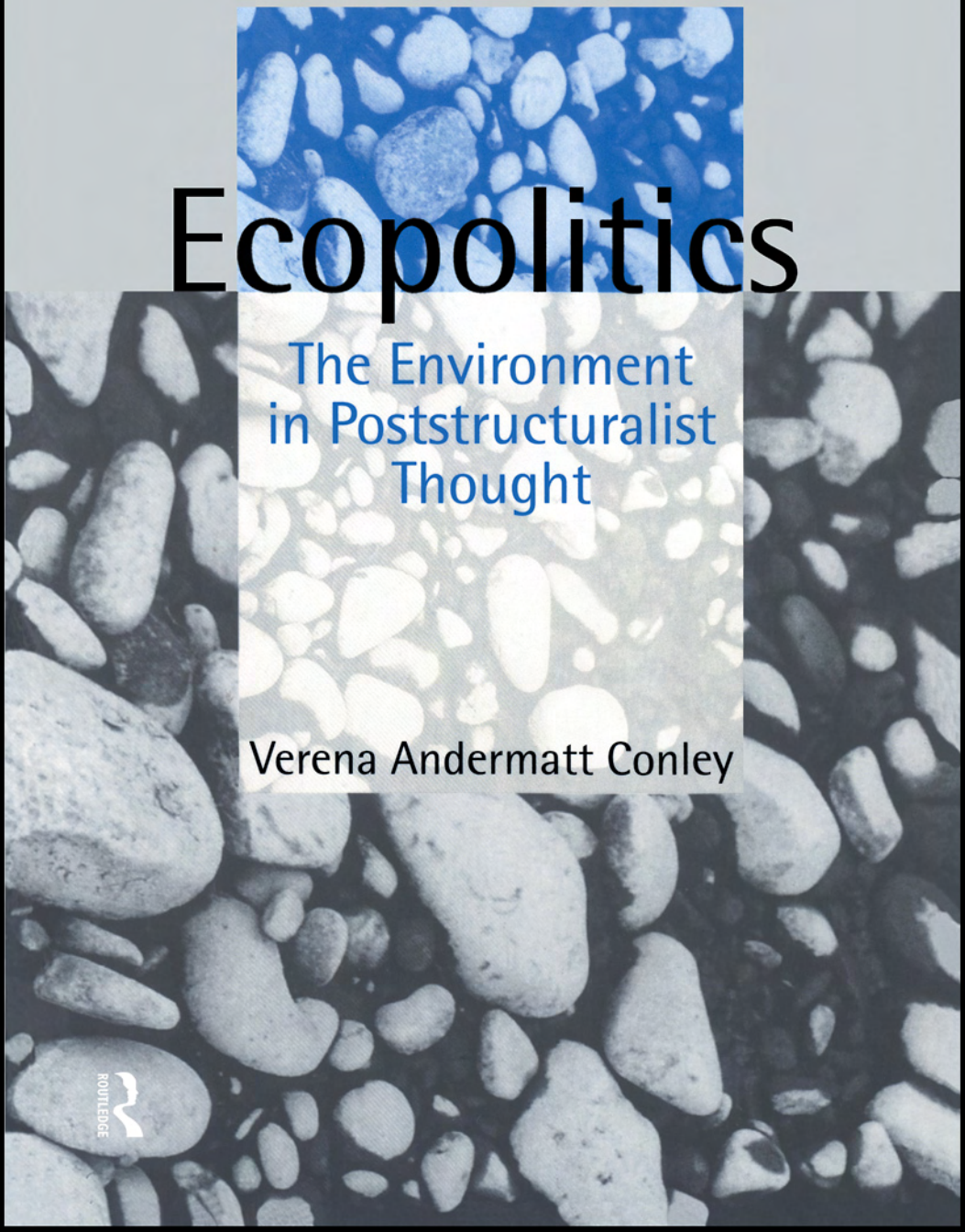

Ecopolitics

Rethinking the conditions of life, space and the state of the world figured prominently in the events of 1968, yet little attention is now being paid to ecological themes that arose in this influential period. *Ecopolitics* reassesses awareness—or non-awareness—of ecological issues in the work of key French poststructural thinkers and others affected by these events. Calling into question the status of the 'subject,' poststructuralism has been driven not only by feminism but by various findings, in both the social and applied sciences, that bear a strong ecological consciousness. Poststructuralism has continued to open new ways of thinking about the world and of studying concrete conditions of life. Its long-range effects are made possible by an enviromental awareness that remains today at the heart of issues concerning cultural theory.

Pointing first to some currently disparaging critiques of ecology in the work of Luc Ferry and Jean Baudrillard, *Ecopolitics* then returns to Claude Lévi-Strauss' critical reading of Sartre, which led the way towards ecological thinking in contemporary theory. Through a reading of key texts by Bateson Serres, Prigogine and Stergers, Virilio, Guattari, Cixous, Irigaray and others, *Ecopolitics* illustrates how by means of reassessing nature and questioning technologies, a shift away from humanism has played a key role in shaping ecological thought.

Ecopolitics will appeal to students concerned with the environment and those engaged in gender and cultural studies.

Verena Andermatt Conley is Professor of French at Miami University, Ohio, and Visiting Professor at Harvard University. Her previous publications include *Hélène Cixous: Writing the Feminine* (1984, 1991); and *Hélène Cixous* (1992). She is also editor of *Rethinking Technologies* (1993).

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Ecopolitics

The environment in poststructuralist thought

Verena Andermatt Conley

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For Tom

Contents

Series preface

Feminist theory is the most innovative and truly living theory in today's academies, but the struggle between the living and the dead extends beyond feminism and far beyond institutions. *Opening Out* will apply the living insights of feminist critical theory in current social and political contexts. It will also use feminist theory to analyze the historical and cultural genealogies that shaped those contexts.

While feminist insights on modernity and postmodernity have become increasingly sophisticated, they have also become more distant from the *realpolitik* that made feminism a force in the first instance. This distance is apparent in three growing divisions. One is an evident division between feminist theory and feminist popular culture and politics. Another division is that between feminism and other social movements. Of course, this second division is not new, but it has been exacerbated by the issue of whether the theoretical insights of feminism can be used to analyze current conflicts that extend beyond feminism's 'proper' field. In the postmodern theory he has helped build, the white middle-class universal subject has had to relinquish his right to speak for all. By the same theoretical logic, he has also taken out a philosophical insurance policy against any voice uniting the different movements that oppose him, which means his power persists *de facto,* if not *de jure*. Currently, there are no theoretical means, except for fine sentiments and good will, that enable feminism to ally itself with other social movements that oppose the power networks that sustain the white, masculine universal subject. *Opening Out* aims at finding those means.

Of course, the analysis of the division between feminist and the other social movements is a theoretical question in itself. It cannot be considered outside of the process whereby feminist theory and women's studies have become institutionalized, which returns us to the first division, between feminist practice and feminism in the academy. Is it simply the case that as women's studies becomes more institutionalized, feminist scholars are defining their concerns in relation to those of their colleagues in the existing disciplines? This could account both for an uncritical adherence to a postmodernism that negates the right to act, if not speak, and to the distance between feminism in the institution and outside it. But if this is the case, not only do the political concerns of feminism have to be reconsidered, but the disciplinary boundaries that restrict political thinking have to be crossed.

Disciplinary specialization might also be held accountable for a third growing division within feminism, between theoretical skills on the one hand, and literary analysis and socio-economic empirical research on the other. Poststructuralist or postmodern feminism is identified with the theoretical avant-garde, while historical, cultural feminism is associated with the study of how women are culturally represented, or what women are meant to have really done.

Opening Out is based on the belief that such divisions are unhelpful. There is a small advantage in uncritical cultural descriptions, or an unreflective politics of experience; without the theoretical tools found in poststructuralist, psychoanalytical and other

contemporary critical theories, our social and cultural analyses, and perhaps our political activity, may be severely curtailed. On the other hand, unless these theoretical tools are applied to present conflicts and the histories that shaped them, feminist theory itself may become moribund. Not only that, but the opportunity feminist theories afford for reworking the theories currently available for understanding the world (such as they are) may be bypassed.

None of this means that *Opening Out* will always be easy reading in the first instance; the distance between developed theory and practical feminism is too great for that at present. But it does mean that *Opening Out* is committed to returning theory to present political questions, and this just might make the value of theoretical pursuits for feminism plainer in the long term.

Opening Out will develop feminist theories that bear on the social construction of the body, environmental degradation, ethnocentrism, neocolonialism, and the fall of socialism. *Opening Out* will draw freely on various contemporary critical theories in these analyses, and on social as well as literary material. *Opening Out* will try to cross disciplinary boundaries, and subordinate the institutionalized concerns of particular disciplines to the political concerns of the times.

Teresa Brennan

Acknowledgments

I wish to thank colleagues at Miami University and at the Institute for Research in the Humanities at the University of Wisconsin, Madison, who gave me the space, time and money necessary to develop and carry out this project. Friends at Miami University, at the Universities of Wisconsin, Minnesota, California at Los Angeles, Paris VIII and Canterbury at Kent who provided valuable research tips, critical insights and discussion for different portions and versions of this book, which was presented in the form of lectures. I am especially indebted to my graduate students, whose intellectual curiosity and persistence during long seminar hours in the fall of 1992 kept the project going: Andrea Doane, Alain Gabon, Lucie Maillard, Francesca Muccini, Bernd Renner, Violeta Richards, Jaclyn Rosebrook, Grace Rudolph, Salomé Sali, Suzette Shahin and Xiao Wang. Thanks also to David and Francine Conley and Melissa Ince for their input on animal rights. Hi to Castor and Auric and the folks from Buyck who offered many tips and observations about the nature of forests, plants and wildlife. My gratitude goes to my parents who, on the shores of Swiss lakes, taught me the love and respect of nature in my early childhood.

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It goes without saying that—and there are truly no words for saying it—my affective gratitude goes to Tom, with whom I share my ecological adventures at the cabin in Voyageur Country that prompted much of this inquiry, and in the hope of many more to come. To him these pages are dedicated.

Introduction

This book is a study of environmental awareness (or non-awareness) in contemporary French theory. The renewed attention brought to the environment, at the heart of political debates in industrialized nations, reaches back to an intellectual climate that was born in the late 1950s but grew exponentially in the 1960s. That decade brought the environment forward as a subject more urgent and compelling than the future or the ends of "man." A shift occurred that led to a critique of the full historical subject and the philosophy of Hegel in its different aspects—Kojèvian, Marxist, and existentialist—that had articulated humanism of the postwar years. The self-fulfilling autonomous subject-acting-on-an-object had been associated with the concurrent domination of nature, women, and non-European cultures. In the period that followed the postwar years, the plenary subject was decentered. It was called into question especially in structuralist and poststructuralist theories.

The shift that has taken place over the last three decades is crucial not only for a history and practice of feminism and multiculturalism but also, I shall argue, for contemporary readings of ecology. In this book, I shall postulate that much of the forceful and seminal work that marked these years has complex ties with issues associated with ecology, but that the strength of this affiliation or identification has been either muddled, repressed, diverted, or relegated to areas where it ought not to be. In making this argument, I wish not to rehearse many of the current debates that gain profit by trashing philosophy and theory associated with the aborted revolution of almost thirty years ago. I do, however, wish to argue that what 1968 thinkers did to produce commanding changes in the way we think the world—or in the way we are today studying the concrete conditions of life, space, and *habitus*—owes much to ecological consciousness. This consciousness has since been revised or forgotten.

I am advancing this hypothesis in order to discern three major dilemmas that cause intellectuals, teachers, theorists, feminists, and adepts of philosophy and literature (no doubt the readers of these pages) to ponder the effectiveness of our professional work in everyday lives. First, when the ferment that surrounded the Parisian revolts in May 1968 is recalled in both America and the United Kingdom, it is often distorted or twisted, in order to impugn radical thought, as part of a program that would like to modify the "excesses of political correctness." I would like to bring forward the memory of what led to and followed these events here and now, in order to denounce policies that foster the destruction of environmental regulation and its consequence, the abrogation or repression of ecological consciousness. The lack of attention paid to the ecological basis of European philosophy of the 1960s, seen, by way of its erasure, in its revision or outright repression, is a clear sign of complicity—if I may broaden and distort a common slogan—with a destructive "contract on the globe." I postulate that ecological awareness, what may be seemingly marginal, located in rarefied intellectual or pedagogical spheres, remains at the heart of issues concerning cultural theory in general.

Second, we are witnessing in debates surrounding cultural theory an edginess, even evidence of a timorousness, about "what to do" with ecology. How does it "work" in specific areas of theory devoted to feminism, to literary history, to the teaching of language, to interdisciplinary programs, and so on? Does it exist in the humanities, outside institutes of biology or public policy? "C'est avec de bons sentiments qu'on fait de la mauvaise littérature" (It is with good sentiments that one writes bad literature). Is ecology an object of ridicule because, as it is a *bon sentiment* it would be evidence, as André Gide's celebrated dictum goes, of "bad literature?" In other words, if the issues at the core of debates about the future of the world are deadly serious, would ecology be that which remains unnameable in most areas of humanistic inquiry? Would the strong reasons that motivate feelings about ecology become a pale topic of study in view of the commanding tropes of irony and travesty? If human culture, cultural diversity, plurality, and coalitions of race, class, and gender are marketed for consumption in humanistic disciplines, where does ecology, as an area of study devoted to what makes them possible, fit in current agendas? The book will address these issues.

Ecology can be the subject of a *persiflage*, the untranslatable substantive (registered somewhat ponderously as "mockery" in many English dictionaries) that connotes everything so disgustingly arrogant and even castrated about French salon culture, the area of debate that Claude Lévi-Strauss (1971:572) long ago called "une tabagie intellectuelle du Café de Commerce" (stale intellectual tobacco smoke of the Commerce Café), in which Parisian intellectuals draw attention to their voluble, if indeed real, argumentative brilliance that leaves the environment out of sight and out of mind.

Or third, ecology can be a more problematic area, a neuralgic point for students of poststructuralism who identify with still current voices trained in the 1960s. Many proponents of poststructuralism, defined in a variety of ways, count among this group. They resist being dissociated from tenets of political thought that advocate careful and tactful treatment of gender or of multiculturalism. At the same time, they resist addressing this dilemma in direct association with the environment. In doing so, that is, in failing to include ecological issues in their politics, they risk converging, probably without ever wanting to, toward the positions that are advocated by the neo-liberals and the Parisian *persifleurs*. I will argue, therefore, that a more overt stance and a real commitment have to be taken in respect to ecology.

Before the tenets of the project are further introduced, I wish to go back to French thought in the 1960s. It is a known fact that shock waves in philosophy and criticism, emanating from an epicenter in Paris, struck many areas of the world after the rumblings of May 1968. In this book I shall contend that now, almost thirty years later, many beginnings of ecological awareness are anchored in the theories of 1968. Many of its reflections on the environment are still viable and thus constitute the core of a "tradition" of informed debate, extensive dialogue, and ecology. I shall also contend that over the last three decades some of the most precocious reflections on philosophy and ecology have become, like the world itself, irreversibly polluted. The political stakes of this book involve retrieving (but without moping over or pining for) an awareness initiated and made clear, through a welter of philosophy and cultural theory. I would like to assess its value and its viability here and now, in constant view of its most effective traits that have come out of the association between ecology and feminism.

