actions considered in the deliberation process. Organization of female discussion groups.	A qualitative assessment of the availability of gender knowledge on the issues discussed and the role played in the participatory process. The number of female discussion groups organized.
To consider the reflection on gender inequalities as a mechanism to empower women in participatory decision-making initiatives.	11. To reflect openly on gender inequalities in political and participatory spheres.	Involvement of women's groups	13. Deliberation on gender inequalities related to political representation and deliberative mechanisms, as well as participant's reflections on gender inequalities in the participatory activity itself.	The number of women's groups involved in the participatory process. A qualitative assessment of the reflections on gender inequalities and their role in empowering women in the participatory process.

Knoweldge support	The prevalence of a "hard" disciplinary tradition in environmental sciences applied to the analysis of environmental issues has also prevented the consideration of social issues that would connect scientific approaches to the environment with citizens' concerns, particularly in the case of women. Interdisciplinarity as a strategic paradigm to address feminist critical perspectives on science: recognition of local knowledge, communication between science and citizens, interaction between physical and social traditions in science, and consideration of the ethical responsibilities of the scientific activity. The unequal legitimacy between a technical and a cultural rationality depends also on the availability of knowledge informing the diversity of values and interests on the environment that take part in the discussion. Technical and cultural rationalities have shown fundamental differences in the framing of problems, reasoning logics and the standards of proof necessary to support a specific position in relation to an environmental risk marked by scientific uncertainty.	12. To promote interdisciplinarity, particularly between natural and social traditions, at epistemological, methodological and practical levels.	Identification and systematisation of arguments involved in the environmental debate and their legitimacy	17. To engage scientists and experts from diverse disciplines in deliberative processes regarding problem definition, methodological orientations, the research process and scientific uncertainties. 18. To recognize and openly discuss scientific uncertainty in the deliberation process. Also to openly address issues of ethics and the responsibility of science.	Assessment of disciplines involved Production of interdisciplinary studies Qualitative assessment of the participatory process regarding values and arguments considered and the legitimacy of a cultural rationality A consideration of the positive/negative consequences of openly dealing with scientific uncertainty.
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Women's sceptical perception of science and technology, as well as their critical assessment of the possibility that science and technology will bring solutions to the environmental crisis. Women also show a higher concern than men for ethical commitments of scientific activity. Science tends to fail to address women's interests and to communicate with them. Women's distance from science is increased by the lack of influence of female interests in shaping scientific research. Women self-report a low interest in science, a low level of scientific knowledge, and a feeling of disempowerment in relation to policy-making. To use knowledge to empower traditionally unrecognized perspectives on the environment	14. To stimulate science communication with citizens, also by addressing the specific interests of citizens in the environment. 15. To produce gender studies on the environmental issues addressed, also as a mechanism to enable science-society communication. 16. To empower women as providers of local knowledge shaped by gendered roles and experiences.	Science and citizens, emphasis on female participants Identification of women and their experiences in the everyday management of the environment Integration of experts from gender studies and women's groups	20. The production of gender studies on environmental issues addressed in the deliberation sessions. In particular, gender studies may bring new insights into research areas (energy, water and agricultural management, hazardous toxics, consumption, etc.) and also methodological contributions (inter-scale analysis, introduction of the micro-scale, and emphasis on diversity). 21. Gender assessment of knowledge informing the discussion sessions.	A qualitative assessment of the use of gender studies to facilitate science-society communication Qualitative assessment of the integration of gender in the scientific knowledge available during the participatory process Availability of gender approaches to topics dealt in the participatory process
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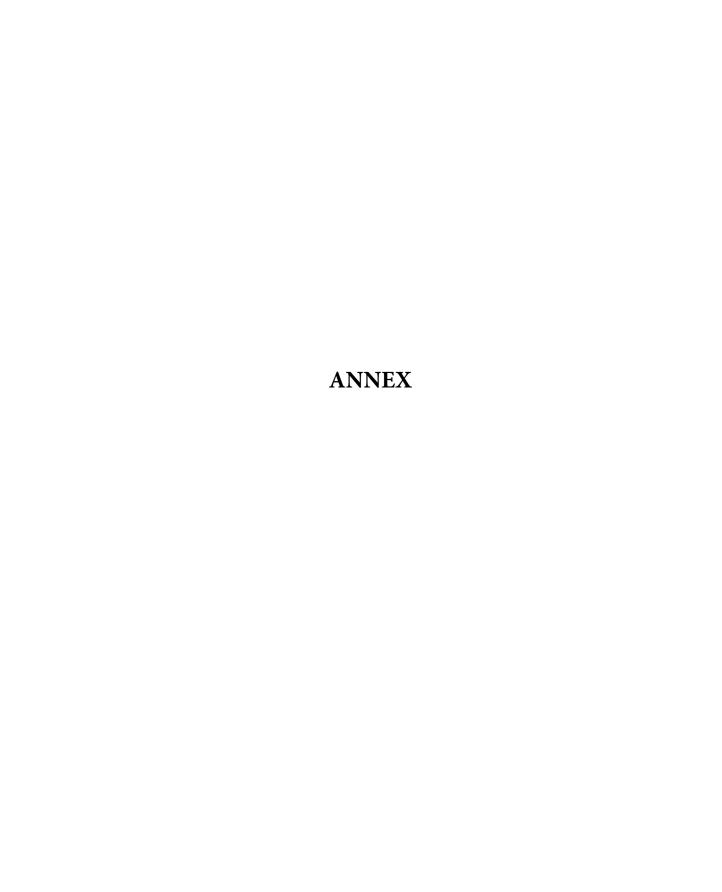
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Lits of annexed documents

- ANNEX 1. Enquiry to members of Coordinadora Antilínia de les Gavarres
- ANNEX 2. Enquiry to members of Salvem l'Empordà
- ANNEX 3. Enquiry to members of Salvem les Valls
- ANNEX 4. Interviews to members of Coordinadora Antilínia de les Gavarres
- ANNEX 5. Interviews to members of Salvem l'Empordà

ANNEX 1. Enquiry to members of Coordinadora Antilínia de les Gavarres

Projecte de Recerca: Governança ambiental des d'una perspectiva de gènere Mercè Agüera Cabo, Joint Research Centre, Comissió Europea, Ispra-Italia. merce.aguera-cabo@jrc.it

-Novembre/Desembre 2003-

Els resultats d'aquesta enquesta es faran servir com a material de treball en la recerca de tesi "Governança ambiental des d'una perspectiva de gènere" que es realitza en el marc d'un projecte finançat pel la Unió Europea que pretén avançar en el tema de la participació ciutadana. Per tant, el que respongui/responguis en cadascuna de les preguntes és molt important per als resultats que s'obtinguin.

Li/et preguem que les seves/teves respostes siguin tan reflexionades com sigui possible i, sobretot, que responguin a una opinió personal.

Moltes gracies per la seva/teva col·laboració.

Mercè Agüera

ENQUESTA A MEMBRES DE LA COORDINADORA ANTILÍNIA DE LES GAVARRES

Nom i Cognom	
(opcional)	
Sexe	Home
	Dona

Edat	
Ocupació	
Nivell Educatiu	No tinc títols d'estudis
	Educació General Bàsica
	Estudis professionals
	Estudis universitaris
	Altres:
Municipi de residència	
Característiques de l'habitatge	Visc sol/a
(Marca amb una creu)	Comparteixo pis amb amics
	Visc en parella
	Visc amb la família
	Altres:

Preguntes

Des de quin any es/ets			
membre de la Coordinadora			
Antilínia de les Gavarres?			
A través de qui o de q	luin		
mitjà va/vas conèixer	la		
Coordinadora i les se	ves		
activitats? (Un amic o	una		
amiga, un veí o veïna,	un		
familiar, a través del d	iari)		
Es la primera vegada que es vincula/et vincules	Sí		
a una organització?	□ _{No}	Si no es la primera vegada que participa/participes	Grup Ecologista
		en algun tipus d'organització, en quin tipus d'organització havia/havies col.laborat?	Associació local (grup de festes, grup de joves, grup excursionista, associació de pares) Partit polític
			Altres:
Es/ets un propietari o propietària	Sí, jo sóc un propietari/propietària afectat/da		
afectada per el pas de la línia d'Alta Tensió?	Sí, la propietat del terreny afectat és d'un familiar meu. (El seu marit o la seva muller es consideren també familiars) Sisplau, pot especificar el parentiu?		

	□ No, no sóc propietari/propietària
En un primer moment, quin és el motiu principal que el/et va	La línia d'Alta Tensió havia de passar pel meu terreny i no hi estava d'acord
empènyer a involucrar-te en la Coordinadora? (Marqui/marca amb	☐ Em preocupaven els efectes que la línia d'Alta Tensió poguessin tenir sobre la salut
una X el motiu principal. Si cal pot/pots marcar-ne més d'un, fins a un	Pensava que la línia d'Alta Tensió representava una agressió al nostre territori
màxim de tres)	Em preocupaven els efectes de la línia d'Alta Tensió sobre el paisatge del meu municipi i de les Gavarres
	☐ Creia que la línia d'Alta Tensió no era una solució correcte des d'un punt de vista ambiental pel model de desenvolupament territorial que hauria de seguir Catalunya
	Pensava que la línia d'Alta Tensió faria baixar la qualitat de vida del poble
	Altres:

Actualment, després de passar un temps com a membre de la Coordinadora Antilínia de les Gavarres, amb quina de les següents opinions està/estàs més d'acord?	La línia d'Alta Tensió passa pel meu terreny i segueixo sense estar-hi d'acord La línia d'Alta Tensió pot tenir efectes negatius sobre la salut de la gent que hi viu a prop La línia d'Alta Tensió és una agressió al nostre territori La línia d'Alta Tensió destrossa el paisatge del municipi i de les Gavarres
(Marqui/marca amb una X la opinió amb la que estiguis més d'acord. Si cal	Considero que la línia d'Alta Tensió no és un model de desenvolupament del territori desitjable per Catalunya La línia d'Alta Tensió ha fet baixar la qualitat de vida del
pot/pots marcar-ne més d'una, fins a un màxim de tres)	poble Altres:
Coneix/coneixes casos concrets en que cregui/creguis que la línia d'Alta Tensió ha tingut efectes negatius sobre problemes de	Sí. (Si us plau, expliqui/explica breument el cas):
salut, qualitat de les collites, etc.?	□ No.
La construcció de la línia d'Alta Tensió ha tingut efectes negatius sobre la seva/teva qualitat de vida, o de les persones que	Sí. (Si us plau, indiqui/indica quins són els efectes negatius):

viuen amb	
vostè/tu?	
	No m'ha afectat a mi directament, però ha afectat a persones que conec. (Sisplau, indiqui/indica quins són els efectes negatius):
	□ No.
Quina activitat o activitats	☐ Contribueixo econòmicament
realitza/realitzes en l'organització?	☐ Treballo en temes d'organització d'activitats (manifestacions, accions directes, activitats lúdiques)
	☐ Vaig a les manifestacions
	Ajudo en la realització de tràmits judicials i administratius
	☐ Estic a la Junta Directiva
	Faig tasques d'informació i conscienciació
	Ajudo quan es fan excursions, arrossades i activitats d'aquest tipus
	□ Vaig col.laborar quan vam fer els bloquejos per les obres
	He contribuït en la realització d'estudis tècnics sobre la problemàtica
	He enviat escrits a la premsa

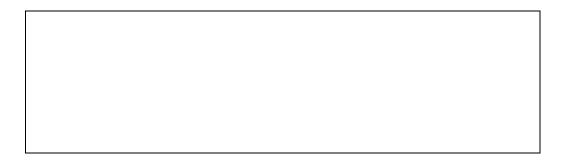
	☐ Altres:
Assenyala quines creu/creus que són	Recollir fons econòmics
-o han sigut- les activitats més importants que es	Organitzar les activitats (manifestacions, accions directes, activitats lúdiques)
fan a la Coordinadora? (Marqui/marca amb	Les manifestacions
una X les tres activitats que consideri/consideris	Els tràmits judicials i administratius
més importants)	☐ La direcció (Junta Directiva)
	La informació i conscienciació de la gent
	La col.laboració de la gent en les excursions, arrossades i activitats d'aquest tipus
	☐ Els bloquejos per les obres
	Negociar amb les autoritats
	Enviar escrits a la premsa
	□ Altres:

	onflicte, hi havia situacions de la seva/teva vida quotidiana
	entre veïns, etc.) en les que s'estima/t'estimes més no donar a nembre de la Coordinadora Antilínia de les Gavarres?
concixer que es/ets in	icinote de la Coordinadora Antinina de les Gavarres:
No, no tinc cap p	roblema en dóna a conèixer la meva vinculació a l'organització.
	s ambients o davant de determinades persones m'estimo més
no fer-ho saber.	
	ssible, indiqui/indica en quines circumstancies o davant de
* *	estima/t'estimes més no donar a conèixer la teva afiliació al
moviment, i perqi	ıċ.
Tant si	Participo regularment: hores a
participa/participes	a la setmana
regularment com si	
ho fas	
esporàdicament,	Participo esporàdicament:
quantes hores	vegades a l'any
dedica/dediques a	
l'organització?	Quan faig una participació esporàdica hi acostumo a dedicar:
	hores a la
	setmana
Com valora/valores	Col.laboro tot el que puc i n'estic satisfet/a
la seva/teva	_
contribució en	☐ Voldria col.laborar més però no puc per les meves
l'organització?	responsabilitats familiars
(Marqui/marca amb	
una creu una o	☐ Voldria col.laborar més però no puc per les meves
varies de les	responsabilitats laborals
següents respostes)	, <u> </u>