In 1968 a dividing line was drawn between a time of postwar development and a world degraded by unrestricted development of capital economy. The Parisian revolts might not have accomplished much in a broader historical frame, but they none the less brought to a global perspective a consciousness, indeed a renewed awareness, of the increasing gap opened—somewhat like an ozone hole—between a stratosphere of strategic operations in the corporate offices of industrialized nations and the soils and waters of nations threatened by the unrestricted economic pressures. Paris in 1968 was certainly not the same 1968 as that of the Democratic Convention in Chicago or the riots that riddled campuses over all of North America. Common goals and agendas could be found, but in the broader picture of things the French situation concerned above all a need to change the ways in which the world was being *thought*.[1] In France the student revolts were based on an awareness that academic reforms needed to be inaugurated. An intellectual focus prevailed. The revolts were aimed at bringing attention to the ways in which subjects think the world, and were, therefore, also aimed at retrieving the consciousness of the *eco* from the standpoint of the economies of higher education.[2] The students proclaimed that the management of a professional household was not in synchrony with the environment at large, and that the latter was being mismanaged in ways similar to those in which France was administering the former.

Before going further I want to underscore that this book is *not* directly about 1968. That is merely a point of reference in a perspective locating some of the roles that ecology plays in structuralist and, mainly, poststructuralist thinking. Against those neo-liberals intent on debunking environmental awareness by identifying it with a terroristic anti-humanism, or against the *persifleurs* for whom the easy benefits of high technology do away with the materiality of the environment, I propose to reassess some of the ethical principles at the basis of poststructuralism. They are seen here as an intensive reflection upon, and a selective mobilization of, the themes and styles of thinking that fell under the category of structuralism around the years 1966–72. Structuralism afforded revolutionary ways of looking at most of the disciplines taught in institutions of higher education; it applied models of dynamic change and movement to fields of knowledge that it was then beginning to analyze in terms of mechanisms *(dispositifs)* or apparatus *(appareils)*. It attended to the passages and shifts of configurations of energy and information in different areas of knowledge and, for that reason, the term "human sciences" was coined in order to bring the image of things "human" into a critical relation with scientific modes of study dominant since the time of Descartes and Newton.[3]

The tenets of structuralism were most dramatically visible in the way in which, all of a sudden, they turned what had been taken to be autonomous "subjects" and "objects" into dynamic configurations or *systems*. For Roland Barthes (1968), the economy of fashion was a "system" of mode that varied on minimal changes in hemlines, pleats, or edges of textile. For art historians (e.g. Burnham 1968), sculpture since the advent of Rodin had been telling its viewers that its forms pertained to *systems* as much as to the matter, bronze or plaster, formerly handled and molded to convey aesthetic expression. For Jacques Derrida (1967:9–10), structuralism was crucial for translating what had been understood primarily as form—architecture, painting, literature—into writing and translation itself, that is, a *force* or unpredictable system of movement. It defied schematic containment or imprisonment in a fixed form aimed at becoming the "truth." And for Gilles Deleuze (1968), the "logic" that commanded the serial production of

meaning became a topic no less vital than meaning itself. Better than any field of study that preceded it, structuralism enabled its students to envision how inherited phenomena—from goldfish to gold finches in the golden ages of literature—were part of networks of forces producing a consciousness of the complexities of the world at large.

If a decisive example can be invoked to show how structuralism was tied to the history of May 1968, one of its proponents in political theory argued that the effects of World War II and the Holocaust, the two defining events of the twentieth century, were neither really calamities of humanity gone awry nor bitter chapters in a history that would cause poets to wonder if indeed poetry could be written after Auschwitz. The war was, rather, one of many catastrophes planned and staged by cooperative forces that delighted in, and reaped great profit from, destruction. For the superpowers that ruled after the World War II, the fact of death and genocide amounted to a byproduct of a much more important process of polarization that had been planned in 1941 or even before.[4] When the analytical process of structuralism uncovered the ethical shabbiness behind postwar economic development, it can be said, for our purposes, that the age of poststructuralism began.

I will argue that poststructuralism, contrary to some received ideas, refers to a current of thought that grows from the sociopolitical and environmental awareness of what structuralism had established. The discoveries of structuralism were used to analyze conditions of the world that gave rise to them. They also decentered the human subject from the commanding position it imagined it occupied in the operation of the world. Questioning its plenitude, the movement led to the renewed consideration of the ethical side of the relation between the human subject and the world in which she or he was born. An ethical inflection of structural "process" is present, for example, in the ways that Jean-François Lyotard assesses the "state of knowledge" in the period beginning in the last decade. In an essay entitled "Oikos" (1989) he argues that the postmodern age, ostensibly beginning in the post-World War II years, witnesses a greater conflict, both between humans and nature (in which the former ravage the latter) and between northern and southern hemispheres. The "developed" systems of the First World above the Equator strive to destroy the threats posed by the "entropic" or cold economies generally located below. The system of the relations shows that war on nature is enacted by the rich on the poor. The "poststructural" view informing Lyotard's analysis discerns the ways in which relational systems become ideological components in global contexts.

An inheritor of the environmental consciousness raised in 1968, Lyotard also ties dilemmas that concern populations at large to those that inhabit every human subject. Ecology has to do with the war of the First World on the Third and Fourth Worlds, to be sure, but it also means "the discourse of the secluded, of the thing that has not yet become public, that has not become communicational, *that has not yet become systemic,* and that can never become any of these things" (Lyotard 1989:105, my emphasis). In every one of us there is located something that cannot be mediated by forces that name or otherwise control nature. Lyotard wishes to seclude a vital, indeed naturistic, "process" of thought that grows into the world from what would too quickly systematize it. A dilemma that is felt about the environment that inhabits us and also qualifies us as "eco-subjects" inspires an observation that extends a comparison of children and computers. In the world where structures of digital communication are said to prevail, humans would be analogous to mechanisms on which computers are based. But alas for many (and to the benefit of

others, such as myself and, it is also hoped, the readers of this book), the problem is that computers have never grown into life. They have never worked through all the difficulties that every human being experiences in her or his childhood years. Computers have never experienced crises of subjectivity. By contrast, children—though their subjectivities are most likely modified by their access to computers—are not closed "systems" that run on automatic pilot or that have preprogrammed feedback loops that allow them to become adults without a trace of trauma or an awareness of the world that has determined them. Nor are they simply, in a specious vocabulary that glosses over the complexities of the dialogical basis of language, "interactive" with each other's "terminals."

The reassessment of poststructuralism as part of an ecological ethos that is being proposed here might indeed be complementary to those from which Lyotard establishes an equivalence of ecological awareness and the sensibility of childhood. If Lyotard's example is borrowed so as to include the history of environmental awareness, it could be said that the "structural" vision of the world in 1968 could move in two directions, either toward further economic development and greater "war" declared upon the poor and upon nature, or else toward a renewed assessment of dynamic environmental balances. Structuralism, as many of its historians have shown us, constructs its meaning from what is often observed in histories of economic development. Poststructuralism of an ecological signature can, by contrast, be said to locate the dilemmas in which subjects are born within that economic development (Dosse 1991–2). Poststructuralism poses often unanswerable questions—which have been called *incontournables*—about how individuals at any area on the globe ought, if choices are even possible, to address issues of pullulating demographic growth; of increasing social disparity; of the preservation of the environment; of legislation, reaching back to ideologies that attempt to eradicate the work that has coordinated feminism and ecology, aimed at legitimating a violation of the world at large.

This book is therefore perched in the cleft of the dilemmas of the kind that Lyotard specifies, and for at least two reasons. First, it is clear that 1968 is a historical crossroads in which a generation of subjects born on the heels of 1945 replaces those that had been identified with "full" subjects who had grown into that ideology in the heydays of existentialism. A distance on that part of the past has since been gained, and so also is gained, at the same time, a consciousness of social contradiction. In North America, it has been marked by the policies of the United States government that revived the existential ideology of the full subject needed to defeat a German and Nipponese hydra, later to send to their death many of its own unwanted subjects that it conscripted massively for the defense of economic interests in Vietnam. Obvious since 1962, the Contradiction between a "good" and a "bad" war acquired *intellectual* force when seen from the perspective of France, a country that had extracted itself from a similar dilemma after the fall of Dien Bien Phu in 1954.

At the heart of the experience of the two nations was the sense that world-wide systems, or ecology in general, had run amok. Ecology was, without being named as such, something like an "apical meristem" of collective awareness. For the intellectuals in Paris, ecology concerned how "thought," pertaining to any number of disciplines, would be cultivated and transmitted in an infrastructure of the *artes liberates*. And for the American citizen, it concerned how the sight of senseless murder and the carpet-bombing

of lush rainforests and carefully managed landscapes were equivalent to a war waged less on communists than on the environment.

Second, the issue about what to do *after* the protests and the contained violence of the occupation of the Sorbonne is tied to many of the concerns and even the emergence of poststructuralism.[5] The movement of that name identifies a more pervasive dilemma about how to manage and to direct into ethical directions what structuralism had analyzed so brilliantly in many different fields of study. In this book I would like to hypothesize that the driving force of poststructural thought is indissolubly linked to ecology, though in its development over the past two decades matters concerning the future of the world have been treated differently and with different consequences. Gains have been made in awareness, but there have also been erosions. At the current juncture (in the fall of 1995), ecology, a concern that supersedes almost every issue on international political agendas, seems all but consigned to oblivion. But, as seen in the case of Lyotard, ecology can and does include the struggle for a (mental or physical) place of seclusion, an *oikos* of thought that is not subject to systemic control by destructive orders or strategic configurations. The lesson that the heritage of 1968, when seen filtered through the example drawn from Lyotard's work, remains first and foremost a struggle to accord us, as subjects, the wherewithal to cope with what has befallen us by virtue of our being born—getting to understand the surrounding world, coping with the gender and class that have determined us—but without collapsing into ideologies that strive to overtake and contain consciousness as it grows or changes.

This book seeks to rehabilitate some ecological components of French intellectual thought of the past thirty years. The historical formation of poststructuralism needs to be kept in focus if indeed the political and symbolical efficacy of ecology in intellectual matters, understood broadly as a critical relation with the world at large, can be sustained. In a certain and almost congruent way, both the recent lack of attention paid to the ecological basis of European philosophy of the 1960s and its revision and simplification thirty years later become a clear sign of complicity with the loosening of ecological policies. I shall proceed to a reassessment for pragmatic, even "corrective" ends, of some French poststructural thinkers who explicitly deal with ecology in their work. But first, a liminary example might illustrate the point being made above about the edginess in some theoretical discourses in respect to an environmental awareness that they merely imply and do not overtly address. In these discourses, an ecological consciousness that heightens cultural awareness gets attenuated or mediated in the course of argumentation.

Jacques Derrida, whose writings are partially responsible for the shift from structuralism to poststructuralism, has increasingly politicized his work and to such a strong degree that it can no longer be accused of nihilism, self-referentiality, narcissism, or other epithets of the kind that greeted it with such hostility in the 1970s and 1980s. In a dazzling analysis of the "ghost" of Marx that haunts political theory, Derrida undertakes a vigilant and caustic reading of Francis Fukuyama's *The End of History and the Last Man* (1992), a book, in Derrida's words, that "remains in the tradition of Leo Strauss, picked up by Allan Bloom, the academic exercise of a young, earnest, but late reader of Alexander Kojève (and a few others)," a book that is "suspensive to the point of indecision" (that is, politically correct) in its arguments for the advent of global liberal democracy (Derrida 1993:98).[6] Fukuyama, Derrida says, blends apocalypse and evangelism. He even cribs Kojève's Hegel by stating, as had the philosopher-teacher who

trained many French "human scientists" who emerged in 1968 (apocryphal tales tell of Bataille, Lacan, and Lévi-Strauss regularly attending his lectures), that American capitalism in 1950 could be seen as the end of time, and an end of history, which would be the *telos* of both communist-utopian and capitalist-pragmatic ideologies. The United States, Kojève stated—and Fukuyama reasserts, would be the "final stage of Marxist 'communism'" (Derrida 1993:121).

Derrida rightfully calls this "an unbelievable and indecent picture" *(ibid.)* after underlining how Fukuyama moves toward showing that "political correctness" works against the implicit progress and liberation contained in Kojève's vision. Fukuyama's recuperation of Kojève is based on a messianic notion of an economic event whose eventfulness depends on its deferment—that is, on an eventual condition of something always-being-about-to-come, but also something that is entwined with its already-being-here: liberal democracy will come to pass about the entire globe, but it is already in our midst, notwithstanding some of the catastrophes it has necessarily, in its march toward the future, brought about in our midst. (At that point in the argument Fukuyama dehistoricizes the mission of democracy, recognizing that "the language of a 'Nature"' (Derrida 1993:109–10) is part and parcel of political structures, thus "naturalizing" it by subterfuge.) The religious aura of *The End of History and the Last Man* and other works should not be cause for unjust alarm.

> If such works have a certain fascination, their very incoherence and often their pathetic primitivity play a role of a symptomatic sign that surely needs to be accounted for. Drawing our attention to a *geo-politics of current ideological stakes*, deploying them in conjunction with the world-wide cultural market, they are meritorious in forcing us to recall this anachronistic complication.
>
> (Derrida 1993:118, my emphasis)

The complication he mentions comes precisely with Fukuyama's rehash of Kojève's post-Marxism. In Derrida's reading, so far, so good: environmental awareness seems to be the implied conclusion that will follow the unawareness of the world that will be spoiled under the revival of 1990's consumerism in American culture. The deconstruction of Fukuyama, timely and concise, helps to stave off the uses to which critics of political correctness would too easily put it, such as the slashing of budgets earmarked for Marxian studies, advancement of policies discouraging interdisciplinary and theoretical curricula, the suppression of women's studies, the annulment of courses (however laborious and time-consuming they may be) that teach critical thinking. Derrida's reading would even be aimed against the confusion of democratic liberalism and corporate elitism that Fukuyama celebrates. But in the environment of his deconstructive maneuver, Derrida's allusion to geopolitics is not kept in view. In a world of human-made commodities, geopolitics float away and lose their environmental force in the context for the argument that considers the omnipresence of Marx, a Shakespearean ghost in the development of world-wide capitalism.

Derrida does not specify the ecological consciousness, dating to the enterprise of the geophysical year of 1965, that defines the space in which the concept in a contemporary sense was born, the breadth of its aim, or the stakes of its investment in it. Like that of

Marx, the ghost of an ecological awareness is evoked at this and other junctures in Derrida's arguments, but it is not entirely drawn out or back into the dilemma of the Marxian world in which industrial development had gone unchecked. In Derrida's reading we witness a tacit presence of ecology, but it is not really brought forward or even considered as a name. If his reasoning figures in a postmodern arsenal of intellectual weaponry used to fight the global effects of corporate or flexible capitalism, his readers are those upon whom falls the responsibility, first, of developing the latency of its ecological consciousness and, second, of spelling out more clearly where it can be applied.

The slippage or drift away from a grounding dilemma of ecology that is visible in these pages of *Spectres de Marx* characterizes many other aspects of the ways in which French cultural theory negotiates, with greater or lesser success or with increased or decreased consciousness, issues that concern the future of the globe. Because of the hesitancy (or, as has been noted above, the "edginess") that is associated with environmental issues in critical theory, the order of this book will be at once descriptive and polemical.[7] The descriptive part of the analyses will engage separate reviews of different types of environmental consciousness made manifest in theory associated with 1968 and its aftermath, but with the aim of discerning the force and the effects of the way in which they are received in 1996. What was proposed then, or else what was implied in the conceptual infrastructure of certain writings? And what has happened in their reception or interpretation since the time of their publication? Such are the questions that will be addressed.

Different facets of ecological conscience will be drawn out of writings that include structural anthropology (Lévi-Strauss) and its inverse, pragmatic ethnography, which shuttles across the English Channel and the North Atlantic (Gregory Bateson); science with praxis (Michel Serres, Ilya Prigogine and Isabelle Stengers); neo-futurism (Paul Virilio); the philosophy of existential territories (Gilles Deleuze and especially Félix Guattari); heterology (Michel de Certeau); and two versions of French feminism (Hélène Cixous and Luce Irigaray). After discerning the principal ecological tenets in each body of theory I shall examine how they work—or fail to work—in view of environmental dilemmas that we are now facing. I do not wish to judge works on a scale of consciousness but rather prefer to see how they can refine and sharpen our ways of thinking through issues that for a long time had been either obvious but not dealt with or, at least, stirring about in a nascent state.

It thus may be *we* who discover an ecological relation, by dint of working back through materials comprising a canon of theory, for reasons other than those that have canonized them. The re-reading therefore seeks to be consonant with ecological subjectivities. For in developing a study that touches on ecological subjectivity I am impelled to relate consciousness of the self to that of being attached to and separated from the world. If being born into the world, as Lyotard has implied in "Oikos" (1989) inevitably touches on quandaries of dispossession, of severance, and of exile from the idea of a maternal paradise garden that wells up and out of the past, subjectivities remain, forcibly, also geographical and ecological.

The study begins with a critical assessment of Luc Ferry and Jean Baudrillard. Ferry's *The New Ecological Order* (1992), in my mind, is the product of 1968 trashing defined above. His non-metaphysical humanism is a rejection of differential thought. The

arrogant and untenable position that is championed in this work of neo-liberalism will illustrate how a French critique of American "political correctness" willfully disparages ecological matters. Jean Baudrillard becomes the prototype of the brilliant *persifleur* whose world of simulacra does away with what seems to be an old-fashioned and hopelessly antiquated, indeed pre-electronic, materiality. Like Fukuyama's *The End of History*…(1992), Jean Baudrillard's decontextualized and naive impressions about North American space elicit a seductive fascination for his readers. They also set forth positions that, like current anti-environmental platforms in America, by virtue of their outrageousness, intend to bait or to arouse readers into reactions that can be turned against them.

Since the early 1990s, when Ferry's book appeared in France (and soon after, in English translation), we have witnessed three events that attest to the success of their views. First, the election of Jacques Chirac as leader of the French nation has been a call to disregard the environment. Second, Chirac's decision, a mimicry of Gaullist ideologies of "action," to pollute the Pacific by resuming nuclear testing, has won, except for a general disinterest or ignorance in the United States, world-wide castigation. Third, attempts to disenfranchise Greenpeace may have gone as far as the murder of members associated with the *Rainbow Warrior*.[8] These examples show how the militant nature of the old French regime's return to power (with its intention of slashing social programs) has many analogies with the rise of conservatism in the United States. It pictures an ecological relation with the world as something static, uninformed, passively effeminate, and obstructive to business interests.

In turning to the more complicated areas of ecological awareness in French thinking, I want to show that a give-and-take, a tidal ebb-and-flow, has moved between the human sciences, both when they found a broad public in the early postwar years and now, when they are read in light of increased pressures exerted on the globe. The chronology can be conceived as beginning with Claude Lévi-Strauss's critique of Jean-Paul Sartre in *La Pensée sauvage* (Lévi-Strauss 1962a), which summarizes and anticipates many of the major themes of contemporary theory. By arguing against Sartre, in favor of a decentering of human subjects, for the inseparability of nature and culture, Lévi-Strauss opens the way in contemporary French theory to ecological thinking. The endpoint of this project is, of course, in the here-and-now, in the collective labors that need to be expended to safeguard the future of the planet. In Lévi-Strauss's writings, the expression of ecological awareness is often clear and of a true temper. Much of it hinges on the degree of willingness to abandon dialectical philosophy that would espouse progress or teleology of the kind glimpsed in Kojève (e.g. Kojève 1947) or that would continue to separate humans from nature.

In this book, I appeal to those readers who recognize the importance of various kinds of differential processes in the context of ecology. In some of the texts, the awareness gets mythified or clogged in identification with romantic or obsolescently modernist visions of "mother nature." Whenever effects of foreclosure or occlusion of awareness are caused by affiliation with Amazonian goddesses or earth mothers—and I believe this happens in the work of Hélène Cixous and Luce Irigaray—a readjustment, specifically in view of more variegated versions of feminism, can enhance (and deconstruct in a positive sense) the work extending and complicating the "geopolitical" borders of feminisms. What is being posited in the context of feminist theory is that *la pensée 68* has left an

indelible imprint that bears a stamp of ecological awareness. For this reason, the originality of Cixous's and Irigaray's philosophical agendas, which now are very well known, can be honored and extended through the intercession of different lines of argument found in the works of, among other theorists, Teresa Brennan, Donna Haraway, Carolyn Merchant, and Val Plumwood. Drawing for the most part on poststructural theory, their approach to the environment materializes, concretizes, and can serve to redirect the energies that the French feminists used to accede to subjectivity and language. *Ecopolitics* will aim toward the encounter and intervention where, I hope, what is said about the environment enriches the ecologies of feminism, but also where an assessment of the influence of French thought can be reconsidered. I predict that in areas that concern the literary vanguard, where *belle-lettres* wed structural and poststructural theory to fiction, or in other areas where self-consciousness and performance are valorized (in theater, for instance), the heritage will be seen working somewhat independently of ecology. Before addressing these matters, it is necessary to see, first of all, how two types of ecological disparagement have clouded the contemporary horizon.

Chapter 1
A first type of disparagement
The return of the full subject and the division between nature and culture

In the introduction it was noted how Jacques Derrida locates current disparagements of critical thinking wherever conveniently anachronistic strands of philosophy are exhumed to simplify complex issues of our own time. He showed how Francis Fukuyama appeals to an obsolete idea of geopolitics by conjuring up grandiose eschatological schemes that link the end of time to the advent of international capitalism. The coming of this economic religion will be the "savior" of the present and the promises to insure the future condition of "man." The model that Derrida discovers in Fukuyama's work can also be extracted from popular culture, in which similar regressive promises are made. The return to "family values"—in which the image of the family projected in advertising resembles the homes of the 1950s (Kojève's ideal), made manifest by Ozzie and Harriet, Chester Riley, and "My little Margie" in the early years of American television. Politicians continually exploit anachronistic images in order to control the imagination of an ever-growing public that is subjected to the media. Bogus views of wealthy suburban or urban cultures and of loving spouses are still used to mobilize the illusion of families leading their lives, consuming as they never had, and enjoying the benefits of urban or suburban utopia. Derrida's analysis of the messianic element of international capitalism is important for a politics of ecology. It can also be used to locate how precarious indeed ecological thinking may be in respect to intellectual movements that are tied to French politics.

In this chapter I wish to argue, first, that a new "eco-right" in France proceeds in the same anachronistic direction. It regresses to a strain of philosophy of the postwar years that championed the fully constituted subject. It disinters the *panzers* and Sherman tanks of Sartrian dialectics, rusting and rotting in the Ardennes of Hegelian philosophy, to offer quick and easy solutions to the knotted and thorny problems that ecologists now raise concerning the future of the planet, whether in demography, geography, climatology, or immunology.

The culprit here is Luc Ferry. His *Le Nouvel Ordre écologique: l'arbre, l'animal, l'homme* was published in 1992 and awarded the Médicis prize for best essay in the same year. Ferry has many axes to grind. A political philosopher doing away with poststructuralism's "anti-humanism," he sets out to expose ecology as a terroristic movement that resembles other totalitarianisms of the 1930s and the 1950s. To the nostalgic views of revolutionaries coming out of 1968, Ferry opposes his vision of a democratic reform that seeks to protect the environment of human societies.[1] This new ecology saves society from the fanaticism of deep ecologists, ecofeminists and a surviving stand of old forest growth, the philosophers of 1968. Ferry's new ecological

order, reminiscent of that already forgotten New World Order (touted briefly by the American government during the war in the Persian Gulf), militates for neo-liberal democracy in France on the eve of European integration. It debunks all ecological writings in France that are seen to be associated with 1968 and its "revolutionary" political ideals by associating them with Russian communism and, especially, Nazi fascism. The fascist ties of revolutionary ecology in 1968 thinkers are developed at length by way of an attack on deep ecology and especially on American ecofeminists. In its place, Ferry argues for a consensual democracy and a "soft ecology" that would test cars for emissions of carbon dioxide and prevent industries from dumping too much toxic waste in conspicuous places. Otherwise, it would proceed with its cultural improvements over nature without rethinking, on the eve of the twenty-first century, its current social and political practices in a radical way and with lessons gained from poststructuralism. On the back cover of the American translation of the book, the question is asked: "Is ecology in the process of becoming the object of our contemporary passions, in the same way that Fascism was in the 30s, or Communism under Stalin?" Ecology is said to become an "object" when, in fact, as part of a wider epistemological shift, poststructuralism had done away with dualisms in favor of differential thinking.

As a political philosopher, Ferry holds on to an abstract argument that disregards these shifts or any anthropological concerns. By going back to Sartrian existentialism as his point of reference, he puts between parentheses not only what he calls a narrow "anti-humanism" but also several decades, crucial for advances in science and technologies, that have so completely altered our relations with the world that some of Sartre's pronouncements, already criticized by Claude Lévi-Strauss in 1962, have become utterly unthinkable thirty years later. This holds true particularly of the subject/ object divisions and the separation of nature and culture (see Chapter 4 of this volume).

The New Ecological Order, which in French bears the subtitle, "the tree, the animal and man" (omitted in the English translation), is a polemical tract, a sort of neo-liberal *mazarinade* in the tradition of the French Revolution. Its aggressive stance is seemingly attenuated by its *persiflage,* that is, by its ironic twists and turns. It takes as its main target French philosophers of 1968, Gilles Deleuze, Félix Guattari, Michel Serres and, more indirectly, Jacques Derrida and Michel Foucault. It accuses all of them for being "anti-humanist," leftover revolutionaries who, because they favor differences and the particular, are really fascists in disguise. The title of the preface, "Les parenthèses de l'humanisme," rendered in English as "The passing of humanism," because of its stereotypical use of the partitive, can be read in more than one way: are we talking about humanism *as* parenthesis or the parentheses *of* humanism? Are we working from the Middle Ages and the darkness of 1968 toward a new, enlightened Humanism on the March? Will that humanism be less metaphysical than the last one but keep the centrality of humans by dividing nature from culture and, men from animals? Ferry hinges it all on the question of *rights,* or, in his words, on that which is exemplary of human freedom. Shrewdly, he opens his diatribe with the dramatization of animal trials transcribed from the archives of legal records of the Renaissance. Rats (and other mammals, as well as beetles and worms) had to be notified in order to appear in court. There they would be tried before humans could obtain the right to do away with them. It was only after they failed to obey the mandate or the subpoenas that they could be tried in their absence. The

chosen examples cannot fail to elicit amusement from contemporary readers. Without further ado or analysis, Ferry quickly draws his conclusions:

> The answer is clear to us Moderns, arising out of a concept we take for granted *[naturel];* that it is insane to treat animals, beings of nature and not of freedom, as legal subjects. We consider it self-evident that only the latter are, so to speak, "worthy of a trial".
>
> (Ferry 1992 [1995]:xvi)

Ferry frames his question in a rather engaging way. Yet the conclusion that separates nature from freedom and rights is never elaborated. His modernist declaration, which tries to bring back an outmoded mental ecology, can elicit just as much of a smile from postmodernist readers. As a philosopher, Ferry chooses to privilege the question of rights while bypassing anthropological or scientific questions. Drawing on the age-old debate of the relation between nature and culture, Ferry quickly inflects culture in terms of a movement that aims toward freedom and legal rights. He singles out those ecologists who declare that humans have no claim to strive toward a privileged position in the universe. Yet their position is the result of a lengthy decentering of the human subject and the earth that can be dated from the discoveries, among others, of Galileo. The decentering was further accomplished by the failure of rationalism, the discovery of the unconscious and, as we have already shown in the introduction, by the discovery, in both the sciences and the humanities, of structures, complex systems, and processes. Without engaging any of these new modes of knowledge, Ferry goes back to a post-Enlightenment republicanism and existentialism to focus on a freedom of humans that is defined as their separation from nature. Confining himself to the realm of rights, Ferry avoids contending with all the binaries that are being called into question.

Those discoveries blur the several centuries, following the Renaissance with its animal trials, of anthropocentric divisions between nature and culture, man and woman, even things animate and inanimate. As numerous recent studies have shown, life is an accident that appeared because certain conditions made it possible at a given moment.[2] These conditions, scientists now claim, could not be reproduced. The centrality of humankind therefore cannot be defended and means little when compared to the vastness of the universe. The narrow context of the arguments based on rights does not allow the author to broach such questions. Downplaying all discoveries that show otherwise, Ferry concludes by renewing ties with Sartrian existentialism in such a way as to transcend human history and natural history within which, more and more, humans are seen as having but a gratuitous presence.

Against structuralism and poststructuralism, Ferry finds it productive to return to a Sartrian style of existentialism that defines culture as transcending, or separating itself, tearing itself away *(arrachement),* from nature. This dialectical approach to "human nature," of which Sartre writes in pages of "luminous depth and simplicity" in *L'Existentialisme est un humanisme* (1946) (heaven forbid that it needs footnotes in Ferry's text!), is open to men and women.[3] Culture is measured by the act of tearing oneself away and by the distance one gains from nature. Though, clearly, humans can no longer say that they are the "masters and possessors of the world," rather than "radically" changing social praxes by imposing violence from without, they can devote themselves to

reforming democracies from within. Ferry speaks from the vantage point, it seems, of his Parisian debates. Never addressed are the issues concerning what happens in places that do not have democratic structures at the basis of their political practice. No mention is made either of the fact that, at least in the area of economics, a Cartesian spirit is taken as an axiom. For a political philosopher, Ferry puts precious little politics, let alone economics, in his argument.

Behind Ferry's seductive and engaging discourse, dotted with subtly ironic touches, there lurks a philosopher who is out to demolish anyone he sees associated with 1968—from poststructural philosophers to deep ecologists and ecofeminists—and who, at the same time, advocates a federalized economic policy for France. *The New Ecological Order* impugns an ecology based on decentering the human subject in order to exhume vague and outworn concepts ringing of freedom and democracy—concepts that have at times led to the worst abuses of rights—in order to clear the way, it seems, for further corporate development on French soil.[4] It is because, for him, rights are seen as intimately linked to freedom and culture that they become the focus of his analyses.