		Voldria col.laborar més però no puc perquè faig altres activitats		
		Altres:		
	_	tats que realitza/es en l'organització, s'ha/t'has sentit més nb homes o amb dones?		
	M'he sentit igual de còmode treballant amb homes com amb dones.			
	M'he sentit més còmode treballant amb homes. Podria/es explicar en quin sentit, en quines tasques o activitats i perquè?			
	M'he sentit més còmode treballant amb dones. Podria/es explicar en quin sentit, en quines tasques o activitats i perquè?			
i n	Segurament, pel fet de participar en la coordinadora ha/has fet noves coneixences i noves amistats. Veu/veus aquesta relació diferent del tipus d'amistats que ha/has tingut fins ara amb persones del seu/teu mateix sexe o del sexe oposat?			
	No, el tipus de ger	nt que he conegut és semblant a la que em relaciono guin homes com dones.		
	Sí, per mi són ami	istats diferents de les que havia tingut fins ara.		
	és una amistat dif	explica breument en quin sentit aquestes amistats són diferents, si erent a la que ha/has tingut fins ara amb altres homes o dones, i er vostè/per tu la seva coneixença.		
Als	Alguna vegada s'ha/t'has plantejat si el fet de ser home/ dona implica avantatges o			

inconvenients per realitzar algunes de les activitats, accions o tasques de l'organització? Perquè?			
Creu/creus que hi ha diferències si una organització civil com la Coordinadora Antilínia de les Gavarres està liderada o representada per un home o per una dona? Implica uns determinats avantatges o inconvenients? (En el funcionament de la organització, per representar l'organització davant les institucions polítiques o per parlar amb la premsa, etc.) Perquè?			
Després d'allò que ha passat en el	La Generalitat de Catalunya		
conflicte de les Gavarres, ha canviat	L'Ajuntament de Cassà de la Selva		
la seva/teva confiança en allò	La companyia FECSA-ENDESA		
que diuen o fan?	Els mitjans de comunicació		
Indiqui-ho/Indica-ho de la següent manera:	L'Ajuntament de Llagostera		
→menys confiança	Els científics i científiques que fan informes sobre els efectes sobre la salut de les línies d'Alta Tensió		
més confiança	La gent del poble		
= la mateixa confiança	Els polítics en general		

NS = No ho sé	Els mossos d'esquadra	
	L'equip tècnic que ha fet la feina de planificació de la línia d'Alta tensió	
	Altres:	
Quines de les següents	La Generalitat de Catalunya	
institucions o grups socials creu/creus	Els ajuntaments dels pobles	
que haurien de ser els més responsables	☐ El sector industrial i comercial	
en millorar les condicions	☐ Els mitjans de comunicació	
ambientals del territori de Catalunya?	Els científics i científiques	
(Marqui/Marca amb	Els tècnics i tècniques ambientals	
una creu els tres que haurien de ser els	Les associacions	
més responsables)	☐ Els polítics	
	Els ciutadans i ciutadanes	
	☐ Altres:	
Què valora/valores més de la seva/teva experiència com a membre la de la Coordinadora Antilínia de les Gavarres?		



Està/estàs d'acord amb les següents opinions? Valori-les/valora-les del 0 al 4.

0 = Gens	1 = Una mica	2 = Bastant	3 = Molt	
d'acord	d'acord	d'acord	d'acord	4 = No ho sé

1	El que més em preocupa de les problemàtiques ambientals és com poden
	afectar a la salut de la gent
2	No entenc el significat de conceptes com "desenvolupament sostenible" o
	"sostenibilitat"
3	Abans de ser membre de la Coordinadora pensava que la meva opinió
	sobre el futur del poble no era important
4	La gent hauríem de participar directament en les decisions importants que
	es prenguin al poble
5	Les decisions sobre el futur del poble les han de prendre només les
	autoritats, que per això les hem votat entre tots els ciutadans i ciutadanes
6	No he entès mai quan a la TV o als diaris parlen de conceptes com "canvi
	climàtic", "efecte hivernacle", "forat de la capa d'ozó"
7	Participar en la Coordinadora Antilínia m'ha fet adonar que la meva
	opinió sobre el futur del poble també és important
8	Després de l'experiència en la Coordinadora Antilínia vull participar en la
	vida política del poble
9	Les autoritats haurien de fer activitats de participació per conèixer la
	opinió de la gent abans de prendre una decisió
10	El que més em preocupa de les problemàtiques ambientals i del territori és
	com poden afectar a la qualitat de vida de la gent
11	La gent hauríem de tenir més informació sobre la qualitat dels productes
	que consumim, sobre els efectes sobre la salut dels avenços tecnològics, i

	sobre tot allò que pogui afectar la nostra salut
12	Penso que els polítics i els tècnics son els únics que poden prendre
	decisions sobre el futur del poble perque tenen un coneixement sobre el
	territori que la gent del carrer no tenim
13	No m'interessa el món de la política
14	La gent hauríem de tenir una informació més clara respecte als projectes
	que es volen fer en el territori on vivim perque ens en poguem fer una
	opinió i dir si hi estem d'acord o no.
15	Després del que he vist / viscut en relació a les actituds de les
	administracions en el conflicte de les Gavarres, m'he desencantat de la
	política
16	No entenc massa sobre temes ambientals, allò que m'amoïna es el que
	passa al meu poble i com afecta a la gent del meu voltant
17	Els governs haurien de destinar més diners a la gestió del medi ambient
18	Es necessari que la nostra societat segueixi creixent econòmicament i per això
	ens cal seguir construïnt infrastructures sobre el nostre territori i invertir en el
	desenvolupament de les activitats econòmiques
19	Els polítics i la gent hem d'entendre que ja no podem seguir creixent com
	fins ara, perque el creixement econòmic comporta problemes ecològics
•	molt importants
20	Si les autoritats fessin més cas del que la gent opinem les coses anirien
2.1	millor
21	El que més em preocupa de les problemàtiques territorials és que s'està
22	perdent el nostre paisatge i la nostra memòria històrica
22	La gent hem de canviar aspectes de la nostra forma de viure, com
	consumir menys o fer petites accions quotidianes com separar les deixalles, si volem un medi ambient de millor qualitat
23	Crec que l'aplicació de l'Agenda 21 és molt important per avançar cap a
23	una societat sostenible
24	Em costa comprendre els mecanismes de la política i com es prenen les
	decisions
25	M'agradaria participar com a ciutadà/ciutadana en la presa de decisions
	sobre el futur del poble, però penso que no tinc ni les capacitats ni els
	coneixements per fer-ho
26	Crec que fa falta informació més entenedora sobre els temes ambientals
	perquè la gent que no els coneix també els pogui entendre
	1 2 2 2

27	Els avenços en ciència i tecnologia aconseguiran portar solucions als
	problemes ambientals
28	El fet de participar en la Coordinadora Antilinia de les Gavarres m'ha fet
	entendre millor els problemes ambientals del nostre entorn
29	M'agradaria participar en la vida política del poble però no tinc temps per
	aquest tipus d'activitats
30	Podem seguir creixent però hem de prendre mesures per no fer malbé el
	nostre entorn
31	Els acord mundials entre governs que es prenen a les Cimeres de la Terra,
	com Rio de Janeiro o Johannesburg, són molt importants per al nostre
	futur ambiental
32	El govern hauria de penalitzar a les industries que contaminen
33	Els acords i les directrius que marca la Unió Europea sobre temes
	ambientals, en realitat no són molt importants, perquè a nivell local els
	governs no els apliquen.
34	L'Agenda 21 és una bona eina per avançar en la millora ambiental a nivell
	local, el que passa és que les autoritats no l'estan aplicant correctament

A casa seva/teva, qui s'encarrega o té l'hàbit de...

(tu mateix/a, company o companya, muller o marit, fill o filla, avi o àvia, ningú, etc.)

(Si viu/vius sol/a, sisplau, deixi/deixa en blanc aquesta pregunta)

Fer les compres de cada día	
Tenir cura d'algun familiar	
Gestionar el pagament d'aigua, gas, electricitat	
Decidir quins aparells audio-visuals, de comunicació,	
informàtics comprar	
Recordar que cal separar les deixalles	
Insistir en arreglar les coses que s'han fet malbé abans	
de comprar-ne de noves	

Conscienciar que cal tancar els llums o l'aigua quan no	
s'utilitzen	
Comentar les darreres notícies en materia de medi	
ambient	
Preocupar-se per la qualitat dels aliments que mengeu	
Fer servir el transport públic	
Parlar sobre les últimes novetats sobre la política del	
poble	
Interessar-se per les novetats en tecnologies sostenibles	
(plaques solars)	
Negar-se a comprar productes que impacten	
negativament sobre el medi ambient	
Fer servir varies vegades l'oli de cuinar	
Donar noves utilitats a les coses que s'han fet velles	
	II.

Quines de les següents accions estaria/estaries més disposat/da a fer (o ja fas) per impactar menys el seu/teu entorn i millorar la qualitat del medi? (Marqui/ marca'n un màxim de tres o indiqui'n/indica'n d'altres)

Si fos possible, canviar-me a una companyia d'electricitat que oferís garanties de que la seva energia és menys contaminant pel medi
Comprar productes que estigués segur/a que per produir-los no han utilitzat químics ni han fet variacions genètiques
Fer servir menys electricitat i menys aigua
Pressionar per a que una part dels impostos es destinin a millorar la qualitat del medi
Fer servir el transport públic o anar a peu sempre que sigui possible
Consumir menys i procurar comprar productes que no impacten el medi ambient

Posar a casa plaques solars i altres aparells de tecnologia sostenible
Comprar aparells elèctrics que consumeixen menys o cambiar les bombetes de casa per unes de més baix consum
Altres:

Indiqui/indica quin del següents temes li/et preocupen més en referència a les problemàtiques ambientals:

(Marqui/ marca'n un màxim de tres o indiqui'n/indica'n d'altres)

Els efectes sobre la salut
Els efectes sobre el paisatge
La destrucció de la natura
L'extinció d'espècies animals
La contaminació de l'aire i de l'aigua
La pèrdua de biodiversitat
Que es facin malbé llocs que m'estimo
Que cada cop hi hagi més espai urbanitzat i menys espai rural
La qualitat d'allò que mengem
La pèrdua de boscos

La indústria d'energia nuclear
Els grans desastres naturals com el Prestige
El canvi climàtic
Altres:

Moltes gracies per la seva/teva col.laboració!

ANNEX 2. Enquiry to members of Salvem l'Empordà

Projecte de Recerca: Governança ambiental des d'una perspectiva de gènere Mercè Agüera Cabo, Joint Research Centre, Comissió Europea, Ispra-Italia. merce.aguera-cabo@jrc.it

-Novembre/Desembre 2003-

Els resultats d'aquesta enquesta es faran servir com a material de treball en la recerca de tesi "Governança ambiental des d'una perspectiva de gènere", que es realitza en el marc d'un projecte finançat pel la Unió Europea, i que pretén avançar en el tema de la participació ciutadana. Per tant, el que respongui/responguis en cadascuna de les preguntes és molt important per als resultats que s'obtinguin.

Li/et preguem que les seves/teves respostes siguin tan reflexionades com sigui possible i, sobretot, que responguin a una opinió personal.

Moltes gracies per la seva/teva col·laboració.

Mercè Agüera

ENQUESTA A MEMBRES DE SALVEM L'EMPORDA

Nom i	
Cognoms	
Cognoms (opcional)	
Sexe	Home
	Dona

Edat	
Ocupació	
Nivell Educatiu	No tinc títols d'estudis
	Educació General Bàsica
	Estudis professionals
	Estudis universitaris
	Altres:
Municipi de residència	
Característiques de l'habitatge	Visc sol/sola
	Comparteixo pis amb amics/amigues
	Visc en parella
	Visc amb la família
	Altres:

Preguntes

Aproximadament, des de quin mes i any ets membre de Salvem l'Empordà?			
A través de qui o de quin mitjà vas conèixer Salvem l'Empordà i les seves activitats? (Un amic o una amiga, un veí o veïna, un familiar, a través del diari)			
Es la primera vegada que et vincules a una organització?	□ Sí		
	□ No	Si no es la primera vegada que participes en una organització,	Grup Ecologista
		en quin tipus d'organització havies col.laborat?	Associació local (grup de festes, grup de joves, grup excursionista, associació de mares i pares)
			Partit polític
			☐ Altres:
Et vas vincular a Salvem l'Empordà perquè estaves directament afectat/afectada per alguna de les problemàtiques per les que lluita la plataforma?			
No, no estic directament afectat/afectada per cap de les cap de les problemàtiques.			