Freedom and culture are championed through a generalized dismissal of all philosophies that question the validity of anthropocentrism. The critique is developed in two parts. The first focuses on ecologists who advocate the rights of nature and hence accord it, so to speak, the status of subject. By juxtaposing their legal battles with Renaissance animal trials, the argument uses a rhetoric of comparison in an attempt to ridicule them. In a second part, because they are all seen to decenter the human subject, Ferry puts in one category deep ecology, ecofeminism, and differential thought associated with 1968.[5] All are said to have ties with fascism and communist totalitarianism. Ferry writes in France, for a French readership. To make his case against the rights of nature, he takes an intellectual *Concorde* to the United States, where, all of a sudden, his arguments begin to appear very muddled. Writing for his French readership, he opposes the French law focusing on "freedom" to American law based on "rights" and "interests," elements of a putative American utilitarianism. In other words, a person can be protected only when his or her interests are threatened. Ferry proceeds to show that when ecologists, such as representatives of the Sierra Club, wish to protect a forest or an animal species, they have to be able to prove that the latter's rights are menaced. This seems to be incomprehensible when seen from Paris. Sneers Ferry: "In 1972, in the very serious southern California Law Review, appeared a long article by Professor Christopher D.Stone entitled: 'Should Trees Have Standing? Toward Legal Rights for Natural Objects.'" (Ferry 1992 [1995]:xvii). A belittling tone describes a law professor who wanted to defend a forest against the development of an area in the Sierra Nevada underwritten by the Walt Disney Company.[6] The suit was rejected—as American readers will not be surprised to hear. When it moved into appeal,

> Professor Stone, who until then had been calmly defending the ideas of radical ecology in his university courses, set about to draft rapidly an article proposing, in his own words, "that we give legal rights to forests, oceans, rivers and other so-called natural objects in the environment—indeed to the natural environment as a whole".
>
> (Ferry 1992 [1995]:xvii).

In Ferry's view, only humans have rights, since the rights imply a status of subject incompatible with nature's functioning as a mere object.

Why protect a nature that has no rights, asks Ferry, or that maybe does not even want to be protected. French readers can indulge in Ferry's *persiflage* while remaining oblivious to other political aspects implied in the Sierra Club's defense of the forest in question. The complexities of ecosystems, of threats to water, air, species, and the like, are not easily reduced to either inanimate objects or elements in a binary equation of which the superior term is "man" and the inferior, "nature". These "remainders" cannot be included in a discourse that champions freedom and culture alone. An institution like the Sierra Club is less interested in denouncing anthropocentrism from the point of view of radical ecology than in fighting legal battles against powerful industries in the very manner that is advocated by Ferry's own reformist discourse. It is an all-pervasive American law that dictates its approach.

By way of this and other examples, such as Roderick Nash's book, *The Rights of Nature* (1989), Ferry arrives at his real point of interest when he shows how Michel Series's *Le Contrat naturel* (1990) owes everything to American writings about the rights of nature. Series's book is perhaps less indebted to American literature on the subject than to science. If we absolutely must give him a genealogy, it will be less that of Professor Stone or of Roderick Nash than a tradition of atomism that includes Lucretius, Leibniz, Whitehead, François Jacob, and the like. Serres goes on to show how nature is the forgotten term in the natural contract drawn up for humans at the time of the French Revolution. The natural contract, Serres argues, is more than a contract between nature and culture; it is the very precondition to all other contracts (see Chapter 4). We are always, a priori, in an ecological rapport with the world and nature. Serres urges his readers to change from a dialectical either/or to a more symbiotic, and less deadly, rapport.

Ferry proceeds with little transition to incriminate ecology as an object that he fears will replace philosophy. He accuses it of aspiring to be a "new cosmology," a "system", and of aspiring to a "vision of the world" (Ferry 1992 [1995]:26). "Ecology or barbarism," he warns, might be a slogan that leads to a new fundamentalism (ibid.: 27). No one will dispute Ferry on the possible rhetorical excesses of any movement, be it ecological or whatever. What does surprise, however, is that he never invokes the other pole of the dyad he constructs. He glosses over the excesses of global capitalism that wreaks havoc on the world and blatantly disregards not only plant and animal rights but human rights when economic interests are at stake.[7] The prisoner of syllogisms and abstract speculations, Ferry does not broach other areas that cannot be separated from ecology, arguably the "human sciences," which must be maligned since they belong to 1968.

Ecology is not entirely rejected, nor are "past abuses" of Cartesian philosophy discounted. Against the "revolutionaries," Ferry searches for what he calls a "non-metaphysical, non-tyrannical humanism," which he finds in an ongoing, consensual, internal reform of democracies:

> Would [this new humanism] have something other to say than Cartesianism, so concerned with making man the "master and possessor of nature"—or is the only solution to get "down to earth," to return to old-

> time frugality, to the *wilderness* (in English in the text) in which American cinema and German philosophy constantly immerse us? Would such a move signal the end of all that we may love about modern culture, artificial and unnatural though it may be? The question here is whether the civilization of uprootedness and innovation is, on the one hand, as irreconcilable with a concern for nature as seems, initially, to be the case. And, on the other, whether the latter implies a renunciation of artifice.
>
> (Ferry 1992 [1995]:xxii)

It is necessary to quote this passage at length because, as we shall see, the accusations Ferry launches, especially against ecofeminists and differential thinkers, are simply unfounded. They do not argue for nature as a "subject," but they question the position of "man." Many of them also argue, in the wake of structuralism, for detachment. To paraphrase Jacques Derrida, from the opening paragraph of *L'Écriture et la différence* (Writing and difference): even if structuralism were to recede one day and leave its objects on the shore, we still could not go back to thinking along a division in terms of subjects and objects (Derrida 1967:9–10). Structuralism erased that convenient demarcation—to which Ferry himself wants to return—and it did so for good. It uprooted Western thinking by opening it to structures, systems and processes.

While we do not wish to dispute the validity of Ferry's reservations about a"return to the earth," the division between the former and contemporary culture is not so neatly drawn for most ecologists. To be sure, ecology has to do with the preservation of forests, waters, and wildlife, or with one's aesthetic pleasure and enjoyment during a trip to the Minnesota Boundary Waters, to Yellowstone Park, or the Pantanal. It has even more to do with a different understanding about the functioning of the world in terms of the interrelation of humans and nature. We can rummage through the shelves at Blockbuster Video Shops, overloaded with Rambos, Terminators, Die Hards, in search for films about *wilderness*—a term that is rarely used any more outside of Ferry's argument—and will find little but a couple of cassettes such as *A River Runs Through It* or even *River Wild*, all narratives that amount to thinly disguised advertisements selling real estate in Montana and Wyoming to CEOs and media stars.[8] Ferry mocks the Sierra Club for defending trees against media companies. Nothing is said about the ruthless and unscrupulous methods by which the rights to "develop" an area or to fell forests are obtained. Their methods far exceed those used by American family dynasties who razed the land at the turn of the century.

The *wilderness*—made equivalent with a 1960s slogan of return to the earth—is linked by Ferry to Nazism, which equally champions nature and animal rights (Ferry 1992 [1995]:91). This is an informative point, though it does not have to be part of a syllogism. If Nazis protected animals, all those who protect animals are not Nazis. Ferry plays on the Nazi rhetoric that wants to protect animals and nature in order to grow healthier fauna and flora. He fails to mention that the same reasoning is the very one that is being used by timber industries, for example, to deceive tree owners, loggers, and other citizens for the sake of growing "healthier" flora and fauna after entire regions are devastated. Clearcutting is necessary to get rid of diseased trees and grow others that regenerate! The deer love young trees, therefore clearcutting is good for wildlife too! The unspoken in this slogan is that clearcutting is done for harvesting purposes alone. It eliminates

biological diversity and makes many animals lose their habitat. More trees produce more deer. They then soon are said to become "nuisance animals" and have to be exterminated. The same goes for beavers who multiply unchecked in presence of corporate "forest management," but whose pelts have lost their value because of advocates of animal rights.[9] Are these companies, part of liberal democracies, the very antithesis of the "fascists" identified by Ferry? If so, there is an equivalence that can be made between fascism and neo-liberal democracy. (Behind the rhetoric of creating jobs, there is the unspoken proposition that the company will simply leave once the trees are cut or the technology has become defunct.) Through a personal style of deductive reasoning, Ferry shows painstakingly how man of culture renounces nature in the ethical sphere (Ferry 1992 [1995]:62). He renounces his particular interests in favor of a general interest. The response of American readers—though they might long for such an Age of Innocence—will resemble that which Ferry ascribes to modern readers of sixteenth-century animal trials.

Ferry ponders questions of how we can articulate tradition and freedom, nature and humanistic culture. The questions are quite general and devoid so far of any geophilosophical anchoring that would be grounded in geography or economics. Even if one can agree with Ferry on an abstract level, one cannot but raise objections on a very practical level. When taking a detour through the United States to expose the ridicule of assigning the status of legal subject to a forest, Ferry would do well to consider both parties involved in the case, the Sierra Club and its opponent, generally an international Goliath. He also fails to ground his findings in more concrete economic and political terms. Since these dimensions are lacking in his material, Ferry may sound indeed like an old-style humanistic philosopher, trained in a Cartesian tradition, who insists on separation in all areas, including between philosophy and science.

In a second stage, Ferry proceeds from the question of rights to that of deep ecology, ecofeminism and the French poststructural philosophers. If he was perturbed by the legal processes that argued for the rights of trees and animals, he now feels doubly threatened by the adepts of deep ecology, especially by the "furies" of its offshoot, ecofeminists. Ferry reviews deep ecology by ways of Aldo Leopold's exhortation to "think like a mountain" (Ferry 1992 [1995]:59). He adds in his by now familiar tone of *persiflage:* "The task promises to be a bit tricky for some of us" (ibid.). A little poetic imagination might indeed be a prerequisite for such an analogy. Where Leopold exhorts humans to put themselves in the place of things, the followers of Arne Naess, a Norwegian deep ecologist, develop an understanding of the world in terms of interconnectedness. Their attempts to think relationally are complemented by spiritual components borrowed often from the art of Zen, Eastern philosophy, and religion, popular in the 1960s (as the date of publication of the volumes quoted by Ferry confirms). They aim at undoing dualisms, at healing the body *and* the spirit by introducing a spiritual dimension in an excessively material, unidimensional world. The opposition is drawn between materiality and spirituality and less, as Ferry sees it, between a republican universalism *à la française* and nationalism with its conservative and fascistic resonances privileging the local and the ethnic. Ferry unmasks the "threats" of the movement, by incriminating their writings, especially those of Bill Devall, whom he sees as plotting a political takeover. It now is the turn of the American reader not just to curl his or her lips into an ironic smile but to

roar with laughter. Ferry goes a step further in his presentation to the French public of American intellectual terrorism in his denunciation of ecofeminism.

He quotes from an article by Bill Devall:

> Deep ecology, unlike reform environmentalism, is not just a pragmatic, short-term social movement with a goal like stopping nuclear power or cleaning up the waterways. Deep ecology first attempts to question and present alternatives to conventional ways of thinking in the modern West.
>
> (Devall 1980:69)

No attempt is made by Ferry to account for the time lapse between 1980 and 1992, the date of publication of his own book. Rather, for his purposes,

> it is a matter, of course, of specifying exactly what is being targeted in this "modern West" and in the name of which principles the critique is being launched. Though given impressionistically, with broad strokes, the response none the less forms a figurative image.[10]
>
> (Ferry 1992 [1995]:69)

Perhaps rigor seems to be lacking in Ferry as well and we could ask the same question of his own discussions of deep ecology and ecofeminism. What broad strokes does he apply when he reduces different movements from all over the globe to a single denominator. As the protection of animals was not the exclusive prerogative of Nazism, so ecofeminism, the next target on Ferry's itinerary, is not necessarily part of deep ecology. We cannot but agree with Devall on the necessity of changing mental structures. Yet deep ecology with its spiritual underpinnings is not the only way of thinking transversally and relationally. Some ecofeminisms are derived from deep ecology, others are not. The holism in deep ecology and some ecofeminisms is discredited in many contemporary theories of ecology that none the less strongly argue for changing ways of thinking and for other modes of existence. Ecology can, but does not have to, be grounded in the kind of Zen spirituality much in vogue in the 1960s and 1970s. Quoted is yet another passage from Devall's article, in which are opposed two streams of environmentalism that mark the latter half of the twentieth century: one reformist and the other revolutionary. The latter supports many of the former's short-term goals but, in addition, it searches for a new metaphysics, an epistemology, a cosmology, and an environmental ethics of the person and the planet. One is surprised by Ferry's knee-jerk reaction to this rather unassuming but convincing passage. Writes Ferry:

> It would be wrong to imagine that we are dealing with a simple curiosity, an exotic symptom of the folly that seems to overtake American university professors on occasion, as when they succumb to the fashion of "deconstructionism" or to the imperative of "political correctness."
>
> (Ferry 1992 [1995]:60–1)

Ferry proceeds to show how deep ecology gains recognition outside the academy, from the Sierra Club to Green Parties and how, in turn, this vision threatens to fill the void left

by the collapse of utopias. To anyone even modestly acquainted with political struggles in North America, such a fear seems perfectly risible, though one might wish that these movements did in fact have the importance that is being ascribed to them. What is being stressed in these pages by Devall is the need to think through political and economic philosophies of mastery and to establish other relations with humans and the world. Ferry again traces to an origin in the 1930s and in Nazism not only deep ecology but also ecofeminism and differential thought.

The "hatred of modernity" that results from this combination, it is maintained, prompts thinkers such as Devall to argue for a return to nature. While this might be the case, they do not actually say what Ferry attributes to them. They show the very impossibility of separating nature from culture and of establishing a full subject. The importance of nature in contemporary thought (Deleuze, Guattari, Serres) has more to do with a reassessment of the concept itself. Ferry accuses differential thinkers of being revolutionaries rather than reformists. Arching back to the French Revolution of 1789 and to Sartre of the post-World War II years, he shows how the republican ideal was a progressive, universal ideal of the left, whereas a conservative nationalism that comes out of German Romanticism privileges the particular, the ethnic, and the local.[11] The latter—mythic and irrational—is propagated at the expense of the universal, democratic, and rational ideal.[12] Differential thinkers, like Félix Guattari—seen as a deep ecologist of sorts!—urge their readers to "resingularize" and to "practice the art of *dissensus*" (an art of becoming) rather than neo-liberal *consensus*.[13] Ferry sees resingularization as the opposite of universalism. Again, he smoothes over the fact that Guattari, despite his emphasis on resingularization, also openly declares himself a universalist. Guattari militates against globalism. Resingularization does not appear to be in contradiction with universalism. And contemporary neo-liberal democracy is more global than it is universal because of its economic practices. Guattari argues against the leveling of thought and of human values at the hands of an aggressive economic globalism that reduces social classes while imposing the same imaginary everywhere. It creates economic exploitation and, by colonizing the brain, prevents humans from thinking.

It can be said, too, that Ferry's ideal of republican universalism did not prevent colonialism. It did, in fact, contain a strong ethnocentric charge that led to France's colonial ventures in the nineteenth century all the way up to Sartrian existentialism, a philosophy built on the history of expansion. Differential thinking, devoid of prestructuralist attachments, approaches—and is part of—the world-as-process. It stresses the importance of thinking the world as a network of pressure relations that yield moments of bifurcation and new departure. It prevents uniformity while urging humans to solidarize temporarily for specific political causes.

We cannot disagree with Ferry when he sees the aftermath of 1968 degenerating partially into nostalgic archaism and private cults of the self: "If we wish to revalorize politics as an autonomous sphere of collective decision, a counterpoint to the ethics and culture of the self to which many today are retreating, we must reformulate the principles of democratic reformism" (Ferry 1992 [1995]:139). Ferry sees the emphasis on difference as leading to a culture of authenticity and private life-styles.[14] It would be hard to disagree. But is the emphasis on culture of the self not part of the very scheme of neo-liberal democracy that wants people to consume and that, by doing so, fosters bogus

authenticity by reducing everything to slogans, identity-bytes and publicity images?[15] Ferry, busily tracing origins and influences, does not elaborate.