Ш	
	Sí, una de les problemàtiques per les que lluita –o lluitava- Salvem l'Empordà m'afecta directament.
	Ets un propietari afectat o una propietària afectada per una de les problemàtiques per les que lluita Salvem l'Empordà, o ets familiar d'un propietari o propietària? (El teu marit o la teva muller es consideren també familiars)
	Pots indicar quina es la problemàtica i en quin sentit t'afecta directament?
	ins van ser el motius principals que et van empènyer a vincular-te a Salvem mpordà?
haı	tualment <u>, després de passar un temps com a membre de Salvem l'Empordà,</u> n canviat o s'han afegit altres motius a aquells que en un principi et van fer cular-te a Salvem l'Empordà?
	No, els motius per mobilitzar-me segueixen essent els mateixos que quan em
	vaig involucrar a Salvem l'Empordà.
	Sí, després de passar un temps com a membre de Salvem l'Empordà, ara considero que hi ha altres motius pels quals és important mobilitzar-se.

Tu mateix/mateixa o persones properes tu (familiars, veïns) han anat a buscar ajuda a Salvem l'Empordà per algun conflicte que els preocupava?		
	No, ni jo mateix/mateixa, ni persones properes a mi ens hem dirigit a Salvem l'Empordà per un problema que ens preocupava.	
	Sí, jo mateix/mateixa i/o altres persones properes a mi ens hem dirigit a Salvem l'Empordà per un problema que ens preocupava. Podria/podries esmentar quines són les persones que es van dirigir a l'organització (familiars, veïns) i quin tipus d'ajuda els van demanar?	
-	gun dels projectes en contra dels que lluita Salvem l'Empordà té efectes gatius sobre la teva qualitat de vida o de la qualitat de vida de gent a prop teu?	
	Sí, algun dels projectes ha fet disminuir la meva qualitat de vida. Si us plau, indica quin és el projecte i en quin sentit ha fet disminuir la teva qualitat de vida.	
	No m'ha afectat a mi directament, però ha afectat a persones properes a mi. Si us plau, indica quina relació tens amb aquestes persones (familiars, amics, coneguts, etc.) i en quin sentit ha disminuït la seva qualitat de vida.	
	No, no conec cap cas directament.	

en	ha situacions de la teva vida quotidiana (laborals, familiars, entre veïns, etc.) les que t'estimes més no donar a conèixer que ets membre de Salvem mpordà?
	No, no tinc cap problema en donar a conèixer la meva vinculació a l'organització.
	Sí, en determinats ambients o davant de determinades persones m'estimo més no fer-ho saber. Si us plau, si es possible, indica en quines circumstancies o davant de quines persones (companys de feina, veïns, familiars) t'estimes més no donar a
	conèixer la teva afiliació al moviment, i perquè.
Qu	ines tasques i activitats realitzes a Salvem l'Empordà?
	Vaig a les assemblees Generals.
	Si us plau, indica quin es el teu paper en les assemblees
	Estic en una comissió
	Si us plau, indica en quina comissió i quines tasques realitzes dintre de la comissió.
	Col.laboro esporàdicament.
	Si us plau, indica en quines activitats col.labores (manifestacions, concerts, accions, difusió de l'organització, etc.) i quines tasques has desenvolupat.

Contribueixo econòmicament.		
Altres:		
Quines creus que són les activitats més importants	La difusió de les problemàtiques i del moviment a la premsa Recollir fons econòmics per l'organització	
que fa Salvem l'Empordà?		
(Marca amb una X les tres activitats que consideris més	☐ Les manifestacions	
importants)	Les activitats lúdiques (arrossades, sopars, concerts)	
	Els tràmits judicials i administratius	
	Els estudis tècnics	
	L'assessorament a la gent dels pobles	
	La informació i conscienciació de la gent	
	Negociar i pressionar a la Generalitat i als Ajuntaments	

	Les accions directes
	L'establiment de contactes i l'assessorament d'altres organitzacions civils en defensa del territori
	☐ La difusió i el contacte entre la gent a través de la pàgina web
	☐ Altres:
Tant si participes	Participo regularment:
regularment com si ho fas	a a la semiana
esporàdicament, quantes hores dediques a l'organització?	Participo esporàdicament:vegades a l'any
	Quan faig una participació esporàdica hi acostumo a dedicar:
	hores en total (aproximades).
Com valores la teva contribució en	Col.laboro tot el que puc i n'estic satisfet/satisfeta
l'organització? (Marqui/marca amb	☐ Voldria col.laborar més però no puc per les meves responsabilitats familiars

var		☐ Voldria col.laborar més però no puc per les meves responsabilitats laborals			
seg	uents respostes)	Voldria col.laborar més però no puc perquè faig altres activitats			
		Altres:			
	les tasques i activi pallant amb home	tats que realitzes en l'organització, t'has sentit més còmode s o amb dones?			
		le còmode treballant amb homes com amb dones.			
	M'he sentit més co	bmode treballant amb homes.			
	Podries explicar en quin sentit, en quines tasques o activitats i perquè?				
	M'he sentit més còmode treballant amb dones.				
	Podries explicar en quin sentit, en quines tasques o activitats i perquè?				
con	eixences i noves a	e participar en Salvem l'Empordà has fet noves mistats. Veus aquesta relació diferent del tipus d'amistats a amb persones del teu mateix sexe o del sexe oposat?			
		nt que he conegut és semblant a la que em relaciono guin homes com dones.			
	Sí, per mi són ami	stats diferents de les que havia tingut fins ara.			
	una amistat difere	breument en quin sentit aquestes amistats són diferents, si és nt a la que has tingut fins ara amb altres homes o dones, i què la seva coneixença.			

Alguna vegada t'has plantejat si el fet de ser home o dona implica avantatges o inconvenients per realitzar algunes de les activitats, accions o tasques de l'organització? Perquè?

Creus que hi ha diferències si una organització civil com Salvem l'Empordà està liderada o representada per un home o per una dona? Implica uns determinats avantatges o inconvenients? (En el funcionament de la organització, per representar l'organització davant les institucions polítiques o per parlar amb la premsa, etc.)

Perquè?

Després d'allò que ha	La Generalitat de Catalunya
passat en els conflictes en els que	L'Ajuntament del teu poble
lluita Salvem l'Empordà, ha canviat la teva	Les companyies promotores que localitzen els seus negocis a l'Empordà
confiança en allò que	Els mitjans de comunicació
diuen o fan ?	La gent dels pobles afectats per una problemàtica
Indica-ho de la	Els tècnics i tècniques que fan informes sobre problemàtiques ambientals
següent manera:	La gent de l'Empordà en general, estigui afectada o no per una problemàtica
▼ menys confiança	Els grans propietaris de terrenys
▲ més confiança	Els mossos d'esquadra
= la mateixa	Els grups ecologistes
confiança	Els polítics en general
NS = No ho sé	Altres:

Quines			La Generalitat de Catalunya				
_	següents institucions o grups socials creus		Els ajuntaments dels pobles				
	rien de ser		Les indústries				
-	responsables	H	Els mitjans de comunicació				
en mill	orar les	Ш	Dio initiano de confunicació				
condici		-					
	tals del		Els científics i científiques				
territor			•				
Cataluı	ıya?		Les associacions				
			Els polítics				
`	amb una creu		Els ciutadants i ciutadanes				
de ser e	que haurien		Altres:				
respons							
тезропа							
Què valores més de la teva experiència com a membre de Salvem l'Empordà?							
Està/es	tàs d'acord amb	les s	egüents opinions? Valora-les del 0 al 4:				
0 = Ge	0 = Gens $1 = Una mica$ $2 = Bastant$ $3 = Molt$ $4 = No ho s$						
d'acord d'acord		d	d'acord d'acord				
1	El que més em preocupa de les problemàtiques ambientals és com poden afectar a la salut de la gent						
2	No entenc el significat de conceptes com "desenvolupament sostenible" o "sostenibilitat"						
3	Abans de ser membre de Salvem l'Empordà pensava que la meva opinió						

sobre el futur del meu poble i/o de l'Empordà no era important

La gent hauríem de participar directament en les decisions polítiques que

4

	es prenen i que afecten al lloc on vivim
5	Les decisions sobre el futur de l'Empordà les han de prendre només les autoritats, que per això les hem votat entre tots els ciutadans i ciutadanes
6	No he entès mai quan a la TV o als diaris parlen de conceptes com "canvi climàtic", "efecte hivernacle", "forat de la capa d'ozó"
7	Després de les experiències que he viscut com a membre de Salvem l'Empordà vull participar en la vida política del meu poble
8	Les autoritats haurien de fer activitats de participació per conèixer la opinió de la gent abans de prendre una decisió
9	La gent hauríem de tenir més informació sobre la qualitat dels productes que consumim, sobre els efectes sobre la salut dels avenços tecnològics, i sobre tot allò que pugui afectar la nostra salut
10	Penso que els polítics i els tècnics son els únics que poden prendre decisions sobre el futur de l'Empordà perquè tenen un coneixement sobre el territori que la gent del carrer no tenim
11	No m'interessa el món de la política
12	El que més em preocupa de les problemàtiques ambientals i del territori és com poden afectar a la qualitat de vida de la gent
13	La gent hauríem de tenir una informació més clara respecte als projectes que es volen fer en el territori on vivim perquè ens en poguem fer una opinió i dir si hi estem d'acord o no.
14	Després del que he vist / viscut en relació a les actituds de les administracions en els conflictes pels que lluita Salvem l'Empordà, m'he desencantat de la política
15	No entenc massa sobre temes ambientals, allò que m'amoïna es el que passa al meu poble i com afecta a la gent del meu voltant
16	Els governs haurien de destinar més diners a la gestió del medi ambient
17	Es necessari que la nostra societat segueixi creixent econòmicament i per això

	ens cal seguir construint infraestructures sobre el nostre territori i invertir en el desenvolupament de les activitats econòmiques
18	Els polítics i la gent hem d'entendre que ja no podem seguir creixent com fins ara, perquè el creixement econòmic comporta problemes ambientals molt importants
19	Si les autoritats fessin més cas del que la gent opinem les coses anirien millor
20	El que més em preocupa de les problemàtiques territorials és que s'està perdent el nostre paisatge i la nostra memòria històrica
21	La gent hem de canviar aspectes de la nostra forma de viure, com consumir menys o fer petites accions quotidianes, com separar les deixalles, si volem un medi ambient de millor qualitat
22	Crec que l'aplicació de l'Agenda 21 és molt important per avançar cap a una societat sostenible
23	Em costa comprendre els mecanismes de la política i com es prenen les decisions
24	M'agradaria participar com a ciutadà/ciutadana en la presa de decisions sobre el futur del poble, però penso que no tinc ni les capacitats ni els coneixements per fer-ho
25	Crec que fa falta informació més entenedora sobre els temes ambientals perquè la gent que no els coneix també els pugui entendre
26	Els avenços en ciència i tecnologia aconseguiran portar solucions als problemes ambientals
27	El fet de participar en Salvem l'Empordà m'ha fet entendre millor els problemes ambientals del nostre entorn
28	M'agradaria participar en la vida política del poble però no tinc temps per aquest tipus d'activitats
29	Podem seguir creixent però hem de prendre mesures per no fer malbé el nostre entorn
30	Els acord mundials entre governs que es prenen a les Cimeres de la Terra, com Rio de Janeiro o Johannesburg, són molt importants per al nostre

	futur ambiental
31	El govern hauria de penalitzar a les industries que contaminen
32	Els acords i les directrius que marca la Unió Europea sobre temes ambientals, en realitat no són molt importants, perquè a nivell local els governs no els apliquen.
33	L'Agenda 21 és una bona eina per avançar en la millora ambiental a nivell local, el que passa és que les autoritats no l'estan aplicant correctament

A casa teva, qui s'encarrega o té l'hàbit de...

(tu mateix/mateixa, company o companya, muller o marit, fill o filla, avi o àvia, ningú, etc.)

(Si vius sol/sola, si us plau, deixa en blanc aquesta pregunta)

T 1 1 1	1
Fer les compres de cada dia	
Tonin auna d'alaun familian	
Tenir cura d'algun familiar	
Controlar les despeses d'aigua, gas i electricitat quan	
arriben les factures	
arriben les factures	
D : 1: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Decidir quins aparells audiovisuals, de comunicació,	
informàtics comprar	
Recordar que cal separar les deixalles	
recordar que car separar res deixanes	
Insistir en arreglar les coses que s'han fet malbé abans	
de comprar-ne de noves	
de comptui ne de noves	
Conscienciar que cal tancar els llums o l'aigua quan no	
s'utilitzen	
Comentar les darreres notícies en matèria de medi	
ambient	
unioidit	
Preocupar-se per la qualitat dels aliments que mengeu	
711	
Fer servir el transport públic	

Parlar sobre les últimes novetats sobre la política del poble	
Interessar-se per les novetats en tecnologies sostenibles (plaques solars)	
Negar-se a comprar productes que impacten negativament sobre el medi ambient	
Fer servir varies vegades l'oli de cuinar	
Donar noves utilitats a les coses que s'han fet velles	

Quines de les següents accions estaries més disposat/disposada a fer (o ja fas) per impactar menys el teu entorn i millorar la qualitat del medi?