The proponents of a right to difference, what Ferry calls the "extreme left" in France, give culture a quasi-ontological status that horrifies the philosopher:

> It is in this way, once again, that the ideology of the right to be different forms a bridge between ecology and feminism—or at least between a certain ecology and a certain feminism. For another tradition of thought, that of existentialism, offered us a diametrically opposed fashion of conceiving women's dignity.
>
> (Ferry 1992 [1995]:114)

And he declares the necessity to restate its principles by going back to Sartre's *L'Existentialisme est un humanisme* (1946), to Simone de Beauvoir and her contemporary avatar, Elisabeth Badinter, whom he praises for rejecting nature in an age of advanced technology when she writes somewhat unproblematically: "The sacrosanct nature is today being manipulated, modified and defied in keeping with our desires" (Badinter 1986 [1989]: 315).[16] These two women propose a feminism that is humanistic (refusing to confuse humanity and animality (or to give the status of subject to animals and trees), egalitarian (women are no more bound than men to the determinations of nature), and republican (it is by breaking away from the sphere of the particular determinations of nature in general that one rises to the universality of culture and ethics) (Ferry 1992 [1995]:116).

Ferry refuses to accept a critique of anthropocentrism that makes subjects of trees and animals. As he states it, they can never be but objects. A division of nature and culture, of subject and object, which structuralism had begun to liquidate and poststructuralism had continued to do, is rehearsed over and over again. By going to the United States and to a kind of thinking that is far removed from that of continental theory, Ferry can apply his existential views without much risk. As we shall see in the following chapters, it is the very liquidation of a subject/object division in much continental thought that conjures up a differential view of the world in which no full subjects can exist and where all is said to be nature. This nature has been reassessed in ways quite different from those of existential humanism.

A final look at Ferry's debunking of ecofeminism is revealing:

> First, what is meant across the Atlantic by "ecofeminism?" The term, coined by Françoise d'Eaubonne, appeared for the first time in 1974. It was quickly adopted in the United States where, as would be expected, it has experienced enormous popularity.
>
> (Ferry 1992 [1995]:116)

Through an additional swipe at American gullibility, and with the intimation that the term also made money *(faire fortune)*—a nuance lost in translation—Ferry quotes the definition given by Karen J.Warren (1987), one of the leaders of the movement, who flatly states that there is a link between the oppression of women and nature, and that its understanding is necessary for feminist theory, which must include an ecological

perspective (Ferry 1992 [1995]:116–17). Though discussing these movements separately, Ferry again links *la pensée 68* to deep ecology and ecofeminists. It may be this penchant for universalism, perhaps, that causes differences to be reduced, rather than emphasized. Complexities—not only in the relations between 1968 thinkers and deep ecologists, but between them and ecofeminists, as well as among ecofeminists themselves—are skipped over. While some ecofeminists are close to deep ecology, others are not. Some, like Carolyn Merchant, write out of an American philosophical tradition, while others, such as Val Plumwood, derive their work from continental theories. Some ecofeminism is holistic, has a spiritual orientation, and is preoccupied with Goddesses and myths that serve to empower women. Others focus on Marx and Freud. Conspicuously absent in Ferry's line-up are important names that would throw his argument off balance or would offer challenges, such as Teresa Brennan or Donna Haraway. Among the ecofeminists he mentions, differences in style and thinking are considerable. But Ferry is less interested in listening to their texts than in presenting them as a menace to public interest:

> It would be wrong, seen from Europe, to think that this is simply a fantasy, one of those hyperboles characteristic of fringe groups, which we ourselves had abundant experience with in the 1960s. For ecofeminism is beginning to occupy a less than negligible place in the heart of American feminism and beyond: it is omnipresent in universities, where it strongly contributes to the reign of intellectual terror exercised in the name of political correctness and the right to be different—the demand for which evolves easily into a demand for a difference in rights.
>
> (Ferry 1992 [1995]:118)

A footnote here adds that "affirmative action is an abstract phenomenon but exerts very real pressure at American universities" (ibid., n. 8). Once again, having recourse to the points of reference in Simone de Beauvoir and the neo-existentialist Elisabeth Badinter, Ferry praises the necessity for both sexes to separate from nature in order to accede to freedom and culture. What serves to make his point is a lengthy passage from an article by Val Plumwood entitled "Ecofeminism" (1986), in which she criticizes Simone de Beauvoir for transcending nature and identifying with the male. Plumwood shows that, for de Beauvoir,

> "the full humanity" to be achieved by woman involves becoming part of the superior sphere of the spirit and dominating and transcending nature and physicality…. Woman becomes "fully human" by being absorbed in a masculine sphere of freedom and transcendence conceptualized in human-chauvinist terms.
>
> (Plumwood 1986:125)

Surprisingly, Ferry turns the passage against Plumwood. While de Beauvoir's beliefs—the only ones available to her at that time—in no way diminish everyone's heartfelt admiration for her and her work, the existentialist's rhetoric and position make—somewhat like the Renaissance animal trials—the postmodern ecofeminist reader smile. The static, ethnocentric world of postwar tribulations in which de Beauvoir lived has

undergone massive changes, not least by means of technologies and scientific discoveries. The idea of transcendence, as we shall show below, hardly holds in a universe seen as processual confusion of orders, a *chaosmos* that cannot fit in Ferry's binary schemata.

It is just as static and curiously depoliticized a view that informs Ferry's own conclusion. Against the revolutionary and extreme ecological positions of deep ecologists, ecofemmists, and 1968 thinkers, Ferry proposes a "soft," "reformist ecology," based on a universal consensus that will agree on emissions, toxic waste, clean water, and so on, but without changing the ways of thinking that produce an overabundance of waste and destruction. Ferry concludes with a short analysis of three cultures (consumption, rootedness, and separation) in relation to nationalism and cosmopolitanism.[17] Setting aside consumption, he declares that rootedness in a particular language and national space is not incompatible with the cosmopolitan gesture of tearing oneself away in order to produce an innovative work of culture. And he is quick to add:

> Here, it seems to me, is where the true danger lies, a danger to which we would be exposed should radical ecology succeed in winning over public opinion: by considering culture, in the manner of sociobiology, to be a simple prolongation of nature, the entire world of the mind is endangered. Between barbarism and humanism, it is now up to democratic ecology to decide.
>
> (Ferry 1992 [1995]:151)

We readily admire his belief in such a noble gesture. But most culture is under the sway of what he excludes from the choice, that is, consumption. It is that very consumption of images and signs that is the target of some ecological critique that will be engaged in the following chapters along with a notion of transcendence. In his attacks, Ferry equally fails to account for an art of polemic that marks ecofeminism and its adherents. Ecofeminism, like the feminisms that preceded it, is based on *polemology,* an art and practice of battle, not just of the delineation of philosophical concepts or predictable subject-positions. There are moments when democratic exchange does not work, or when its process becomes an alibi in the destruction of pluralism. If a shrillness or a seemingly "paranoid" vision of history seems at times to mark international feminism, it is, I shall argue, for a good reason. The good reason is that ecofeminists need to be heard, and that their excess, if excess there is, serves the purpose of calling subjects into battle.

These two sides of Ferry's evaluation of the "case" of ecofeminism show why the author reached back to the now-anachronistic moment of Sartrian humanism of the late 1940s and early 1950s. By invoking past heroes and heroines in a French canon that had not been central to 1968, he can muffle the necessarily strident debates that have advanced the cases of both feminism and ecology since that era. The philosophies of difference that emerged from *la pensée 68* are hardly what Ferry typifies as "the enemy of democratic process." To the contrary, the decentering of the subject, gained by the labors of structuralism and poststructuralism, leveled hierarchies and shifted a vertical vision of the world toward a more horizontal one, so important for feminism, that places on the same surface both multiculturalism *and* ecology. Ferry wants to do away with 1968. Falsely accusing ecologists of attributing to nature the status of subject, he himself

wants to reintroduce a separation between nature and culture in the name of a defense of democratic ideals.

Another way of dispensing with the environment, not unrelated to what Ferry challenges in his review of French philosophy, comes from a certain postmodernism itself, from an ideology that asserts that the achievements of high technology have enabled all humans to leave matter behind and live in a utopia of simulation. It is an ideology that celebrates the world not as matter but as simulacra. Its champion is Jean Baudrillard, a thinker of 1968, who has abandoned his earlier and incisive critiques of capitalism, which was interpreted to be a system of signs that overtake commodities in order to celebrate the precession of simulacra. How a cultural criticism that had strong ecological affinities got lost in the shuffle of simulacra will be the topic of the next chapter.

Chapter 2
A second type of disparagement
Denaturing or ecology as simulacrum

Manuals summarizing the history of ideas often state that structuralism spells the demise of the referent. "Man," through whom we obtained a sense of the world, our ultimate Referent, disappears under our feet like words written on the sand of a beach lapped by the flux of surf. This demise, which Michel Foucault dramatized with stunning brilliance at the end of *Les Mots et les choses* (1966), is the end of all humanistic endeavors: "Man is an invention of which the authenticity of thinking shows its recent date." To which he adds that if some "event" should happen, like that which ended the enlightenment, to throw things topsy-turvy, then "one might bet that man would vanish, such as at the edge of the sea a face drawn in sand" (Foucault 1966:398) That demise would be further confirmed by the "events" that have since taken place. One, as this book argues, is the increased consciousness of nature and its history. The other, far more significant than May 1968, includes the electronic revolution and a transformation that moves, in the physical sphere, from the production of goods to the production of signs. The emphasis that *la pensée 68* placed on the "sign" to the detriment of the world would indicate today that, already more than thirty years ago, the presence of nature and of the living was made out to be less important. An essay of structural theory would argue—as did Luc Ferry in respect to eco-feminists—that structuralists can despise the world, they can live in their prison-houses of language, but "that's their business" (Ferry 1992 [1995]:238). Throughout our inquiry it will become increasingly evident that signs do not cause the world to disappear, but they do inflect and shape it. Even for the most ethereal of structural thinkers, the physical world never completely vanishes. To the contrary, it is seen to persist, even to *win*, over the abstraction of language irrespective of technology.

The complete separation between systems of signs and nature is an illusion perpetuated by certain "techno-liberals," among whom figures a second culprit, Jean Baudrillard. In 1968, 1970, and 1972, Baudrillard authored three remarkable, vast, and fabulously rich studies of consumer society and its expansion, from the tracking of commodities to the commerce of signs and the colonization of the imagination. The "object" that had been associated in his *oeuvre* with commodification now blurs and bleeds into a froth of fascination. Where it had been the basis of an intervention in a nascent critique of environmental damage, it is now "fascinating, for it is on the horizon of my disappearance. It is what theory might be for the real: [seen] not through a reflection, but [as] a defiance and a strange attractor" (Baudrillard 1990:179). The object seduces where it had formerly been a critical point of reference. Rather than tracking how and why the writing follows a given parabola, I would like to see how it takes increased distance from the forceful awareness it had evinced at an earlier moment of development. In each book, the Marx of the *Critique of Political Economy* (1859) and the pages of the

first volume of *Capital* (1867) on the fetishism of objects, are used to launch a caustic critique of economic development in the postwar years. By the 1980s, the cutting edge of Baudrillard's politics begins to wear, and by 1990 it is completely dull. "Precession of simulacra" is a text both brilliant and disquieting for its rampant cynicism. Baudrillard questions less commodity-fetishism than the distinction between subject and object (Baudrillard 1981). Of interest for our purposes is the way he heralds the demise of dialectical thinking. In a flow that displays argumentative brilliance, he carries his readers off into a world of simulacra that leaves matter far behind.

Baudrillard shows convincingly that, in a world dominated by market economy and structural laws of value, the "real" disappears. Any attempt to reinject it is artificial. Polarities collapse and give way to a continuous surface. There is no more sacred, no more ideology.[1] All differences are said to disappear. Baudrillard becomes the spokesperson for a system that indeed would *like* to work as smoothly and efficiently as he claims. He is seduced by his own model to the point where he refuses to see either very real social differences or physical problems that do not go away.

An epigraph from *Ecclesiastes* makes it clear that a simulacrum never conceals an underlying truth. A simulacrum *is* the truth. It is not a copy of a preexisting form. Baudrillard takes as a starting point Borges's allegory of simulation in the tale of the cartographers of the Empire who plot a map so detailed that it ends up covering exactly the entire territory it represents (Borges 1990:99). Projecting the concept that equates originarity of simulacra to a technology that fabricates simulacra (hence technology is also a simulacrum, there to produce its ubiquitous aura in an entirely specular world), he argues coyly that today:

> abstraction is no longer that of the map, the double, the mirror or the concept. Simulation is no longer that of a territory, a referential being or a substance. It is the generation by models of a real without origin or reality: a hyperreal. The territory no longer precedes the map, nor survives it. Henceforth, it is the map that precedes the territory— PRECESSION OF SIMULACRA—it is the map that engenders the territory and if we were to revive the fable today, it would be the territory whose shreds are slowly rotting across the map. It is the real, and not the map, whose vestiges subsist here and there, in the deserts which are no longer those of the Empire, but our own. *The desert of the real itself.*[2]
>
> (Baudrillard 1981 [1983]:2)

I would like to anticipate some of the conclusions to this chapter by saying that Baudrillard did not know how "true" his words would ring in view of the division of the world into a technocratic, first-world supremacy, a hyperreal world of simulacra that breaks away, and the "rest." When models generate simulacra they detach from a referent; they break off from the physical world itself and become autonomous. They none the less leave in their midst a remainder that cannot fail to be likened to many parts of the Third World and pockets of the First World. The latter function as the receptacle of the inert and marginal residue of physical reality, a *chora* of capitalism. In contrast, Baudrillard's ideal technocratic supremacy seems limpid and clean. Though he does not criticize it, he remains keenly aware of the new and more virulent forms of colonialism

that are engendered in the realm of technology. Today imperialism is engineered by simulators who make the real, who fabricate the real in its entirety, and who make their creations coincide with their own "simulation models." Maps and territory that constitute for living subjects spaces that are lived, felt, smelled, and seen give way to images convoked by means of the GPS, the Global Positioning System. The sovereign difference between maps that reflect a lived experience and simulators may be found in the vacant areas where the charm of cartographical abstraction has disappeared. But if the GPS is a simulation, it surely has as its origin the physical superficies of the globe.

And it was precisely this irreducible difference that formed the poetry of the map and the allure of the territory, the magic of the concept of a "world-picture" and the charm of the real:

> This representational imaginary, which both culminates in and is engulfed by the cartographer's mad project of an ideal coextensivity between the map and the territory, disappears with simulation—whose operation is *nuclear* and *genetic*, and no longer specular and discursive. With it goes all metaphysics. No more mirror between being and appearances, of the real and its concept. No more imaginary coextensivity: rather, genetic miniaturization is the dimension of simulation. The real is produced from miniaturized units, from matrices, memory banks and command models—and with these it can be reproduced an indefinite number of times. It no longer has to be rational, since it is no longer measured against some ideal or negative instance. It is nothing more than operational. In fact, it is no longer enveloped by an imaginary, it is no longer real at all. It is a hyperreal, the product of an irradiating synthesis of combinatory models in a hyperspace without atmosphere.[3]
>
> (Baudrillard 1981 [1983]:2–3)

One Utopian map is replaced by another. The collapse of the space between referent and representation or, rather, the collapse of the referent into what is no longer called representation but simulation, the order of the hyperreal, does away with the traditional sense of allegory that informed earlier representations of the world. In the medieval sense, as the history of cartography confirms, *allegory* represents, stands for, replaces and displaces another type of reality. But Baroque allegory, that which is born at the end of the sixteenth century, as redefined by Walter Benjamin (1963), continues to fragment into continuously atomized pieces. The process of fragmentation as a basis of meaning ensures the impossibility of discourse ever coinciding with, or referring to, a real.[4] This process makes all discourse by definition allegorical, with the difference that neither center nor substance comprises the order and form of allegory. Direct links between discourse and referent are attenuated or erased.