(Marca'n un màxim de tres o indica'n d'altres)

Si fos possible, canviar-me a una companyia d'electricitat que oferís garanties de que la seva energia és menys contaminant pel medi
Comprar productes que estigués segur/segura que per produir-los no han utilitzat químics ni han fet variacions genètiques
Fer servir menys electricitat i menys aigua
Pressionar perquè una part dels impostos es destinin a millorar la qualitat del medi
Fer servir el transport públic o anar a peu sempre que sigui possible
Consumir menys i procurar comprar productes que no impacten el medi ambient
Posar a casa plaques solars i altres aparells de tecnologia sostenible
Comprar aparells elèctrics que consumeixen menys o canviar les bombetes de casa per unes de més baix consum
Altres:

Indica quin del següents temes et preocupen més en referència a les problemàtiques ambientals:

(Marca'n un màxim de tres o indica'n d'altres)

Els efectes sobre la salut
Els efectes sobre el paisatge
La destrucció de la natura
L'extinció d'espècies animals
La contaminació de l'aire i de l'aigua
La pèrdua de biodiversitat
Que es facin malbé llocs que m'estimo
Que cada cop hi hagi més espai urbanitzat i menys espai rural
La qualitat d'allò que mengem
La pèrdua de boscos
La indústria d'energia nuclear
Els grans desastres naturals com el Prestige
El canvi climàtic
Altres:

 $Moltes\ gracies\ per\ la\ seva/teva\ col·laboraci\'o!$

ANNEX 3. Enquiry to members of Salvem les Valls

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Li/et preguem que les seves/teves respostes siguin tan reflexionades com sigui possible i, sobretot, que responguin a una opinió personal.

Moltes gracies per la seva/teva col·laboració.

Mercè Agüera

ENQUESTA A MEMBRES DE SALVEM LES VALLS

Nom i Cognoms (opcional)	
Sexe	Home
	Dona

Edat	
Ocupació	
Nivell Educatiu	☐ No tinc títols d'estudis
	Educació General Bàsica
	Estudis professionals
	Estudis universitaris
	Altres:
Municipi de residència	
Característiques de l'habitatge	☐ Visc sol/sola
	Comparteixo pis amb amics/amigues
	☐ Visc en parella
	Visc amb la família
	Altres:

Preguntes

Aproximadament quin mes i any ets de Salvem les Vall	membre		
A través de qui o o mitjà vas conèixer les Valls i les seves activitats? (Un am amiga, un veí o veï familiar, a través d	Salvem Sic o una		
Es la primera vegada que et vincules a una organització?	□ Sí		
Organitzaeto.	No	Si no és la primera vegada que participes en una organització, en quin tipus d'organització havies col.laborat?	Associació local (grup de festes, grup de joves, grup excursionista, associació de mares i pares) Partit polític Altres:

Ets un propietari afectat/propietària afectada pel pas de l'Eix de Vic-Olot?		
Sí, jo sóc un propietari	afectat /una propietària afectada problemàtiques.	
	eny afectat és d'un familiar meu. (El teu marit o la teva mbé familiars) Si us plau, pots especificar el parentiu?	
No, no sóc propietari afectat/propietària afectada		
En un primer moment, quin és el motiu principal que et va empènyer a involucrarte en la plataforma? (Marca amb una X el motiu principal. Si cal pots marcar-ne més d'un, fins a un màxim de quatre)		
Actualment, <u>després de</u> <u>passar un temps com a</u> <u>membre de Salvem</u>	L'Eix Vic-Olot afectava el meu terreny i no hi estava d'acord Em preocupaven els impactes negatius l'Eix Vic-Olot sobre el desenvolupament turístic de la zona <i>En aquest sentit, pot</i>	
l'Empordà, han canviat o s'han afegit altres motius a aquells que en un principi et van fer	afectar directament la teva activitat laboral?	
vincular-te a Salvem l'Empordà?	Em preocupaven els impactes de l'Eix Vic-Olot sobre la qualitat de vida de les zones per on ha de passar Pensava que l'Eix Vic-Olot i el túnel de Bracons	
	representaven una agressió al nostre territori Em preocupaven els impactes negatius de l'Eix Vic-Olot	

sobre el paisatge dels espais per on passa

Creia que l'Eix Vic-Olot i el túnel de Bracons no eren un bon model de desenvolupament territorial, i que aquest no era el tipus de "progrés" que li fa falta a Catalunya.

Em preocupaven els impactes de l'eix Vic-Olot i del túnel de Bracons sobre la fauna que habita a la zona, on hi ha moltes espècies en extinció

Em preocupaven els impactes negatius l'Eix Vic-Olot sobre l'activitat agrícola de la zona *En aquest sentit*, pot afectar directament la teva activitat laboral?

...

Em motivava la lluita ecologista en general, i per això vaig voler-me vincular a la causa de Salvem les Valls

Em precoupaven els impactes ambientals de l'Eix Vic-Olot

Em motivava la lluita de Salvem les Valls, per ser una lluita que surt de la gent que viu al territori

Altres:

Actualment, després de passar un temps com a membre de la Salvem les Valls, amb quina de les següents opinions estàs més d'acord? (Marca amb una X la opinió amb la que estiguis més d'acord. Si cal pots marcar-ne més d'una, fins a un màxim de quatre)

L'Eix Vic-Olot afecta el meu terreny i segueixo sense estarhi d'acord

Em preocupen els impactes negatius l'Eix Vic-Olot sobre el desenvolupament turístic de la zona

Em preocupen els impactes de l'Eix Vic-Olot sobre la qualitat de vida de les zones per on ha de passar

Penso que l'Eix Vic-Olot i el túnel de Bracons representen una agressió al nostre territori

Em preocupen els impactes de l'Eix Vic-Olot sobre el paisatge dels espais per on passa

Crec que l'Eix Vic-Olot i el túnel de Bracons no són un bon model de desenvolupament territorial, i que aquest no és el tipus de "progrés" que li fa falta a Catalunya.

		Crec que l'Eix Vic-Olot i el túnel de Bracons no són un bon model de desenvolupament territorial, i que aquest no és el tipus de "progrés" que li fa falta a Catalunya.		
		Em preocupen els impactes de l'eix Vic-Olot i del túnel de Bracons sobre la fauna que habita a la zona, on hi ha moltes espècies en extinció		
		Em preocupen els impactes negatius l'Eix Vic-Olot sobre l'activitat agrícola de la zona		
		Em sento motivat/da a recolzar les causes dels moviments ecologistes		
		Considero que l'Eix Vi-Olot comportarà impactes ambientals molt negatius per allà on passa.		
		Hem sento motivat/da a recolzar altres moviments locals on la gent defensi el territori on viu.		
		Altres:		
Hi ha situacions de la teva vida quotidiana (laborals, familiars, entre veïns/veïnes, etc.) en les que t'estimes més no donar a conèixer que ets membre de Salvem les Valls?				
	No, no tinc cap prob	lema en dóna a conèixer la meva vinculació a l'organització.		
	Sí, en determinats ambients o davant de determinades persones m'estimo més no fer-ho saber. Si us plau, si és possible, indica en quines circumstancies o davant de quines persones (companys de feina, veïns) t'estimes més no donar a conèixer la teva afiliació al moviment, i perquè.			

Quines tasques i activitats realitzes a Salvem les Valls?
Contribueixo econòmicament
Treballo en temes d'organització d'activitats (manifestacions, xerrades i conferències)
☐ Vaig a les manifestacions
Ajudo en la realització de tràmits judicials i administratius
He assistit a les reunions amb les autoritats com a representant de l'organització
He contribuït en la realització d'estudis tècnics sobre la problemàtica
He enviat escrits a la premsa
Faig feina en la pàgina web i en el contacte entre socis i socies a través del correu electrònic
Altres:

Assenyala quines creus que són les activitats més importants que fa Salvem les Valls? (Marca amb una X les tres activitats que consideris més importants)	Recollir fons econòmics
	Organitzar activitats (manifestacions, xerrades i conferències)
	Les manifestacions
	Els tràmits judicials i administratius
	La direcció (Junta Directiva)
	La informació i conscienciació de la gent
	L'assessorament a la gent dels pobles
	La informació i conscienciació de la gent
	La col.laboració de la gent en les excursions, arrossades i activitats d'aquest tipus
	La contribució a favor de la causa de Salvem les Valls de científics i intel·lectuals que debaten sobre el conflicte de Bracons a través d'estudis, o conferències i xerrades
	Les reunions amb les autoritats per debatre sobre el conflicte
	La realització d'estudis tècnics sobre la problemàtica pels mateixos membres de l'organització
	La difusió de la problemàtica i del moviment a través de la premsa

	La difusió de les activitats de l'organització i el contacte amb la gent a través de la pàgina web i el correu electrònic
	Altres:
Tant si participes regularment com si ho fas esporàdicament,	Participo regularment: hores a a la setmana
quantes hores dediques a l'organització?	Participo esporàdicament:vegades a l'any Quan faig una participació esporàdica hi acostumo a dedicar:
	hores en total (aproximades).
Com valores la teva contribució en	Col.laboro tot el que puc i n'estic satisfet/satisfeta
l'organització? (Marqui/marca amb una creu una o varies de les següents	Voldria col.laborar més però no puc per les meves responsabilitats familiars
respostes)	☐ Voldria col.laborar més però no puc per les meves responsabilitats laborals

	Voldria col.laborar més però no puc perquè faig altres activitats		
	Altres:		
En les tasques i activitats que realitzes en l'organització, t'has sentit més còmode treballant amb homes o amb dones?			
	al de còmode treballant amb homes com amb dones.		
☐ M'he sentit mé	s còmode treballant amb homes.		
Podries explica	r en quin sentit, en quines tasques o activitats i perquè?		
M'he sentit mé	s còmode treballant amb dones.		
Podries explicar en quin sentit, en quines tasques o activitats i perquè?			

Segurament, pel fet de participar en Salvem l'Empordà has fet noves coneixences i
noves amistats. Veus aquesta relació diferent del tipus d'amistats que has tingut
fins ara amb persones del teu mateix sexe o del sexe oposat?
No, el tipus de gent que he conegut és semblant a la que em relaciono normalment,
ja siguin homes com dones.
Sí, per mi són amistats diferents de les que havia tingut fins ara.
Si us plau, explica breument en quin sentit aquestes amistats són diferents, si és una
amistat diferent a la que has tingut fins ara amb altres homes o dones, i què ha
significat per tu la seva coneixença.
Alguna vegada t'has plantejat si el fet de ser home o dona implica avantatges o
inconvenients per realitzar algunes de les activitats, accions o tasques de
l'organització? Perquè?
Torganitzacio: reique:
Creus que hi ha diferències si una organització civil com Salvem l'Empordà està
liderada o representada per un home o per una dona? Implica uns determinats
avantatges o inconvenients? (En el funcionament de la organització, per representar
l'organització davant les institucions polítiques o per parlar amb la premsa, etc.)
Perquè?

Després de viure		La Generalitat de Catalunya
de prop com s'ha		·
anat		Els ajuntaments dels pobles afectats
desenvolupant el		El sector industrial de la Garrotxa
conflicte de l'Eix		Els mitjans de comunicació
Vic-Olot, ha canviat la teva		L'Ajuntament de Vic
canviat la teva confiança en allò		,
que diuen o fan		L'Ajuntament d'Olot
?		Els tècnics i tècniques, o en general les consultories, que
Indica-ho de la		s'encarreguen de fer informes d'impacte ambiental
següent manera:		La gent de la Garrotxa
seguent munera.		
		Els polítics en general
▼menys confiança		El sector comercial de la Garrotxa
		Convergència i Unió
▲ més confiança		Iniciativa per Catalunya
		Esquerra Republicana de Catalunya
= la mateixa		El Partit Socialista de Catalunya
confiança		El sistema judicial
NS = No ho sé		Altres:
N5 = N0 110 Se		
Quines de les		La Generalitat de Catalunya
següents institucions o		
grups socials		Els ajuntaments dels pobles
creus que		Lis ajuntaments dels pooles
haurien de ser els		
més responsables		El sector industrial i comercial
en millorar les		
condicions		
ambientals del		Els mitjans de comunicació
territori de		
	l	ı

Catalun	ya?		Els cien	tífics i cienti	fiques			
•	amb una		Els tècn	ics i tècniqu	es ambi	entals		
	tres que de ser els consables)		Les asso	ociacions				
			Els part	its polítics				
			Els ciuta	adans i ciuta	danes			
			Altres:					
Què valores més de la teva experiència com a membre de Salvem les Valls?								
Està/estàs d'acord amb les següents opinions? Valora-les del 0 al 4:								
0 = Ger d'acoro		= Una acord	mica	2 = Bastan d'acord	t	3 = Molt d'acord	4 =	= No ho sé
1	El que m afectar a l			-	blemàti	ques ambie	ntals é	s com poden
2	No enten "sostenibi		gnificat d	le conceptes	com "	desenvolup	ament	sostenible" o