Rather than saying that "there is no real," that there exists no physical world that calls into question "symbolic" forms that are unable to account for it, we can acknowledge that human speech constructs or composes the world, and gives meaning to a real that has no essence outside of various discursive forms. Proponents of discourse theory, from Benveniste to Foucault, never say that the real is inexistent, especially in the sense of nature, but that no truth, *no human truth*, can prevail and that—it must be emphasized—

the world is not "out there" waiting for human symbols to make sense of it (see also Lévi-Strauss 1991a:220). Does such atomization do away with ontologies? Perhaps, with certain kinds of metaphysical ontologies that presupposed a clean division between subject and object. Yet, the insights and analyses of Baudrillard concerning a market economy indissociable from machines such as computers and transputers, and the changes they operate in our thinking of the world, fail to address at least two issues.

First, simulation itself may be used as prosthesis to study nature, but it does not replace or become autonomous in respect to nature.[5] This becomes very obvious today. Simulation—in its restricted meaning—may give humans the illusion of dominating the world through high technologies more than at any time in history when, in fact, appeals are made right and left for a massive rethinking of the distribution and future of the entire human population around the world. The Third World—and a disproportionate number of women—is what the simulation model takes little account of. Second, Baudrillard does not factor into his "operational model" evidence that much of the world has little access to low technologies, much less to Western "high tech." Though the fate of millions may be decided on computers in laboratories far away from their objects of study, the machines themselves live in a different reality.

We can agree with the logic of the argument in so far as in the First World computers replace metaphysics and, seemingly, reality. Further, we can concur that they change our perception of time and space by making everything simultaneous in seamlessly "present time."[6] While computers will develop ever more—except under the force of some extraordinary cataclysm—it will be a long time before computerization will not be qualified as class exploitation. So while citizens of First World countries broadcast the ideology that equates technosciences with answers to all and everything, they fail to think of their own physical mass that continues to weigh on the earth and of the "other half" or more of the population whose lives go in an opposite way of this miniaturization effectuated by simulation. Living in "present time," in what appears to do away with interdependences, adepts of technosciences will need to realize that pressure relations and feedback principles continue to apply in the physical world.[7] It can be put in boldly simple terms. Do immigrants "surf the net?" Do Third World women own web-sites that allow them to exchange ideas about how to improve their lot in view of the gender-differences in which they are born? Do the homeless have electronic homes that simulate the *habitus* they are lacking? Or do they have access to agencies that would help them unite and arm them so that they could terrorize the spaces in which they are otherwise left adrift?

In addition to eliding the social contradiction (based on class, race, and gender) on which it is based, the simulation model also does away with dialectics and with the division of subject and object. Operationals replace categories; ideal and negative instances are wiped clean. Drawing much from Benjamin, in his earlier writings Baudrillard had already analyzed how the contemporary world witnessed use-value giving way to exchange-value. He analyzed this shift in relation to the consumption and the consumer society in which desire is created at the same time as the need to consume. Products are consumed less for themselves than as signs. He opposes this trend to what he perceives to be the *naïveté of ecological conviviality* (Baudrillard 1990:108).[8] In other words, the problem facing ecologists is by and large their inherent ingenuousness of wanting to return to a preexisting real, a world in which physical materiality of things and

rhythms of life had no names to alienate them or to install a rift between mental, symbolic, and physical activities. Because of his own fascination, Baudrillard fails to be critical of the simulation model and to point to the coexistence of several ecological speeds.

Crises of energy and habitat too are seen by Baudrillard as "a *disaster* film, in the same style (and of the same value) as those which currently reap profits for Hollywood."[9] And elsewhere:

> It is pointless to laboriously interpret these films by their relationship with an "objective" social crisis, or even with an "objective" phantasm of disaster. It is in the other direction that we must say that it is the social itself which, in contemporary discourse, is organized according to a script for a disaster film.
>
> (Baudrillard 1981 [1983]:75–6, n. 5)

Contrary to Baudrillard, it can be argued that all spheres of memory or of process are not image. Can the collapse of entire regions of the world just amount to simulation? He would probably retort, "No more subject, focal point, center or periphery: but pure flexion…. No more violence or surveillance, only 'information,' secret virulence, chain reaction, slow implosion and simulacra of spaces where the real-effect again comes into play" (Baudrillard 1981 [1983]:78–9, n. 8). Baudrillard persists in mapping out a world in which control is ubiquitous and automatic, where the violent foundation of the panoptic era (the early nineteenth century) is detached from the mimetic processes of ritualized violence that had preceded them (for example, Michel Foucault's description of the monarchic theater of cruelty in the first chapter of *Discipline and Punish* (1975)).

This vision signals the end of perspective and panoptic space (which remains a moral hypothesis bound up with every classical analysis of the "objective" essence of power), and hence the very abolition of the spectacular.[10] The "spectacular" henceforth is nothing but simulacrum. Baudrillard here can be juxtaposed to the process of dematerialization, especially what Jean-François Lyotard discovers when he suggests, none the less, that the mediatized socio-culture still insists on subject and object, "I" and "you," though this discursive position may no longer exist.[11] But where Lyotard had recourse to atomic physics, Baudrillard borrows from biology a "model" that builds an analogy from the helical structure of DNA. Referring to a television monitor that no longer gazes at us, he states:

> On the contrary, we must imagine TV according to the DNA model, as an effect in which the opposing poles of determination vanish according to a nuclear contraction or retraction of the old polar schema which has always maintained a minimal distance between cause and an effect, between the subject and an object: precisely, the meaning, the gap, the discrepancy, the difference, the smallest possible margin of error, irreducible under penalty of reabsorption in an aleatory and indeterminable process which discourse can no longer even account for, since it is itself a determinable order.
>
> (Baudrillard 1981 [1983]:56)

It follows that all gaps vanish in the genetic coding process, where indeterminacy is less a product of molecular randomness than a product of abolition, pure and simple, of *relations*. And Baudrillard shows convincingly how the process of molecular control, from the DNA protein to the substance it informs, "happens" without the traversing of an effect, of an energy, a determination or a message. Nothing separates one pole from the other, a mere collapse of the two traditional poles leads one into another: an immense implosion that also causes an implosion of meaning. Here begins simulation. Everywhere, in whatever domain—political, psychological, biological, or in media, where the distinction between poles cannot be maintained—one enters into simulation, manipulation, and non-distinction between form and matter, between forces active and passive.

In these scenarios, Baudrillard bathes in a dream world of simulation in which nothing would be left to chance all the while he strives to forget that human life itself owes much to the work of chance. The operational immanence of every detail becomes law and replaces the Law. The world he observes around us seems to be a figment of science fiction, a utopia of forces in perfectly efficient circulation. "A universe purged of every threat to the senses, in a state of asepsis and weightlessness—it is this very perfection which is fascinating" (Baudrillard 1981 [1983]:62). In this sanitized and aseptic world, technology concerns norms that fix or produce a flawless environment. What pertains to the latter in his writings will be carried over on to social arenas. There too, nothing is left to chance. When reading *Simulations*, a text published in 1981, let us say a decade after its date of publication, we discover that the passage becomes a light-year: the smooth functioning of a system that captivates and seduces him has been jolted by the return of nature, in the form of floods, droughts, and by local insurrections that count thousands of dead, not only in Africa and Asia but also in Europe. Local genocide has been accompanied by global geocide. And differences, far from being entirely channelled into a self-contained fascination-machine, are maintained at all levels outside of molecular biology.[12]

In Baudrillard's system the collapse of the two poles of discourse, the sender and the receiver, or the "I" and the "you" that define subject-positions by relational means, has repercussions on the structure of language. The double polarity discussed by the linguist Roman Jakobson and many other structuralists of 1968 vintage does not hold in the model announced in *Simulations*. Henceforth, discourse does not go from one point to the other. Rather, it incorporates the positions of transmitter and receiver in order to become unlocatable.

Sidestepping some of the basic tenets of ecological theory, Baudrillard aims at designing a world of perfect efficiency, in which power circulates without any direct source being discerned. An age of information replaces another of personal power and hierarchies, one that is the subject of structural historiography associated with Michel Foucault's writings of the late 1960s. In Baudrillard's words, atomism and biology replace specularity and discourse. But if indeed the poles or sources are collapsed in the DNA structure, and a subject/object division is questioned, the model that generates simulation would perhaps have more to do with what environmental philosophers call multiple foci and pressure relations than with an all-encompassing simultaneity. Due to acceleration, the abbreviated feedback "loops" or differences that subtend the simulacrum may seem short enough to disappear. That, in a sense, is also a key problem in the

environmental awareness that is so fuzzy and blurred in Baudrillard's later writings. His hyperreal mode leads to a treatment of nature in similar terms and to an obliteration of time with often detrimental consequences for the environment and humans. Time and space seemingly collapse under acceleration of market economy's electronic equipment, and although we can agree with Baudrillard on a general circulation of power attesting to an absence of a single source of emission or of a gaze (a state, a deity, a corporate megalith), none the less it must be underscored that *differences refuse assimilation into the model*. Despite the functioning of the DNA that Baudrillard summarizes from sources in science, the world functions according to sexual, racial, and especially economic differences.

At this point, we can begin to see some phantasmatic relations and common themes that Baudrillard's work shares with Luc Ferry's anti-ecology in so far as it becomes the underside, the repressed dimension of what he calls democratic debate. For Ferry the emphasis is put on human subjects that tear themselves away from nature in order to deal with human causes, with the dilemmas that concern "man" and the *polis*. In Ferry's vision a difference that organizes all communicational relations is utterable, clearly heard and positioned, and readily exchanged. It constitutes the labor of democracy. In Baudrillard's vision, what grounds language and its exchange is not so clear. When signs are simulated in the world of simulacra that they are, a different, not as human-centered, concept of environment emerges. An entirely decentralized state of total and silent power-brokering leaves subjects bereft of subjectivity and environment. An abstract configuration generates more "reality." Those who control the "reality"-generating models are those who control the world. Like benevolent or malevolent geniuses, they are the agencies that foster dialogue about gender, small-scale environmental activity, identity-politics, and so on, as long as their mode of control—the yoking of technology and large sums of money—remains in their hands. Baudrillard is a step ahead, in this respect, of Luc Ferry. Between *Le Nouvel Ordre écologique* and *Simulations*, we witness two versions of "clean" differences. For Ferry, poststructuralism and especially ecofeminism are sick and contagious conditions that ought to be put in quarantine, sent far from areas where state policies are decided. For Baudrillard, the decentralized state of pure circulation has to keep contagious social diseases, the AIDS of ecology, from affecting the cool efficiency of a world of subjects who run on a minimum of food, gasoline, electricity, desire, pleasure, a sense of environmental tact, or conscience, but on the seductive allure of the simulacra stimulating the production of their self-images.

At this point, the issue of purity and danger in Baudrillard's system can intervene to help us articulate its type of ecological consciousness. Seeing acceleration and production as having reached "epidemic" proportions, Baudrillard does not think that either of them can—or should—be curtailed or averted:

> It could be that the entire system of transformation of the world through energy has entered into a viral and epidemic phase, corresponding, in fact, to what energy is in its very essence: spending *[dépense]*, a fall *[chute]*, a differential, a disequilibrium, a miniature catastrophe that first produces positive effects but that, overtaken by its own movement, takes on dimensions of a global catastrophe.[13]
>
> (Baudrillard 1990:108)

For him, there is no intervention possible.

To make his remarks resonant, Baudrillard takes an autobiographical detour through Manhattan. Residents of the island, he observes, derive their energy from soot, acceleration, and exhaust fumes—that is, from the delight that an unthinkable human environment offers to its population:

> To dissuade people from such prodigality, waste, and inhuman rhythm would be a double mistake, since they draw *[puiser]* from what would exhaust *[épuiser]* a normal being the resources of an abnormal energy, and since they would be humiliated if they had to slow down and economize their energy. It would be a degradation of their collective standing, that of an excess *[démesure]* and of an urban mobility that is unique in the world of which they are the conscious and unconscious actors.
>
> (Baudrillard 1990:108)

Distinguishing risk from lack and exhaustion from excess, he adds that nothing will be able to stop this internal logic of acceleration of a movement that is already "out of balance." Does this presuppose that "balance" is originary?[14] Yet Baudrillard must know that, as we shall see, in the world where order and chaos are mixed, this may simply not be the case. Every order is but a temporary configuration coming out of disorder that is forever off balance. In arguing for a corrective catastrophe (it matters little who or what will suffer), Baudrillard belittles those whom he may wrongly believe to be still advocating mechanics of homeostatic equilibrium. He condescendingly sees their interests contained in a "safeguard of the species through ecological conviviality" (ibid.). He shows no interest in analyzing how the latter could help slow down what is at the basis of his simulation model—that is, unbridled capital development.

Celebrating the "inhuman," a "viral" or "epidemic" phase—which, in view of the world-wide problem with AIDS, is equally related to ecological problems,[15] takes on a more than cynical ring—Baudrillard ridicules "conviviality" as whatever has naive implications of sociality. If the figure can be reduced to its lowest common denominator, he becomes the prototype of the free-based, prophecy-believing capitalist bringing together former theories of the left, which sought self-identity or a sense of the dominance of "man" in a *dépense effrénée*, and the position of the New Right, which shows total inattention to global well-being. And he predicts that at the end of this race, another destiny of the human species, and other symbolic relations with the world—more complex and ambiguous than those pertaining to earlier models of equilibrium and interaction—will come about: "A vital destination would imply a total risk" (Baudrillard 1990:108). Yet market economy takes no risks, at least not intellectual ones. It is interested only in selling, just as Baudrillard is invested in marketing a foolproof, hyperreal model of doom. He draws the lines between, on the one hand, a naive desire on the part of ecologists to return to a pristine nature, and, on the other, the contemporary world that is "out of control." Such an opposition, even in its implicit status in the space of Baudrillard's writings, does not hold. It is rather a question of thinking of humans in their interrelation with each other and nature. Baudrillard here rejoins those techno-liberals with dubious political leanings who advocate a *laissez-faire* approach to the

environment. His politics share much, it seems, with the current attempt to loosen environmental control, junk affirmative action, and be done with the advancement of minorities in areas where policy is formed.[16]

Baudrillard says as much in an essay of 1991 bearing the provocative title, *La Guerre du Golfe n'a pas eu lieu* (The Gulf War did not take place). Turning the name of Jean Giraudoux's famous play of 1938, *La Guerre de Troie n'aura pas lieu* (The Trojan War will not take place), which predicted the inevitability of the Second World War, into a post-mortem about an "event" that occurred on computer screens and television sets, Baudrillard questions the physicality of an intervention such as that of Operation Desert Storm. It might be said that humans did not die; that oil wells in Kuwait were not exploded; that tons of smoke never swept over India and the East; that the desert environment was untouched after American and Russian tanks rolled over its sand; that the shallow water of the Persian Gulf saw no pollution; or that no damage was done to species on which extensive and delicate ecosystems depend.