3	Abans de ser membre de Salvem les Valls pensava que la meva opinió sobre el futur del meu poble i/o de la Garrotxa no era important
4	La gent hauríem de participar directament en les decisions polítiques que es prenen i que afecten al lloc on vivim
5	Les decisions sobre el futur de la Garrotxa les han de prendre només les autoritats, que per això les hem votat entre tots els ciutadans i ciutadanes
6	No he entès mai quan a la TV o als diaris parlen de conceptes com "canvi climàtic", "efecte hivernacle", "forat de la capa d'ozó"
7	Després de les experiències que he viscut com a membre de Salvem les Valls vull participar en la vida política del meu poble
8	Les autoritats haurien de fer activitats de participació per conèixer la opinió de la gent abans de prendre una decisió
9	La gent hauríem de tenir més informació sobre la qualitat dels productes que consumim, sobre els efectes sobre la salut dels avenços tecnològics, i sobre tot allò que pugui afectar la nostra salut
10	Penso que els polítics i els tècnics son els únics que poden prendre decisions sobre el futur de la Garrotxa perque tenen un coneixement sobre el territori que la gent del carrer no tenim
11	No m'interessa el món de la política
12	El que més em preocupa de les problemàtiques ambientals i del territori és com poden afectar a la qualitat de vida de la gent
13	La gent hauríem de tenir una informació més clara respecte als projectes que es volen fer en el territori on vivim perquè ens en puguem fer una opinió i dir si hi estem d'acord o no.
14	Després del que he vist / viscut en relació a les actituds de les administracions en el conflicte de les Salvem les Valls, m'he desencantat/da de la política
15	No entenc massa sobre temes ambientals, allò que m'amoïna es el que passa al meu poble i com afecta a la gent del meu voltant
16	Els governs haurien de destinar més diners a la gestió del medi ambient

17	És necessari que la nostra societat segueixi creixent econòmicament i per això ens cal seguir construint infraestructures sobre el nostre territori i invertir en el desenvolupament de les activitats econòmiques
18	Els polítics i la gent hem d'entendre que ja no podem seguir creixent com fins ara, perquè el creixement econòmic comporta problemes ambientals molt importants
19	Si les autoritats fessin més cas del que la gent opinem les coses anirien millor
20	El que més em preocupa de les problemàtiques territorials és que s'està perdent el nostre paisatge i la nostra memòria històrica
21	La gent hem de canviar aspectes de la nostra forma de viure, com consumir menys o fer petites accions quotidianes, com separar les deixalles, si volem un medi ambient de millor qualitat
22	Crec que l'aplicació de l'Agenda 21 és molt important per avançar cap a una societat sostenible
23	Em costa comprendre els mecanismes de la política i com es prenen les decisions
24	M'agradaria participar com a ciutadà/ciutadana en la presa de decisions sobre el futur del poble, però penso que no tinc ni les capacitats ni els coneixements per fer-ho
25	Crec que fa falta informació més entenedora sobre els temes ambientals perquè la gent que no els coneix també els pugui entendre
26	Els avenços en ciència i tecnologia aconseguiran portar solucions als problemes ambientals
27	El fet de participar en Salvem les Valls m'ha fet entendre millor els problemes ambientals del nostre entorn
28	M'agradaria participar en la vida política del poble però no tinc temps per aquest tipus d'activitats

29	Podem seguir creixent però hem de prendre mesures per no fer malbé el nostre entorn
30	Els acord mundials entre governs que es prenen a les Cimeres de la Terra, com Rio de Janeiro o Johannesburg, són molt importants per al nostre futur ambiental
31	El govern hauria de penalitzar a les indústries que contaminen
32	Els acords i les directrius que marca la Unió Europea sobre temes ambientals, en realitat no són molt importants, perquè a nivell local els governs no els apliquen.
33	L'Agenda 21 és una bona eina per avançar en la millora ambiental a nivell local, el que passa és que les autoritats no l'estan aplicant correctament

A casa teva, qui s'encarrega o té l'hàbit de...

(tu mateix/mateixa, company o companya, muller o marit, fill o filla, avi o àvia, ningú, etc.)

(Si vius sol/sola, si us plau, deixa en blanc aquesta pregunta)

Fer les compres de cada dia	
Tenir cura d'algun familiar	
Controlar les despeses d'aigua, gas i electricitat quan	
arriben les factures	
Decidir quins aparells audiovisuals, de comunicació,	
informàtics comprar	
Recordar que cal separar les deixalles	

Insistir en arreglar les coses que s'han fet malbé abans	
de comprar-ne de noves	
Conscienciar que cal tancar els llums o l'aigua quan no	
s'utilitzen	
Comentar les darreres notícies en matèria de medi	
ambient	
Preocupar-se per la qualitat dels aliments que mengeu	
Fer servir el transport públic	
Parlar sobre les últimes novetats sobre la política del	
poble	
Interessar-se per les novetats en tecnologies sostenibles	
(plaques solars)	
Negar-se a comprar productes que impacten	
negativament sobre el medi ambient	
Fer servir varies vegades l'oli de cuinar	
Donar noves utilitats a les coses que s'han fet velles	

Quines de les següents accions estaries més disposat/disposada a fer (o ja fas) per impactar menys el teu entorn i millorar la qualitat del medi?

(Marca'n un màxim de tres o indica'n d'altres)

Si fos possible, canviar-me a una companyia d'electricitat que oferís garanties de que la seva energia és menys contaminant pel medi

Fer servir menys electricitat i menys aigua
Pressionar perquè una part dels impostos es destinin a millorar la qualitat del medi
Fer servir el transport públic o anar a peu sempre que sigui possible
Consumir menys i procurar comprar productes que no impacten el medi ambient
Posar a casa plaques solars i altres aparells de tecnologia sostenible
Comprar aparells elèctrics que consumeixen menys o canviar les bombetes de casa per unes de més baix consum
Altres:
Indica quin del següents temes et preocupen més en referència a le problemàtiques ambientals:
(Marca'n un màxim de tres o indica'n d'altres)
Fls efectes sobre la salut

Comprar productes que estigués segur/segura que per produir-los no han

utilitzat químics ni han fet variacions genètiques

Els efectes sobre el paisatge
La destrucció de la natura
L'extinció d'espècies animals
La contaminació de l'aire i de l'aigua
La pèrdua de biodiversitat
Que es facin malbé llocs que m'estimo
Que cada cop hi hagi més espai urbanitzat i menys espai rural
La qualitat d'allò que mengem
La pèrdua de boscos
La indústria d'energia nuclear
Els grans desastres naturals com el Prestige
El canvi climàtic

Altres:

Moltes gracies per la seva/teva col·laboració!

ANNEX 4. Interviews to members of Coordinadora Antilínia de les Gavarres

BLOC A. RISC SOBRE LA SALUT, ACTIVISME I GÈNERE

Interessos:

- a) Aprofundir sobre la relació entre la percepció del risc sobre la salut i les responsabilitats de gènere
- b) Esbrinar en quina mesura creuen que la seva preocupació es diferent (o no) del la dels homes.
- c) Saber en quin sentit creuen que la seva preocupació ha estat representada en la lluita de l'organització, i com l'han considerat les autoritats.

BLOC B. PROBLEMES DE SALUT, CONEIXEMENT LOCAL FRONT ARGUMENTS TÈCNICS/CIENTÍFICS

Interessos:

- a) Aprofundir sobre la confiança de les dones en els arguments basats en l'experiència local sobre els efectes de la línia d'alta tensió sobre la salut.
- b) Esbrinar amb més detall quin tractament han tingut aquests arguments en l'àmbit públic i, comprovar quina ha estat la impressió de les dones pel fet que les argumentacions personals hagin quedat de costat.
- c) Saber quina és l'opinió que tenen les dones respecte el coneixement científic en quant a l'incertesa que genera al voltant dels riscos sobre la salut de les línies d'alta tensió, i, al mateix temps, si es senten còmodes en utilitzar els arguments que pugui generar la ciència a favor de la seva causa.

BLOC C. RELACIONS DE PODER ENTRE GÈNERES EN L'ORGANITZACIÓ I EN LA RELACIÓ AMBLES AUTORITATS

Interessos:

- a) Intentar fer emergir comportaments, normes i rols de gènere implícits en activitats internes de l'organització, i en quin sentit impliquen posicions de poder.
- b) Aprofundir sobre les inequitats entre gènere en el lideratge de l'organització, especialment esbrinar els motius que fan que les dones amb possibilitat d'ocupar un càrrec de representació no l'hagin tingut.
- c) Intentar esbrinar com perceben el rol de les dones en l'àmbit públic (e.g. capacitats que han de tenir) i, en particular, davant les entitats i institucions que oposa l'organització, i si aquest és un motiu per la seva manca de lideratge en el moviment.
- d) Esbrinar en quin sentit les seves responsabilitats de gènere han dificultat la seva participació en l'organització, o en quin sentit el seu activisme ha debilitat les seves relacions amb la família i personals.
- e) Esbrinar en quin sentit la seva lluita en la coordinadora ha "empoderat" el seu activisme polític en general.

Entrevista

- A. Els resultats de les enquestes han demostrat que el motiu més important per mobilitzar-se per tots els membres de la Coordinadora ha estat el temor que la línia d'alta tensió pogués tenir efectes negatius sobre la salut. De fet, especialment les dones que formeu part del moviment heu demostrat estar molt preocupades per aquest tema, i que això ha fet que us mobilitzéssiu.
- 1. En el seu cas en particular, ha sigut el risc sobre la salut el principal motiu per vincular-se a la coordinadora?
- 2. Per què va tenir aquesta preocupació? Per què va pensar que una línia d'alta tensió podia tenir un efecte negatiu sobre la salut?

- 3. Què és el que li fa més por respecte dels efectes sobre la salut que pugui tenir la línia? Li preocupa especialment respecte a algun familiar/ amistat en particular?
- 4. En les reunions de la coordinadora imagino que sovint sortia aquest tema dels riscos sobre la salut de la línia d'alta tensió. Tothom estava d'acord en aquest argument? Hi havia persones dins l'organització que pensaven que no disposàveu de proves suficients com per argumentar-ho davant les autoritats?
- 5. Ha notat que la preocupació per la salut motivés més a les dones que als homes, o que aquesta preocupació fos expressada de forma diferent per homes i dones?
- 6. Si de bon principi les autoritats i científics li haguessin demostrat clarament que la línia d'alta tensió no té efectes sobre la salut, s'hagués oposat igualment al projecte? S'hagués implicat amb tanta força en la Coordinadora?
- B. En les enquestes diverses persones, sobretot dones, heu assenyalat que teniu coneixença de casos de càncers de persones que viuen a prop de la línia d'alta tensió, i que creieu que poden estar relacionats amb els efectes negatius de les ones electromagnètiques.
- 7. Coneix algun cas de prop?

En cas que SI: Que li fa pensar que el càncer que s'ha manifestat en aquesta persona està relacionat amb la línia d'alta tensió i que no té altres causes?

En cas que NO: Però hi ha membres de l'organització que si que els coneixen... Que en sap a través d'aquestes persones? Quina opinió en té d'aquests casos?

8. S'ha interessat en buscar informació sobre estudis científics que expliquen si és possible que les línies d'alta tensió causin càncers a la gent que hi viu a prop?

En cas que SI: Com ha trobat aquesta informació? Li ha estat útil?

En cas que NO: Per què no s'ha interessat en buscar aquesta informació? La troba útil?

La Coordinadora ha manifestat al llarg de tot el conflicte la preocupació sobre els efectes sobre la salut de les línies d'alta tensió.

9. Sap si en algun moment en la negociació amb les autoritats o després de la realització del projecte s'han denunciat públicament els casos particulars de persones vulnerables a les ones electromagnètiques, o s'han denunciat els casos de càncer existents?

En cas que SI: Com s'han tractat aquests arguments per part de les autoritats?

En cas que NO: Per què no s'han fet servir? Creu que hauria sigut positiu utilitzar-los?

No hi ha estudis concloents respecte a que les línies d'alta tensió puguin causar càncers sobre les persones. Hi ha alguns estudis que assenyalen que existeix una relació, i altres diuen el contrari.

- 10. El fet que la ciència no recolzi les vostres sospites li fa dubtar sobre la relació que pugui haver entre els casos de càncer que coneix i la línia d'alta tensió?
- C. Els resultats de les enquestes han assenyalat que en la Coordinadora activitats com formar part de la Junta directiva, assistir a reunions amb les autoritats, escriure escrits a premsa, dur a termes processos jurídics, etc. les han fet sobretot homes, mentre que les dones han estat més actives en ajudar en excursions o dinars populars, organitzar activitats o participar en manifestacions, etc. De fet, les activitats que he esmentat en primer lloc impliquen sobretot lideratge, i en aquest sentit, es pot dir que la Coordinadora a nivell públic ha estat representada sobretot per homes. De la mateixa manera, quan he trobat escrits a premsa que parlen sobre el conflicte de les Gavarres, sobretot es fa esment als homes representants del moviment, en Joaquim Bosch, en Josep M. Ricart, i en Francesc Armengol. La Montserrat Calm, en canvi, no es citada casi mai pels diaris, malgrat formar part de la Junta Directiva.
- 11. A què creu que es deu aquest fet? Per què creu que han estat sobretot homes els que han representat l'organització?
- 12. Quan es feien reunions per decidir les accions de l'organització o quan es convocaven assemblees, qui conduïa les reunions? Qui acostumava a intervenir?

13. Creu que les dones han participat en aquestes reunions, o que de vegades els costava expressar la seva opinió?

Si es que NO participaven: Per què creu que els costava participar?

14. Hi havia moments de conflicte entre els membres de l'organització?

Si la resposta és SÍ: Pot explicar algun exemple? Quines eren les posicions? Com es resolien els conflictes? En aquests conflictes hi intervenien més els homes que les dones?

- 15. En el seu cas acostumava a donar la seva opinió en les reunions/assemblees? Hi havia ocasions en que li costava especialment expressar-se o en que es sentia incòmode?
- 16. Segons el seu parer, com hauria de ser una persona (qualitats i experiència) per liderar i representar un moviment com la Coordinadora?

Si li costa respondre guiar-la:

- Creu que es important que tingui una formació superior?
- Creu que es important que tingui experiència en altres organitzacions?
- Creu que és important que sigui ben coneguda al poble?
- Creu que és important que tingui una feina ben considerada?
- Quines qualitats creu que hauria de tenir? Saber parlar en públic, no tenir por a enfrontar-se a persones amb poder, saber escoltar a la gent de l'organització, estar sempre disponible...
- 17. Digui'm quatre o cinc adjectius que segons el seu parer caldrien que tingués una persona per poder ser líder i/o representant d'una organització.
- 18. Creu que les característiques que ha descrit, en general, són més pròpies d'homes que de dones?
- 19. Creu que hi ha dones en l'organització que tenen aquestes qualitats i experiència?
 - Si la resposta és SÍ: Per què creu que no han tingut un rol de lideratge?
 - Si la resposta és NO. Perquè creu que no hi són? D'homes n'hi ha amb aquestes característiques?

- 20. Creu que les dones són presses seriosament en l'àmbit públic? Creu que una dona es escoltada com cal a l'hora de parlar amb els representants de les institucions? I amb la gent del poble? I amb la premsa?
- 21.- Alguna vegada ha pensat en tenir un rol de més lideratge en la Coordinadora?
 - Si la resposta és NO: Perquè?
 - Si la resposta és SÍ: Perquè no l'ha tingut?
- 22. Mentre van haver-hi els moments de conflicte i de més feina en la Coordinadora, en algun moment es va trobar que no podia amb tot? És a dir, que no podia compaginar les activitats de la coordinadora amb les feines a casa, amb tenir cura de la família, i a més la seva feina fora de casa?
 - Si la resposta és SÍ: Com va fer per compaginar-s'ho? Va tenir ajuda dels seus familiars? En algun moment es va trobar amb conflictes a casa per formar part de la coordinadora?
- 23. Després de formar part de la Coordinadora creu que pot intervenir més en la vida política del poble o en altres activitats on pot donar a conèixer la seva opinió?
 - Si la resposta és NO: perquè?
 - Si la resposta és SÍ: En quines activitats? Quina relació troba amb el seu activisme polític i tot allò que va aprendre en la coordinadora?

Proposta de persones a entrevistar i preguntes específiques

Criteri per seleccionar les persones a entrevistar:

- Dones activistes
- Que en les enquestes hagin donat el seu nom
- Les dones que han demostrat una major participació en la coordinadora durant el conflicte
- Recomanacions del representant de la Coordinadora, Joaquim Bosch

Temps previst de l'entrevista: 40 minuts

1. Montserrat Alemany

61 anys, pagesa, educació bàsica, resident a Penedès-Llagostera, membre fundadora.

- En l'enquesta respostes molt pobres
- Participa en plens de l'Ajuntament de Llagostera arran de la seva activitat en l'organització
- Protagonista de conflicte amb mossos d'esquadra

2. Montserrat Calm

57 anys, ocupació forestal i agrícola, estudis professionals, resident a Llagostera, fundadora (una de les primeres persones en promoure la mobilització), forma part de la junta directiva (tresorera)

- Els terrenys de la seva mare estan afectats pel pas de la línia
- Coneixement local: càncer en persona vivint a prop de la línia, verdures deformes
- Efectes sobre qualitat de vida: torres xiulen, degradació del paisatge
- Dedicació: "les hores necessàries"
- No assenyala cap tema de gènere

Preguntes específiques:

- Vostè és, pot ser, una de les persones més implicades en la fundació de l'organització. Si no m'equivoco, abans de que es crees la Coordinadora, vostè i altres persones es van encarregar de recollir firmes en contra del projecte, i de reunir-se amb les autoritats. Em pot explicar una mica com va anar tot plegat?
- Per què es van mobilitzar?
- En aquell moment ja els preocupaven els riscos sobre la salut, o els motius inicials per oposar-se a la línia van ser uns altres?
- Vostè també és membre de la Junta Directiva. No obstant, em dóna la impressió que el seu lideratge a nivell públic no ha estat massa conegut. Per exemple, crec que només en un cas he vist el seu nom en un article a la premsa. A

què es deu que la seva imatge pública com a persona implicada en el moviment sigui menys evident que la dels seus companys de la junta directiva, com en Joaquim Bosch o en Josep M. Ricart?

- Mentre va tenir un rol actiu en la Junta Directiva de la Coordinadora, va participar en reunions amb les autoritats o amb representants d'ENHER?
- Com es va sentir en aquestes reunions? En algun moment es va sentir que devia prendre un rol diferent al que està acostumada per a que la seva opinió fos escoltada? Per exemple, mostrar-se molt forta en certes posicions o especialment agressiva? Es sentia còmode amb aquest rol?
- Creu que per una dona és més difícil que per un home aquest tipus de reunions amb les autoritats?
- Tinc entès que arran del seu activisme en la coordinadora també s'ha vinculat en la vida política de Llagostera. En quin sentit la participació en l'organització l'ha estimulat? Li ha donat confiança per comprometre's en un càrrec polític? Que va aprendre en els anys que va estar a la Coordinadora que li és útil ara?
- Creu que les dones, en general, es troben amb més inconvenients per tenir un rol de lideratge en organitzacions com la Coordinadora? I en l'àmbit polític?

3. Montserrat Gironès

42 anys, agricultora, estudis professionals, resident a Llagostera, fundadora

- Terreny del seu pare
- Respostes en l'enquesta són iguales que les de M. Calm

4. M. Teresa Méndez Merino

50 anys, professora d'EGB, estudis universitaris, resident a Cassà de la Selva

- Propietària afectada
- Dedicació: "abans moltes" /"voldria col.laborar més però no sé com ferho"

5. Marina Salvador; 6. Maite Méndez; 7. Engracia Casellas

Segons ha informat el representant de l'organització, es tracta de dones joves que tenen un rol destacat en l'organització d'activitats per l'organització. Feien les seves pròpies reunions i s'encarregaven de planejar quines accions podien ser més impactants per la opinió pública o de cares a la premsa. El fet de que fóssin noies joves i amb fills petits, amb dedicació laboral a mitja jornada els permetia tenir temps per organitzar aquestes activitats. No tinc constància de que hagin respost l'enquesta. En aquest cas, seria convenient realitzar prèviament algunes preguntes bàsiques (edat, ocupació, any vinculació al moviment, motius, etc., o fins i tot demanar-los de respondre l'enquesta o una versió reduïda d'aquesta).

Preguntes específiques: BLOC C.

- En Joaquim Bosch m'ha explicat que formaves part d'un grup de noies joves que vau fer molta feina en quan a preparar manifestacions i pensar quines accions es podien fer per impactar a l'opinió pública. Em pots explicar qui éreu?
- Com us organitzàveu?
- Quines activitats fèieu? Alguns exemples de les accions que vau dur a terme?
- Sempre eren ben acceptades les vostres propostes?
- Rebíeu el suport d'altres membres quan calia preparar pancartes o altres materials? Rebíeu més suport per part de les dones que dels homes?
- Sembla que el fet de que disposéssiu de forces hores lliures us permetia reunir-vos habitualment. Com compaginaves les teves feines diàries amb les activitats a la coordinadora?
- En algun moment vas anar sobrecarregades de feina?
- Es va resentir d'alguna manera la teva vida privada i la teva relació amb la família?
- En relació a preguntes sobre si haguessin volgut tenir un rol de lideratge en la Coordinadora... El fet de disposar de temps per dedicar a la coordinadora no et va donar ànims per prendre un compromís més de lideratge amb l'organització? Perquè?

ENTREVISTES A HOMES AMB ROL DESTACAT EN L'ORGANITZACIÓ QUE PODEN A PORTAR INFORMACIÓ COMPLEMENTÀRIA

BLOC A. RISC SOBRE LA SALUT, ACTIVISME I GÈNERE

Interessos:

a) Esbrinar si algun d'aquests homes amb un rol de lideratge en l'organització ha observat tendències distintes entre homes i dones en la preocupació per la salut.

BLOC B. PROBLEMES DE SALUT, CONEIXEMENT LOCAL FRONT ARGUMENTS TÈCNICS/CIENTÍFICS

Interessos:

- a) Esbrinar quin tractament han tingut els arguments basats en observacions personals en l'àmbit públic, en particular, saber si l'organització ha cregut convenient utilitzar-los.
- b) Saber el pes que l'organització ha donat a les argumentacions científiques enfront de les argumentacions personals, malgrat la incertesa que les acompanya.

BLOC C. RELACIONS DE PODER ENTRE GÈNERES EN L'ORGANITZACIÓ I EN LA RELACIÓ AMBLES AUTORITATS

Interessos:

- a) Intentar fer emergir comportaments, normes i rols de gènere implícits en activitats internes de l'organització, i en quin sentit impliquen posicions de poder.
- b) Aprofundir sobre la inequitat de gènere en el lideratges de l'organització.
- c) Aprofundir sobre com, segons el seu parer, són percebudes les dones en l'àmbit públic i en la negociació amb les autoritats.
- d) Intentar esbrinar com perceben el rol d'un/a líder (e.g. capacitats que han de tenir), i si són característiques generitzades.

Entrevista

Els resultats de les enquestes han demostrat que el motiu més important per mobilitzar-se per tots els membres de la Coordinadora ha estat el temor que la línia d'alta tensió pugués tenir efectes negatius sobre la salut. En particular hi han hagut persones que han assenyalat persones que han desenvolupat un càncer i que viuen a prop de la línia.

- 1. Per la seva banda, coneix casos de càncers de persones que viuen a prop de la línia d'alta tensió?
 - Si la resposta és NO. Però segurament haurà sentit parlar d'aquests casos a través dels seus companys i companyes de l'organització. Creu que les seves argumentacions són certes? Quina opinió li mereixen?
 - Si la resposta és SÍ: Creu que tenen relació amb els camps electromagnètics? Perquè?
- 2. La Coordinadora ha utilitzat els arguments basats en la percepció de les persones sobre els efectes sobre la salut de les línies d'alta tensió en el debat amb les autoritats sobre la construcció de la línia (sense necessitat de recórrer a arguments científics)? És a dir, s'han plantejat els temors de la gent o s'han denunciat casos particulars en que la línia podia ser perjudicial, o un cop construïda s'ha fet esment dels casos de càncer i la seva possible relació amb la línia d'alta tensió?
- Si la resposta es SÍ: De quina manera? Quina ha estat la reacció de les autoritats?
- Si la resposta és NO: Per què no s'han utilitzat?

No obstant, encara que les dades són poques, els resultats de les enquestes també han donat a conèixer diferents tendències entre l'opinió dels homes i de les dones. Serien les dones aquelles que mostrarien una preocupació major pels riscos sobre la salut. Mentre que, en canvi, els homes amb formació superior (universitària) serien aquells que es mobilitzarien en menor mesura per aquesta causa. Aquests homes, en canvi, assenyalen altres motius per mobilitzar-se, com la seva oposició al model de desenvolupament de Catalunya poc coherent amb un creixement sostenible, el qual es feia present amb la realització d'un projecte com el de la línia d'alta tensió de les Gavarres.

3. De la seva experiència en l'organització, en l'assistència a reunions i de parlar amb les persones de la Coordinadora, creu que hi ha diferències en com les

dones expressaven la seva preocupació pels efectes sobre la salut de la línia d'alta tensió?

4. Creu que les dones han usat més els arguments basats en la seva experiència personal respecte a una possible relació entre els casos de càncer i la línia d'alta tensió, o que han cercat més arguments científics? I en el cas dels homes?

No hi ha estudis concloents respecte a que les línies d'alta tensió puguin causar càncers sobre les persones. Hi ha alguns estudis que assenyalen que existeix una relació, i altres diuen el contrari.

5. Creu que continua sent estratègic utilitzar arguments científics per demostrar la relació entre la línia d'alta tensió i el projecte?