Clearly Baudrillard's war was clean as the best of all hypothetical events monitored by predictive models. By now it is painfully obvious that the work that he abandoned, a critique of the political economy of signs and objects, was charged with environmental potential. His turn *away* from this style and spirit of analysis, akin to the labor of 1968 in general, may have various causes that are the topic of another study. Even if the shift toward the purer realm of electronic immateriality was aligned with the harbingers of fascism in French politics—it could easily be shown that the themes of fascination and seduction, as well as the preoccupation with death in *L'Échange symbolique et la mort* (1976), bear witness to their presence—in every and any "event," in an environmental consciousness. Since *Le Système des objets* (1968), it has shrunk immeasurably.

Two ironies are indicative and can serve as a conclusion. First, in *Amérique* (1986), a specular narrative of the author's travels through the United States under the auspices of a tour of lectures at universities and French alliances organized by the French government, Baudrillard tells of the pathos he experienced when he was confined to a room in a high-rise hotel in Minneapolis. He looked westward and saw only a flat sprawl, not the outlines of the Rocky Mountains his eyes were seeking. If his consciousness about simulation were grounded as historically as he implies through the allusion to the cartographical methods parodied in Borges's fictions (maps in the Ptolemaic tradition of the Renaissance remaining almost entirely virtual and in themselves elegantly Baudrillardian), he would have known that the Rockies are about 1,000 miles to the West, and that the Bighorns in Northeastern Wyoming would obfuscate their view. If an anglophone taking a tour of the Montparnasse or the Eiffel Tower were to look South and decry the absence of the Pyrenees on the horizon, the tourist would be mocked as yet another uncultured foreigner.

An epigraph to *Amérique* is taken from the script etched by hydrofluoric acid on the right-hand mirrors of newer cars: "Caution: objects may be closer than they seem." The "real" world is much *farther* from Baudrillard's pen than he would like us to believe. He does not begin with real facts or detail, with concrete objects or the type of thinking they require, as do biologists, botanists, cartographers, feminists, and ecologists. It may be that Baudrillard takes leave of the world in order to regain that pure and ineffectual culture to which I alluded at the outset: the party at the Parisian press, the *salon,* the hour of the

apéritif, the dens where wit, fascination, simulation, pure language, and *persiflage* constitute the raw material of a micro-environment that lives on nicotine and alcohol.

The second irony is that in 1991 the University of Montana at Missoula organized and hosted a conference to study and honor Baudrillard's person and writings. At the invitation of Michel Valentin he in fact came and participated in what was a rousing success. The philosopher known to be far-from-the-world was suddenly in one of the most environmentally emblematic of all sites, the place where "a river runs through it," a mix of grazing lands, timber, mountains, and sheer beauty (realtors sell it in the name of the Montana "hum") that counts among the most expensive acreage in North America. This is where executives, movie stars, and retired sports heroes go to pasture, and where private militias and religious cults buy the land in droves. The land's ecological configuration is being entirely changed by a shift in its tax structure. The original exiles who settled the land and exiled the Indians are, in turn, being exiled by new money. For the purpose of the ideology of growth, his visit seemed well timed and well placed. Following the logic of his arguments, can we say that the rearticulation of Montana never took place? Or that its growth pains at the end of the twentieth century are not anchored in longer cycles of conflict that reach back to native American history and to geology prior to the advent of humankind? It seems as if these issues, no matter how politically charged or politically correct they may be, are none the less a spur for an awareness and a praxis. The early works by Baudrillard remain very effective in this area. The more recent ones, however, like those of a rich retiree, grow to ecological seed. To see how conflict and difference drawn from the biological and informational sciences are related to the world of poststructural and feminist theories, we can now reach back to different and, I believe, more complicated expressions of environmental awareness.

From the threshold where I isolated two forms of ecological disparagement, one that claims that humans must reject nature to accede to culture and the other that does away with nature altogether by means of achievements in the technology of simulacra, I shall now proceed to a critical reading of some major theoretical works that address issues of the environment overtly. We shall see first how theories around 1968 that were still interested in anthropological space made a plea for the environment.[17] The world of simulation—dominated by non-places—appears to be taking over. How to reintroduce the environment, and an existential sense of territory in a world dominated by non-place, will be at the heart of the inquiry that follows. I shall take as a point of departure Lévi-Strauss's structural critique of Sartrian existential dialectics and the full historical subject. The dialogue between the ethnographer and the philosopher opened the space for the consideration of a contemporary, poststructural reading of ecology.

Chapter 3
Emergence of ecology
Beyond dialectics and existential humanism

Up to this point my treatment of the heritage of French critical thinking in its relation to feminism and ecology may have appeared either harsh or vindictive. It is patently apparent that in the writings of both Luc Ferry and Jean Baudrillard we witness a distortion of a vision and a praxis that had originally identified humans, especially women, with geopolitical issues. If a slogan can be borrowed from the invigoratingly vitriolic pen of Robert Hughes (1995), the two exemplars of ecological disparagement studied in the first chapter are to a certain degree *patriotically correct*.[1] In decrying the "politically correct" but legitimate decision to write the environment into agendas for socioeconomic reform, Ferry and Baudrillard were no doubt setting personal concerns ahead of greater collective and international dilemmas. *Le Nouvel Ordre écologique* (1992) marked what has since become a standard view that relegates the globe, affirmative action, and humanitarian concerns to the trashbin for the sake of aligning corporate power with governmental control. *La Transparence du mal* (1990) showed how those who can yoke simulation technology to power can keep the globe in their hands, even if the result of such ownership might leave much of the environment in shambles

Why is it that these views have such currency? What makes the one a recipient of a major prize in France and the other a password in poststructural circles? Posed with a slightly different inflection, another question might be asked: why do we see a dissolution, even an inversion, or repression of some of the values that fomented the structural revolution? In this chapter I shall attempt only indirectly to explain why this seems to have happened. Rather, I intend to measure the expanse of the gap opened between what had been initiated in a reaction to a "self-centered," totalizing existentialism and what now results. Emphasis will be put primarily on how, with 1968, dialectical reason gave way, after Claude Lévi-Strauss's initial critique of its limits in 1962, to differential reasoning, a mode of thinking so important for contemporary feminism *and* ecology. Between the abandonment of the full subject and of existential dialectics and, now, the ostensible return to its process with thinkers like Ferry, it is possible for us to calibrate the extent of the gap between environmental awareness in theoretical worlds then and their heritage now. The epistemological shift to differential thinking is in solidarity with a critique of post-war communism and leftism in general. Being critical of the individual, of an ego, differential thinking opens a priori to an eco-logic. Humans, the reasoning argues on the basis of an axiom, can no longer be completely separated from nature.[2] At the limits of science and philosophy, renewed emphasis is placed on immanence. Before turning to the specifically ecological components of Lévi-Strauss's work, I would like to situate some of the concurrent forces

of feminism that share affinities with what ethnographic research and theory had produced in the postwar years.

For many feminists the Occident lost touch with nature with the arrival of modern science and technology, after the advent of Cartesian mechanics. Projects of mastery, domination and progress valorized conceptual schemata at the cost of what gave birth to them.

> Western development, because of the favor accorded industrialization and social conflict, has "created" a "history" for itself in which "nature" only figures as an object of labor and the terrain of socioeconomic struggles. It has no value other than the negative one of peasant "resistance" to be overcome, of a biological limit always to be transcended, or of a traditionalist anchoring to be rejected.
>
> (de Certeau 1971:226)

The view that nature was to be dominated by science and technology was linked to ideologies that have long equated the domination of nature with the domination of women. But domination of nature also equals "progress." And it is that very "progress" that both enabled and impeded the emancipation of women in the Occident (Clarke 1919). So that, on the one hand, women most likely do not want to be associated with outworn concepts of nature. On the other, they cannot simply perpetuate a masculinist position and reject nature, a gesture rehearsing the very repression that feminists denounce. These feminist critiques of objective thought and dialectical resolution are also to be found in other disciplines, from anthropology and philosophy to science, from which they cannot be separated in the first place.

By the time *The Second Sex* (de Beauvoir 1949) had become a poetics and a praxis of feminism in France, structuralism was beginning to deal a blow to the historical subject that wanted to dominate the world by leaving nature and matter behind. In general, it was seen undoing a vertical rapport of hierarchies of "man" (at the top of the ladder) and "nature" (at a bottom rung) in favor of more horizontal, spatial relations that treat of matter and life as coequals. Structuralisms of different stripe were problematizing the relation between sign and referent and arguing that terms never exist in isolation. Relations between terms, they said, are as important as the terms themselves. The shift in emphasis has had far-reaching consequences for all modes of knowledge.[3]

All of a sudden, disciplines were no longer so neatly separable as they might have been. Structuralism came into view at the very time that ideas of mastery associated with totalitarianisms were becoming obsolete. As an academic discipline, it was related to world-wide epistemological shifts and new discoveries in social and hard sciences that opened boundaries between fields of knowledge and led to more interdisciplinary approaches as well as to a reevaluation of science itself. The delimiting of objects, with emphasis placed on the relational aspect of nature and culture, served to threshold the contemporary emergence of ecology.[4] The term *ecology* itself underwent a mutation. It no longer referred to a classification of species but to active interrelations among themselves and between them and their habitat in its most diverse biochemical and geophysical properties. As it happened with the advent of structuralism, when it becomes

impossible to arch back to prestructural logic, we can say (with a hope couched in double negation) that, henceforth, *it will be impossible not to think in an ecological way.*[5]

THE RIGHT OF THE LIVING

Structuralism decenters "man"—the gender bias is deliberate—who thought he could control the world. It comes as no surprise then, that one of the main proponents of structuralist investigation would also be a champion of ecology. Claude Lévi-Strauss has persistently shown that nothing is really due to humans. At the end of *Tristes Tropiques* (1955), he surmises that nature existed before them and will most likely outlast them. But part of nature also disappears under the onslaught of people and the abuse of technology. When re-read now, in the present cultural context, it appears that much of the anthropologist's work can be put under the sign of ecology aimed at favoring difference through the study of natural and cultural diversity. In one of his texts entitled "Reflexions sur la liberté" (Reflections on liberty), first presented in 1976 as an address to an institution of French republicanism, anchored in the spirit of 1789, the French National Assembly, Lévi-Strauss persuades his fellow countrymen to pass legislation and make of France "a guiding model for the world" in matters of ecology (Lévi-Strauss 1980:279–88). Without being gender-specific, Lévi-Strauss speaks against a hierarchical system that advocates expansion and colonialism. Critical of dialectics, he proposes to replace them with structures that operate around differences and relations. He too calls into question the separation between nature and culture, between body and mind, and he especially rules out the concept of a static condition of nature. Without denying the existence of a "real," he shows how it is always organized through language that changes no less than the world it is said to represent. It follows that different ideologies, or ways that language imagines the world, have differing impacts on nature. And the ideology upon which the autonomous, masterful subject was founded in the post-Cartesian era has proved disastrous to many humans and nature.

In his adamant critique of the historical subject and oppositional reason, Lévi-Strauss is led to evacuate all subjectivity.[6] To the post-Cartesian trend that invents and launches into the world the fully conscious, self-possessed, supremely rational, male subject that conquers the world, Lévi-Strauss retorts that history does not have a specific goal. Changes in a structure are the result of certain pressures, of *"I"*s that manage to become *"we"*s through libidinal economies and rhetorical persuasion (in the case of humans), of natural occurrences, shifts in winds, of plagues, invasions of insects (in the case of nature). Lévi-Strauss breaks with all remaining animist alliances in the world. Nature is not there as a handmaiden for humans, but humans none the less organize it, through their social organization, through everyday life, that is, primarily through a function of the agency offered by language.

So, it can be said that every cultural organization, going from the particular to the general, is built upon a myth. Myths are only valid for some time and intelligible in a certain context. Over time, they lose their intelligibility. Some myths are more destructive to humans and nature than others. So too, for example, is that of the rational, male subject, which blossomed with the era of the ego that believed in controlling its object.[7] Lévi-Strauss uncovers the mythic nature of this position by relativizing it. Writing against

an entire Cartesian tradition that he sees at the basis of the Occidental Project,[8] he is specifically critical of its contemporary representative, Jean-Paul Sartre, whose brand of existential humanism he denounces for instituting a schism between subject and object, or culture and nature.[9]

Against Sartre and his "philosophy of man" that separates nature from culture, Lévi-Strauss reminds his audience that the *homo sapiens* is but a "living species" and, in Rousseauesque fashion ("my freedom is limited by that of my neighbor"), adds that it has no right to extinguish another species for its own profit.[10] Already in *Tristes Tropiques* (1955), Lévi-Strauss assessed the consequences of Western expansion, not as much by appealing to the "noble savage" than by insisting on indigenous people's right to live, that is, to creating space by inhabiting it. In rejecting a human-centered existentialism, too narrow and local and unaware of its global connectedness, he underscores the necessity—and the right—of people to occupy a territory that they can inhabit with their own myths. Without regressing to Rousseau's nostalgia for an untainted past, he contrasts the destructiveness of the West with ways of more ecologically conscious (and conscientious) social constructs. Undoing a philosophy of man, with its narcissism and specular constructs, Lévi-Strauss's structuralism removes the notion of center. The spatial quality of the philosophy shows that it is less an inverted ethnocentrism, as Derrida (1966:149–202) argues, than a critique of the disastrous impact of a civilization that wrongly believed itself to be at the center and in control.

For Lévi-Strauss the respect of other people's lives and ways of living is an *ethical* question.[11] The main argument is that one should not live on credit, overexploit, or colonize, but should give others—humans, animals, and plants—space to exist. Horizontal, spatialized structures flatten hierarchies and the idea of control implicit in vertical schemata. Diversity is praised to the point that it becomes a form of multiculturalism. The latter, anchored in bio- and cultural diversity, produces an aesthetic pleasure that cannot be entirely commodified. Lévi-Strauss refrains from focusing solely on the "health of diversity" as opposed to that of a single-species ecosystem. He is more concerned with aesthetic pleasure in difference and affirms a *right* of all organisms to live. This right is inalienable and precedes codification by law. It is greed that promoted Western humanism and fueled its underlying ideology of expansion. And as human greed is a tenet basic to all life, ecological ethics, therefore, have to be assimilated into codified law. The latter transforms natural rights into civic duties.

Despite the fact that politics and ethics are linked to aesthetics, primarily to those of diversity and pluralism, be it that of human cultures or of the animal world, the ideology here is materialist: life begins in matter. Aesthetics are part of an organization that is not just productive and profit-oriented but that favors ecological diversity and that combines many delicate and complex arrangements of organic and inorganic material. Beauty, an aesthetics of nature that guarantees a consciousness of matter, resides in diversity of species and tongues. Each tribe, each ethnic group, each animal group or plant type has its own more or less elaborate organization.[12]

STRUCTURALISM AND ECOLOGY

Yet to call structuralism either a mental or a material operation would miss its mark. In perhaps one of the clearest expositions of the isomorphism of structural reason and ecology ("Structuralism and ecology" in Lévi-Strauss 1980:143–66), a lecture that Lévi-Strauss delivered at Barnard College in 1970, the anthropologist sketches the history of his discipline and the ways its philosophies operate. The text is situated under a rubric entitled "Places and their representations" and an epigraph, from Montesquieu's *L'Esprit des lois* (1750), stating that before thinking creatures inhabited the world, their reality was possible; that hence relations of thinking creatures and the physical were no less possible; that, finally, laws governing such relations were already possible as well. In the rapport established with Montesquieu, an ecological politics is implied. Lévi-Strauss begins by recalling that his international career really began when, as a refugee from France (the broader lines of the narrative being developed in the first three chapters of *Tristes Tropiques* (1955)), he began teaching at the New School for Social Research, and orientated his classes to a polyglot public of all ages and backgrounds. When he soon taught in the vicinity of Morningside Heights, his students met him with a gracious silence, for in his pidgin English he mistook *dessert* for *desert*. The faux-pas sent his audience on a wild-goose chase of logical connections that were never organized in his notes. The little incident:

> …took place right here, and it bears testimony to the fact that I was already interested in ecology and that by mixing it, at least on a linguistic scale, with cuisine, I would later be able to illustrate certain fundamental aspects of the structural function of mental processes.[13]
>
> (Lévi-Strauss 1980:144)

The anecdote suggests that in both language and its referents various points of crossover, conundrums, or unconscious connections remind us how much we are part of environments, far and near, known and unknown, that extend and transform over time.