Els resultats de les enquestes han assenyalat que en la Coordinadora activitats com formar part de la Junta directiva, assistir a reunions amb les autoritats, escriure escrits a premsa, dur a termes processos jurídics, etc. les han fet sobretot homes, mentre que les dones han estat més actives en ajudar en excursions o dinars populars, organitzar activitats o participar en manifestacions, etc. De fet, les activitats que he esmentat en primer lloc impliquen sobretot lideratge, i en aquest sentit, es pot dir que la Coordinadora a nivell públic ha estat representada sobretot per homes. De la mateixa manera, quan he trobat escrits a premsa que parlen sobre el conflicte de les Gavarres, sobretot es fa esment als homes representants del moviment, en Joaquim Bosch, en Josep M. Ricart, i en Francesc Armengol. La Montserrat Calm, en canvi, no es citada casi mai pels diaris, malgrat formar part de la Junta Directiva.

- 6. A què creu que es deu aquest fet? Perquè creu que han estat sobretot homes els que han representat l'organització?
- 7. Quan es feien reunions per decidir les accions de l'organització o quan es convocaven assemblees, qui conduïa les reunions? Qui acostumava a intervenir?
- 8. Creu que les dones han participat en aquestes reunions, o que de vegades els costava expressar la seva opinió?

Si es que NO participaven: Per què creu que els costava participar?

9. Hi havia moments de conflicte entre els membres de l'organització?

Si la resposta és SÍ: -Pot explicar algun exemple? Quines eren les posicions? Com es resolien els conflictes? En aquests conflictes hi intervenien més els homes que les dones?

10. Segons el seu parer, com hauria de ser una persona (qualitats i experiència) per liderar i representar un moviment com la Coordinadora?

Si li costa respondre guiar-lo:

- Creu que és important que tingui una formació superior?
- Creu que és important que tingui experiència en altres organitzacions?
- Creu que és important que sigui ben coneguda al poble?
- Creu que és important que tingui una feina ben considerada?
- Quines qualitats creu que hauria de tenir? Saber parlar en públic, no tenir por a enfrontar-se a persones amb poder, saber escoltar a la gent de l'organització, estar sempre disponible...
- 11. Digui'm quatre o cinc adjectius que segons el seu parer caldrien que tingués una persona per poder ser líder i/o representant d'una organització.
- 12. Creu que les característiques que ha descrit són més pròpies d'homes que de dones?
- 13. Creu que hi ha dones en la Coordinadora que tenen aquestes qualitats i experiència?
 - Si la resposta és SÍ: Per què creu que no han tingut un rol de lideratge?
 - Si la resposta és NO. Perquè creu que no hi són? D'homes n'hi ha amb aquestes característiques?
- 14. Tenint en compte la seva experiència fins ara... Creu que les dones són preses seriosament en l'àmbit públic? Creu que una dona és escoltada com cal a l'hora de parlar amb els representants de les institucions? I amb la gent del poble? I amb la premsa?

Proposta de persones a entrevistar i preguntes específiques

Criteri per seleccionar les persones a entrevistar:

- Homes amb un rol destacat en l'organització
- Que en les enquestes hagin assenyalat opinions que semblen interessants per fer una entrevista
- Recomanacions del representant de la Coordinadora, Joaquim Bosch
- Temps previst de l'entrevista: 20 minuts

1. Emili Mató

40 anys, Gerent del consorci de vies verdes de Girona, estudis universitaris, resident a Cassà de la Selva, ex-regidor de medi ambient i urbanisme a l'Ajuntament de Cassà de la Selva

- Té un paper molt destacat en l'organització: ha fet escrits a premsa, ha sigut molt actiu en l'organització d'activitats (per exemple, Fira d'Energies Renovables i Eficiència Energètica), ha contribuït en estudis tècnics sobre la problemàtica, etc.
- Esmenta que la seva dedicació en l'organització va tenir conseqüències negatives de cares a la seva relació amb la família, a qui podia dedicar menys temps.
- Considera que les dones es troben menys representades en el món associatiu. Considera que això té efectes negatius en el sentit que les decisions són menys equànims, i que resta heterogeneïtat en el grup. També considera que cada persona té una manera diferent de liderar, però que existeixen tendències de gènere. En general planteja que les dones acostumen a ser menys agressives i més sensibles, però que tenen menys seguretat en elles mateixes, aspecte que afecta la seva capacitat de lideratge.

Preguntes específiques

- En l'enquesta ha esmentat que una de les conseqüències negatives que ha tingut la seva dedicació a la Coordinadora ha estat que li ha pres temps per la seva vida personal, i que això ha implicat poder dedicar menys temps a la família. Aquesta manca de temps ha ressentit també les seves relacions amb la família? Ha sigut causa de conflictes?

- Malgrat tot, ha rebut suport dels seus familiars per poder dedicar els temps que li calia per les activitats de la coordinadora?
- Creu que en el cas de dones amb un rol destacat en una organització (representants o líders del moviment, per exemple, o amb un paper molt actiu) els costos i com se'n ressent la seva vida familiar encara són més importants o deuen ser semblants als que ha tingut en el seu cas? Perquè?
- En l'enquesta també ha realitzat algunes reflexions respecte a temes de gènere que són interessants. Per exemple, assenyala que considera que en general les dones són menys presents en les organitzacions on ha col·laborat i que això té efectes negatius sobre les decisions, en tant que són menys equànims i plurals. Pot explicar amb una mica més de detall aquesta opinió?
- Creu que en la coordinadora les dones també han estat menys representades del que hagués sigut convenient o que la seva participació en la presa de decisions ha estat menor?
- En l'enquesta també esmenta que, malgrat no existeixen característiques fixes en el comportament d'homes i dones, si que hi ha certes tendències. Per exemple, que les dones acostumen a ser menys agressives i més sensibles, però que al mateix temps tenen menys confiança en elles mateixes. Creu que aquest patró es comú a la majoria de dones que participen en la Coordinadora?
- Creu que aquesta tendència ha afectat la seva participació activa en la presa de decisions? Per exemple, a l'hora de discutir en una reunió una assemblea?
- En canvi, com descriuria, de forma general, la tendència en el comportament dels homes?
- Creu que el comportament que generalment tenen els homes implica que fàcilment preguin una posició de lideratge i que la seva opinió sigui més escoltada en les reunions? Recorda casos específics en la Coordinadora en que hagi estat visible aquest comportament?

2. Josep M. Ricart

54 anys. Estudis universitaris. Editor. Resident a Barcelona, amb segona residència a Llagostera. Fundador i membre de la Junta Directiva (portaveu). Ha tingut molt d'interès en cercar estudis científics que parlin sobre les línies d'alta tensió (i en general els camps electromagnètics) i els efectes sobre la salut.

3. Francesc Armengol

- Membre de la Junta Directiva (president de la Coordinadora).
- Es mobilitza sobretot perquè té un fill malalt a qui pot afectar negativament la línia d'alta tensió.
- No tinc constància de que hagi respost l'enquesta.

ANNEX 5. Interviews to members of Salvem l'Empordà

BLOC A. PREOCUPACIÓ AMBIENTAL, ACTIVISME I GÈNERE

Interessos:

- a) Aprofundir sobre els temes que preocupen a les dones que es vinculen a Salvem l'Empordà. En particular, conèixer millor la seva preocupació per la qualitat de vida, el risc sobre la salut i la degradació de la natura; i aprofundir sobre les relacions que tenen aquestes inquietuts amb les seves responsabilitats i rols de gènere.
- b) Esbrinar fins a quin punt el tema de la contaminació de les aigües causada per nitrats ha originat preocupacions pel tema de la salut, i com les dones en particular perceben aquesta problemàtica. Fer emergir, també, coneixement local sobre aquest tema. Investigar si en el moviment de Salvem l'Empordà arran d'un nou projecte de la construcció d'una línia d'alta tensió que creuaria la comarca s'ha originat una preocupació sobre riscos per la salut.
- c) Confrontar la seva preocupació ambiental amb una posició ideològica vers el territori.

BLOC B. RELACIONS DE PODER ENTRE GÈNERES EN L'ORGANITZACIÓ I EN LA RELACIÓ AMB LES AUTORITATS

Interessos:

- a) Intentar fer emergir comportaments, normes i rols de gènere implícits en activitats internes de l'organització, i en quin sentit estan generitzats i si impliquen posicions de poder.
- b) Aprofundir sobre com la representació de dones en càrrecs de decisió en l'organització té conseqüències positives sobre l'activisme de la majoria de dones de l'organització.
- c) Intentar captar com perceben el rol de les dones en l'àmbit públic (e.g. capacitats que han de tenir) i, en particular, davant les entitats i institucions que

oposa l'organització, i si creuen que existeix equitat de gènere en aquests espais. En particular fer emergir experiències en aquest sentit.

d) Investigar en quin sentit les responsabilitats de gènere han dificultat la seva participació en l'organització, o en quin sentit el seu activisme ha debilitat les seves relacions amb la família i personals.

BLOC C. EXPERIENCIA I INTERESSOS EN FEMINISME I ACTIVISME AMBIENTAL

Interessos:

- a) Esbrinar sobre l'interés i l'experiència en temes de gènere de les dones de Salvem l'Empordà i, en particular, sobre el seu coneixement i opinió sobre el moviment feminista.
- b) Investigar si les dones amb una sensibilitat de gènere o vinculades al moviment feminista relacionen d'alguna manera aquesta preocupació amb el seu activisme ambiental, i en particular, amb el seu activisme a Salvem l'Empordà en dos sentits: primer, si creuen que la seva preocupació feminista l'apliquen també en quan a activistes en una organitació; i segon, saber si pensen que un activisme està relacionat amb l'altre d'alguna manera.

BLOC D. PARTICIPACIÓ CIUTADANA I GÈNERE

- a) Aprofundir sobre l'experiència de la plataforma en dur a terme activitats de participació ciutadana, i en la seva opinió respecte a com les administracions estan duent a terme la participació en el Pla Director de l'Empordà.
- b) Plantejar quins aspectes consideren que caldria acomplir per aconseguir la participació de la gent, i en particular, per evitar formes d'exclusió, per exemple, en termes de gènere.

Entrevista

Els resultats de les enquestes han demostrat que a les dones de Salvem l'Empordà, en general, els motius principals per a tenir una preocupació ambiental són respecte a com els problemes ambientals afecten a la qualitat de vida, si es poden generar riscos sobre la salut, i que hi hagi una degradació de la natura.

- 1. En el teu cas en particular, són aquests els motius més importants per mobilitzar-te en una organització com Salvem l'Empordà? Pots explicar amb més detall per què et motiven aquests temes en particular?
- 2. Considereres que el teu activisme ambientalista està més vinculat a una preocupació per l'agressió que pateix l'entorn on vius i com afecta a la gent que és a prop teu, o creus que es tracta més d'una posició ideologica, és a dir, d'una reflexió propiament ecologista, respecte el territori?

La Marta i la Montse em van explicar que un tema que va preocupar molt a la gent de Salvem l'Empordà i va ser important per l'acolliment popular de l'organització va ser el conflicte sobre la contaminació d'aigües subterrànees a causa de nitrats causada per granjes de porcs, i l'escassetat d'aigua a causa de la proliferació de camps de golf. Hem van explicar que fins i tot hi ha pobles on l'aigua de l'aixeta no es pot fer servir ni per beure ni per cuinar.

3. En el teu cas, t'has vist directament afectada per aquesta problemàtica o hi ha gent propera a tu afectada?

Si la resposta és SÍ: Com ha influenciat aquest fet al teu activisme en Salvem l'Empordà? I a la teva preocupació ambiental en general?

4. Aquest conflicte sobre la qualitat de l'aigua subterrànea ha generat en algún moment una preocupació sobre els riscos que es podrien generar sobre la salut? S'ha parlat d'aquest tema a Salvem l'Empordà? S'ha utilitzat com a argumentació per la lluita a nivell polític?

També he sabut que un actualment us enfronteu amb un nou conflicte generat arran d'un projecte de construir una línia d'alta tensió que hauria de connectar França amb Catalunya, i que està previst que travesi una zona de l'Empordà.

5. Em pots explicar en quins termes s'està enfrontant aquest conflicte a Salvem l'Empordà? Quins són els motius que es plantegen per oposar-se a la línia? En el teu cas, què és el que més et preocupa d'aquest projecte?

Els resultats de les enquestes han demostrat que les dones de Salvem l'Empordà sou molt actives en tasques importants per a la presa de decisió respecte als conflictes en els que intervé l'organització. Per exemple, les dones sou especialment actives en la comissió legal i tècnica que té un paper molt important a l'hora de decidir sobre les lluites de l'organització, i, segurament, això també representa que aquestes dones tenen un rol destacat a l'hora de parlar amb les administracions, o amb càrrecs públics. A més, en l'organització, dels tres representants, dues són dones; i, finalment, d'acord amb els resultats de les enquestes, les dones també heu demostrat participar en major nombre en les assemblea setmanals.

- 6. D'acord amb la teva experiència en altres organitzacions o del que coneixes sobre les relacions entre gèneres en diferents àmbits de la vida pública (l'àmbit de les relacions laborals o de la política, per exemple) consideres que les relacions que s'estableixen en les reunions i activitats que realitza Salvem l'Empordà d'alguna manera faciliten o ajuden a que les dones tinguin un rol important i de decisió en l'organització? (Treballar en detall sobre la seva resposta) El fet que tingueu dues dones en càrrecs representatius, creus que ajuda a que les altres dones de l'organització tinguin un paper més actiu? De quina manera?
- 7. No obstant, es pot donar que hi hagi moments en que es reprodueixin maneres de fer o tòpics respecte a les activitats que es consideren que han de fer o són més adequades pels homes o per les dones... Creus que aquestes situacions es dónen en l'organització? Me'n podries donar exemples? Creus que d'alguna manera afecten negativament a les dones i la seva capacitat de decisió en l'organització?
- 8. Una de les teves companyes ha comentat que les dones també es troben amb més dificultats a l'hora de representar l'organització davant del públic, és a dir, que en situacions com, per exemple, pobles petits es troben que una dona es escoltada menys que el que es pogui escoltar a un home. Estàs d'acord amb aquesta opinió? T'has trobat en alguna situació d'aquest tipus? Com has reaccionat davant d'aquesta situació? Consideres que les dones patiu discriminacions semblants en altres contextos en els que heu de representar a l'organització?
- 9. Diverses dones de l'organització també heu tingut un rol destacat en parlar amb autoritats municipals, amb representants de la Generalitat, o amb altres càrrecs d'institucions públiques o també privades, com promotors, etc. T'has trobat en alguna d'aquestes circunstancies?

Si la resposta és SÍ: Sisplau centra't en alguna d'aquestes reunions. Em pots explicar qui éreu el grup de persones que us reunieu? Quin era el teu rol en

aquesta reunió? Vas desenvolupar algún tipus d'estratègia (conscient o inconscient) per a que se t'escoltés i es prengués en consideració la teva opinió o el que volies dir com a representant de l'organització? Consideres que les estrategies o rols que s'han de prendre en aquests ambients són els mateixos per a dones i homes?

Si la resposta és NO: Com es tria a les persones que van a aquestes reunions? Normalment qui hi van? T'agradaria participar en alguna d'aquestes reunions? Per què?/Per què no ho has fet?

- 10. En general, creus que les dones són preses seriosament en l'àmbit públic? Amb quines dificultats creus que es troben?
- 11. Segons el teu parer, com hauria de ser una persona (qualitats i experiència) per liderar i representar un moviment com Salvem l'Empordà? Digue'm quatre o cinc adjectius que segons el teu parer caldrien que tingués una persona per poder ser líder i/o representant d'una organització. Creus que les característiques que has descrit, en general, es donen més en homes que en dones? O que uns o altres, a més, han de tenir altres característiques?
- 12. Com a dona i activista d'una organització civil, de vegades t'has trobat amb incompatibilitats per dur a terme totes les activitats que realitzes (compaginar les activitats amb la família, amb les teves activitats professionals, i a més les activitats en l'organització...)? Reps ajuda dels teus familiars? La teva dedicació a Salvem l'Empordà ha fet que tinguessis algun tipus de conflicte a casa per no poder dedicar més temps a la teva família?
- 13. Consideres que la falta de temps per les multiples responsabilitats en l'àmbit professional i privat és un factor que afecta a que algunes dones de l'organització no siguin més actives, o a que dones que coneixes no participin a organitzacions com Salvem l'Empordà? Creus que les responsabilitats professionals i privades afecten d'igual manera a la participació dels homes en organitzacions civils?
- 14. Estàs vinculada o interessada pel moviment feminista?

Si la resposta és SÍ: De quina manera? Alguna vegada has pensat en relacionar la teva motivació ambientalista en l'organització de Salvem l'Empordà amb la teva preocupació feminista? De quina manera? Creus que el moviment ecologista i el moviment feminista tenen aspectes en comú?

Si la resposta es NO: Et motiva la lluita per millorar la condició de les dones en la societat? Quin opinió tens del moviment feminista?

15. Consideres que ser conscients de les condicions d'inequitat de les dones en la societat, per exemple, en l'ambit públic, ajudaria a millorar la seva plena participació i representació en la societat civil –per exemple, serien més actives en organitzacions de base com Salvem l'Empordà-?

Del contacte que tinc amb la vostra organització he sabut que en els últims temps esteu organitzant activitats per promoure la participació dels i les habitants de l'Empordà en l'elaboració del Pla Director de l'Empordà, en paral·lel a les activitats realitzades per la Generalitat.

- 16. Quina opinió et mereixen les activitats de participació per l'elaboració del Pla Director de l'Empordà ha realitzat la Generalitat fins ara?
- 17. Salvem l'Empordà ha realitzat activitats paral.leles per promoure la participació dels ciutadans i ciutadanes de l'Empordà. De les experiències que heu tingut fins ara, consideres que malgrat els vostros esforços, en les activitats de participació continua haven-t'hi algún tipus d'exclusió? Com es garanteix que les activitats de participació que dur a terme Salvem l'Empordà no exclouran indirectament- determinades persones o col.lectius?
- 18. Creus que, encara que aquesta no sigui la intenció dels i les membres de Salvem l'Empordà, es continua donant algún tipus d'exclusió en termes de gènere?

Proposta de persones a entrevistar i preguntes específiques

En l'organització de la Coordinadora he decidit entrevistar a quatre homes perque tenen un rol molt destacat en l'organització, i poden contribuir a fer més completes algunes de les meves preguntes basant-se en la seva experiència. En el cas de Salvem l'Empordà, en canvi, les dones són molt actives. Ademés, aquest és un dels temes que més m'interessa de les enquestes, aprofundir sobre el seu rol en l'organització. Per això he decidit no entrevistar cap home i, en canvi, entrevistar més dones que en l'altra organització.

Criteris:

- Que en les enquestes hagin donat el seu nom
- Dones activistes membres d'alguna de les comissions, per tant, amb una col.laboració setmanal en l'organització
- Membres de la comissió tècnico-legal, que hagin participat en reunions amb autoritats, tècnics, premsa...
- Que hagin tingut respostes destacades respecte a temes de gènere
- Recomanacions fetes per les representants

Temps previst de l'entrevista: 40 minuts

1. Àngels Casadevall

55 anys. Educadora. Resident a Vilajuïga.

Forma part (o ha format part) d'un grup feminista..

Nega que existeixin diferències de gènere en l'organització de Salvem l'Empordà.

Pensa que el lideratge canviaria si es tractés d'un home o una dona.

2. Anna Albó Riera

36 anys. Arquitecta. Resident a Figueres.

Participa en el Comissió tècnica, ha assistit a reunions amb les autoritats, ha fet xerrades i ha participat amb la premsa.

No té una opinió clara respecte a temes de gènere, peró sembla oberta a reflexionar-hi.

3. Marta Alberich

Probablement entre 40 i 50 anys, administrativa, pertany (o ha format part) d'un grup feminista.

Explícitament assenyala que no té interessos ambientalistes, sino que allò que la motiva és defensar la qualitat de vida.

Les seves reflexions en temes de gènere són interessants. Quan en l'enquesta es demana la seva opinió respecte a les diferències en el lideratge d'un organització per un home o una dona, assenyala: "Sí. Perque la societat és com és. Sempre dependrà de qui hi hagi a l'altre costat. Encara que penso que no hauria de ser així, i per tant, no hem d'adaptar-nos a ella, i per tant que sigui la societat la que vagi canviant... poc a poc, em sembla que en el pitjor dels casos, un home pot ser pres més seriorsament que una dona, encara que amb una dona s'és més displicent."

Quan es demana si prefereixen treballar amb homes o amb dones comenta: "Si bé és cert que quan hi ha equilibri de gèneres, l'aportació de la dona fa que la reunió sigui més àgil, mes pràctica, si la cosa està desequilibrada, tan per un costat com per l'altre, no acabo de trobar-m'hi bé: amb molts homes: les dones ens cohibim i tot es força teòric i repetitiu; amb moltes dones es comencen a formar diferents "tertúlies", encara que també depén de quines dones."

Preguntes específiques:

En l'enquesta has fet algún comentari sobre els diferents rols o comportaments que tenen homes i dones en les organitzacions civils. Per exemple, comentaves que consideres que els homes i les dones tenen diferents aportacions a les reunions. Plantejaves que les dones agilitzen les reunions, però que al mateix temps una predominança de dones pot fer que en les reunions proliferin diverses "tertúlies"; o bé, plantejaves que quan dominen els homes les dones es cohibeixen i la discussió es torna molt teòrica i repetitiva. Consideres que aquestes tendències també es dónen d'alguna manera en les reunions de Salvem l'Empordà? Què creus que aporta la significativa participació de dones en les reunions de Salvem l'Empordà? En quin sentit aquesta aportació és diferent de la dels homes?

4. Marta Ball-llosera

33 anys. Tècnica en medi ambient. Resident a Ventalló.

Representant de l'organització, i membre de la comissió tècnica-legal, amb un rol molt destacat en els mitjans de comunicació i en parlar amb les autoritats.

En termes de gènere comenta: "Crec que el fet de ser dona descol.loca a certa gent. Per exemple, davant una taula rodona amb polítics, queden desconcertats si pots mantenir un debat i deixar-los entre cordes. Crec que el fet que com a portaveu sigui dona (hi ha dos portaveus: un home i una dona), això fa descol.locar als homes. No saben actuar, no actuen per igual que si fos home, i a més crec que en certs moments pot, fins i tot, afavorir la plataforma."

Preguntes específiques:

En l'enquesta has comentat que el fet de ser dona descol.loca els homes quan intervens, per exemple, en una taula rodona. També afegies que en aquest sentit, ser dona pot afavorir la pataforma. Podries explicar una mica més aquesta opinió? Pots explicar-me alguna situació particular en el que s'hagi produït el que expliques? En quin sentit creus que això pot afavorir la plataforma?

5. Lídia Quera Cabrafiga

46 anys. Restauradora de moble antic. Resident a Boadella i les Escaules.

Participa en la comissió d'acció. Dedica a l'organització unes 8 hores a la setmana.

En termes de gènere comenta: "No m'ho he plantejat, però fent-ho ara, pot ser sí que les dones tenim més responsabilitats familiars".

6. Carme Bosch i Arauz

48 anys. Arquitecta. Resident a Figueres.

Recomanada per les representants pel seu rol molt actiu en l'organització.

Es sent especialment afectada pel conflicte de Palau-Saverdera, d'on és el seu company i on vivien anteriorment i ara hi passen alguns caps de setmana. Comenta com els veïns d'aquest poble es van dirigir a l'IAEDEN a l'any 2001 per a que els ajudessin a reclamar la preservació dels connectors biològics entre el parc natural de Cap de Creus i el dels Aiguamolls. Esmenta com es veu directament afectada per la disminució de la qualitat de vida en la zona.

És membre de la comissió tècnica-legal, i ha mantingut entrevistes amb tècnics de l'administració, ha fet al.legacions, etc.

En termes de gènere no fa masses comentaris, planteja que: "Crec en el saber de les persones, siguin homes o dones. M'agrada però que hi hagi forces dones per tal de normalitzar la nostra participació dins la societat."

7. Marta Such Falcó

34 anys. Artista. Resident a Cistella.

És la primera vegada que es vincula a una organització.

Es vincula a Salvem l'Empordà pel conflicte del camp de golf de Cistella, tot i que ja tenia ganes d'implicar-s'hi.

Assenyala que es veu afectada per tot allò que impacti sobre el terriotri i la gent que hi viu, i que tingui efectes negatius sobre la seva qualitat de vida ("física i espiritual").

És membre de la comissió de difusió, a la qual de vegades representa en l'assemblea general. Fa feines com a dissenyadora gràfica. Assenyala que dedica unes 12 hores a la setmana a l'organització.

No assenyala cap tema de gènere.

8. Xandra

Recomanada per les representants de l'organizació. També he observat que té un rol molt actiu en l'organització. El seu nom surt sovint en les col.laboracions de la pàgina web i també va ser molt activa en una de les reunions de l'organització a la que vaig assitir..

9. Bàrbara

Recomanada per les representants de l'organització. Em comenten que es una noia alemanya molt activa en l'organització.

10. Mixo

Recomanada per les representants de l'organització. Em comenten que és una dona molt activa, treballadora de correus, amb molt poc coneixement tècnic.

11. Glòria

50 anys. Metgessa. Resident a Rabòs.

Està directament afectada per un projecte de granja de porcs proper a la seva residència.

Participa en la comissió econòmica. Assenyala que dedica una o dues hores a la setmana en l'organització. Preocupació per la qualitat de vida i com els projectes afecten negativament la gent del seu voltant.

Mostra sensibilitat per temes de gènere. Comenta el següent: "Crec que ser dona, davant d'alguns homes del poble molt tradicionals, crea una mica o bastanta distància (depenent dels casos), i pot ser també desconfiança / Algunes dones no tenen el temps que voldrien perquè estàn cuidant els fills i els horaris no són compatibles en moltes ocasions/ Altres dones amigues no s'atraveixen a parlar en assamblees, ni a la prensa."

Quan es demana sobre la seva opinió respecte a les diferències en el lideratge de dones i homes, planteja: "En el cas concret de Salvem, no veig les possibles diferències. Crec que depén més de la manera de ser de la persona (sigui home o dona)/ En general sí que en moltes ocasions pot haver problemes (fills si el company no col.labora, o no hi ha company...) de falta de temps per la dona per a participar més intensament a les tasques de la organització."