Studying subgroups of Kwakiutl myths that concern the origin and the end of the world in terms of clams and salmon, species dictating how different tribes move about, exchange goods, and use fiction to mediate and palliate seasonal presence or absence of the stays of life, he shows that the myths of the Bella Bella and Chilcotin tribes prove how,

> …confronted by technical and economic conditions tied to the characteristics of the natural milieu, the mind never remains passive. It does not reflect these conditions, but reacts to them, and articulates them logically into a system. But that is not all, for the mind not only does not fail to react in the surrounding environment, but it is also conscious that different milieus exist, and that their inhabitants are reacting with them, each group in its own fashion.
>
> (Lévi-Strauss 1980:154)

Thus myths supply the elements lacking in an environment and make plurivalent and multidirectional the connections that would otherwise, in the rational and empirical domains, move from a technoeconomic infrastructure to its confirmation in myths explaining them. But humans are attached to the environment—at least the Kwakiutl were—in such a way that their lives are not directed by ideologies that merely confirm or ratify an economic base; the world, the imagination, and their histories are too vast, too differentiated, and too mottled to be held under control brought about by the yoking of the one to the other. Histories of climatic change, of transformative patterns of subsistence and plenitude, of nomadisms, of taxonomies, and the like are generated in the comparative lines of difference that myths produce when they shift or invert their content. They change their rapports with animals (porcupines, whippoorwills, lynxes, wolves, moose, northern pike, etc.), and in doing so, they stress contradictions for the people who relate the myths. This prompts the author to conclude, in a way that I believe is more clearly and succinctly pronounced than any of Lévi-Strauss's longer analyses, what remains at stake in a philosophy of environmental awareness. In the structural design of ecology, the world and the mind work together, deciphering concurrently the texts that they constitute. Both mind and world are interdependent and even isomorphic. To think mythically or structurally is to be-in-the-world. But to allow the one, the mind, to accede to a dominion over the other, the world, means to fall into Cartesian and Hegelian recidivism.

Chucked out the window are "vulgar materialism" and "sensualistic idealism," which by "*directly* confronting man to nature" (Lévi-Strauss 1980:164, my emphasis) fail to show how the latter in fact shares structural traits akin to the mind itself.

> To realize that the mind can comprehend the world only because it is a product and a part of this world is not to sin by mentalism or idealism. It is to verify a little better, each day, that by trying to know the world *[en essayant de connaître le monde],* the mind accomplishes operations that do not differ in nature from those that have been unwinding in the world since the beginning of time.
>
> (Lévi-Strauss 1980:164–5)

Nothing, he says, could be further from Hegel's idealism or Descartes's dualism, although the structural enterprise shares some properties with what, in a perfect oxymoron, Lévi-Strauss calls Descartes's "rationalistic fact" (ibid.: 165).

Study of primitive relations with the environment helps to refuse the "divorce" between the intelligible and the sensual. In discovering secret harmonies in quests of meaning (such as the direct savor of a desert, perhaps a Baked Alaska), he concludes that:

> we learn thus better to love and to respect nature and the living beings that inhabit it, in understanding that the vegetable and animal realms, no matter how humble they may be, not only provide people with what is needed to live, but from the beginnings they were also the source of their most intense esthetic emotions and, in the moral and intellectual order, of their first—and already deepest—speculations.
>
> (Lévi-Strauss 1980:166)

BROADER LINES OF INQUIRY

In this light, structuralism is not as closed or restrictive as it may have seemed.[14] Different cultures have developed different systems of signs that temporarily make sense of the universe. None is eternal and, in principle, none is more valid than any other. In accord with his method, in "Reflections on liberty" (1980 [1985]:279–88), Lévi-Strauss searches for a higher logical type or, a "foundational" myth of freedom that would guarantee the right of the living:

> Can we then conceive of a basis for freedom so self-evident as to impose itself on all human beings without distinctions? Only one such basis seems possible, but it implies that man be defined not as a moral, but as a living being, since this is his most salient characteristic.
>
> (Lévi-Strauss 1980 [1985]:281)

Established, normative morality is replaced by ethics. If humans possess rights as living beings, then it follows immediately that these recognized rights of humanity as a species will encounter their natural limits in the rights of other species.[15] Thus, the rights of humankind stop whenever and wherever their exercise imperils the existence of another species:

> It is not a matter of being unaware that man, like any animal, derives his subsistence from living creatures. But this natural necessity, which is legitimate so long as it is exercised at the expense of individuals, cannot go so far as to obliterate the species to which those individuals belong. The right to life, and to the free development of the living species still represented on the earth, is the only right that can be called inalienable—for the simple reason that the disappearance of any species leaves us with an irreparable void in the system of creation.
>
> (Lévi-Strauss 1980 [1985]:281–2)

It is not sufficient to militate for animal rights without thinking through the effects of human development on habitat. The current ideology of growth and development is detrimental to most living species. Despite its alleged paternalism, structuralism, by emphasizing materialism, levels hierarchies. The displacement from "human" to "living" appeals to new ethical dimensions. Upon humans as ethical beings devolves the responsibility to assume the *duty* of safeguarding the diversity of the living. Unlike grasshoppers, tent caterpillars, locusts, spruce budworms or other causes of natural plagues, humans are aware to some degree of their actions. The biological human being needs to draw sustenance from animals and plants. Ethical human beings develop a sense of respect toward themselves, their kindred and other species. Lévi-Strauss's ethics are set in a *chain* of creation in which all links are connected. An extinction of one species unfastens the whole, depriving other species of their right to live. A compelling dimension of the argument is Lévi-Strauss's mourning less of the physical consequences for other species by way of feedback loops (a term taken from Gregory Bateson that will

be discussed below) than the impoverishment of diversity, which he sees as an irreplaceable loss of aesthetics and denial of the right and pleasure to live.

For feminist purposes, Lévi-Strauss addresses only half of the question. He champions nature and denounces the ill-effects of Western growth. Though his model of elementary kinship structures and circulation of women have been intellectual tools for several generations of feminists, he himself subordinates emancipation to social practices that guarantee diversity.[16]

The ethics of distance that Lévi-Strauss advances is located in "grounding" myths of social regulation.[17] The two myths that ought to be foundational for our times are the protection of the *natural milieu* (natural ecology) and the *quality of life* (social ecology). As an anthropologist basing human activities in laws of science, Lévi-Strauss explodes a narrow time frame that many historians and critics of culture are forced to use to sustain their arguments. In a language that may seem a bit dated, he reminds the reader that civilization—with its laws that brought about the demise of the natural world and the degradation of much of the social fabric—has been the dominant ideology in the Occident for only the last three hundred years:

> By itself, the nature of this problem could be assented to by all civilizations. Ours first, for the conception that I have outlined was that of the Roman jurists, who were permeated with Stoic influences, and who defined natural law as the aggregate of general relationships established by nature among all animate beings for their mutual preservation. This concept is also that of the great Eastern civilizations inspired by Hinduism and Buddhism; as well as of the so-called underdeveloped countries, including the humblest groups among them, the illiterate societies studied by anthropologists. As different as these societies may be from one another, they agree making man a recipient of creation and not its master. By means of wise customs that we would be wrong to treat as mere superstitions, they limit man's consumption of other living species and impose on him a moral respect for them, in conjunction with very strict rules to assure their preservation.
>
> (Lévi-Strauss 1980 [1985]:283–4).

Destruction and consumption have accelerated since World War II and especially since the 1980s. Because of massive historical changes, certain models of chronology cease to be intelligible or valid and have to be reevaluated to protect nature and the quality of life. So, for example, the great declarations of rights of 1776, 1789, and 1793: they served "historical needs" that are no longer ours.[18] To these we can add, for ecological purposes, the simple division into left and right, inherited from the French Revolution, when it is based on a separation between humans and nature.

Contemporary needs include the cultural imperatives to base human rights on certain premisses on which, with the eclipse of a few centuries in the history of the Occident, those rights have always been founded. A new *ethos* that reevaluates the emancipatory, teleological discourses inherited from the eighteenth century now has to consider the link between humans and nature and the quality of life. To cut humans from nature, as Western history has done, is tantamount to cutting them off from themselves. Such

demarcations are devised through mental constructions that organize the world on the basis of libidinal economies. Some constructions are more detrimental to nature than others. The most detrimental are those devised by the West three hundred and some years ago that have been intensified since the Industrial Revolution. They are most virulent especially as practiced today. They level differences and produce single species ecosystems that weaken the planet. They are detrimental to nature *and* to humans.

Pollution has been denounced as a threat since the nineteenth century. It appears that in the 1960s, massive evidence of physical and mental pollution caused by technological and scientific revolutions gave the Occident new and heightened awareness of the problem. The ecological vision of the sixties, as we have already seen, begins nostalgically, with a longing for a return to a lost nature. At that time, Lévi-Strauss, though avowedly on the side of nature, recognized the inevitable progressive disappearance of nature and diversity. He has since wanted to slow it down through awareness and governance of laws imposed on human development. One of his major observations that derives from the relation of ethics and aesthetics, attention to diverse forms of myth, and to self-regulating civilizations, concerns the functioning of societies in relation to size. Most constitutions and declarations appear to be based on charters that applied to much smaller groups.[19] A case in point shows that natural and social ecology intersect: if the planet were less populated, what are now called ecological "disasters"—droughts, floods, hurricanes, earthquakes—would be beneficial for the regeneration of nature. Population density makes the effect increase in severity in Third World countries and provide spectacular headlines in the newspapers. In the First World, it is mainly insurance companies that bear the brunt of the economic consequences, and therefore articles urging for a restructuring of people's thinking are relegated to the business section of daily newspapers.

How will democracy, a form of government that the founding American fathers, following Montesquieu, assigned to smaller nations, be maintained in overpopulated countries? Pursuing this question, Lévi-Strauss reintroduces for the Western reader a point of relativism in respect to human ideals about "man's" self-proclaimed importance in the universe.[20] Government needs to realize that human history is *nothing* compared to the history of the universe. Speaking of the inevitable disappearance of nature and of pluralism, which he defines primarily as linguistic pluralism, he does so without nostalgia, regret, or inverted ethnocentrism.[21] Yet he argues ceaselessly for the rights that nature requires in every governmental process and aims his reasoning against the ruthless exploitation by humans. As he studies in his essay on Montaigne's cosmology, Lévi-Strauss debunks humans' feelings of omnipotence.[22] Implied is that, in the broader scale of the universe, our era will be remembered for that of the population explosion. All other changes will have been minor occurrences when measured against long-term waves such as demographic crescendo. Development in connection with population explosion is seen as contributing to a disappearance of species, of flora and fauna, and a wholesale reduction of diversity. Humans—and especially women—cannot not deal with this dilemma.

In the broader scope of his vision, Lévi-Strauss is critical of social theories and history that do not account for nature in the relations that humans have with each other. Humans are not transcendental subjects. Despite numerous technological prostheses, they remain grounded in matter. Lévi-Strauss is arguing not for a political status quo but against the

dyad of nature versus culture or of one term in opposition to the other. Writing against Sartre's dictum that any philosophy that does not have "man"—that is, for him, a French, Western man—at its center has no worth, Lévi-Strauss deplores the anthropocentric shortsightedness of the dialectical basis of such arguments: "With his sovereign way of being wrong, Sartre said: 'Any philosophy that subordinates the human to the Other than man…has as its foundation and consequence the hatred of man.'" To which Lévi-Strauss replies: "A well tempered 'humanism' does not begin with oneself, but puts the world before life, life before man, and the respect of others before *self-love*" (Petitjean and Robin 1991:15–16).

In strictly ecological terms, his advice is to tread lightly, to let things and other humans be and to recognize and respect different ecological systems in overlapping coexistence. Such a stance, though not pushing for emancipatory discourses, does not advocate a *laissez-faire*. Critical of our own technological civilization, which equates globalism with universalism and "unidimensionality," Lévi-Strauss appears to be on the side of slower, "cooler" societies that are more diverse in their relations of cognition and habitat. His gesture can be accused of being an inverted ethnocentrism *only* if we assume, in a somewhat linear fashion, that technologically advanced societies are superior to others and that human history has a telos. And in any event, as we shall see in a postscript below, even his most recent reflections attest to a style of thinking that is anything but nostalgically Rousseauesque in its tenor.

Lévi-Strauss's structural model is itself also a myth, a vision of harmony and beauty, but especially of diversity. Akin to those pharmaceutical specialists who try to recover the medical secrets from shamans before they die, Lévi-Strauss seeks to transcribe the world's mythic diversity before its disappearance. The anthropologist does not preach for violent revolution, but he does leave space for social transformation. Against Sartre, whose historical and dialectical materialism makes of history a foundational term that privileges Western society above indigenous societies with analogical thinking and no history, he argues for dehierarchized, pluralistic, and horizontal models. What may appear as a methodological debate between two thinkers—one abstract, the other seemingly more empirical—helps our own inquiry. Lévi-Strauss undoes the nature/culture division as well as that of body and mind. He shows that ideas—or their infinite narrative braiding in the form of myths—allow one to organize the real, that somewhere continues to resist reduction to an intelligible object in a linguistic code. Yet thought also constructs and inflects the real. And thought is always already in nature, that is, less in the body as opposed to the mind than in chemical processes subtending the mind and *combining the two*. Nature is *in*, and *of*, culture. Lévi-Strauss strongly argues against the science of expansion based in Descartes, which founds a physics cut off from the *cogito*. The same break marks the way Sartre cuts Western society off from other societies. Far from simply being the "noble savages," indigenous or "cold" civilizations may be more ecologically viable than "hot" equivalences in the industrialized world.[23] Structuralism does away with the idea of progress for the sake of diversity. Cultural and natural pluralism as well as diversity are threatened by current Western market systems. Against Sartre, Lévi-Strauss, in "History and dialectic," makes a strong plea for difference and diversity:

> Either way the prodigious wealth and diversity of habits, beliefs and customs is allowed to escape; and it is forgotten that each of the tens or hundreds of thousands of societies which have existed side by side in the world or succeeded one another since man's first appearance, has claimed that it contains the essence of all the meaning and dignity of which human society is capable and, reduced though it may have been to a small nomad band or a hamlet lost in the depths of the forest, its claim has in its own eyes rested on a moral certainty comparable to that which we can invoke in our own case. But whether in their case or our own, a good deal of egocentricity and naïvety is necessary to believe that man has taken refuge in *a single one of the historical or geographical modes of his existence, when the truth about man resides in the system of their differences and common properties*.
>
> (Lévi-Strauss 1962a [1966]:249, my emphasis)

Without being gender-specific, Lévi-Strauss's position shows how the ideologies of feminisms and ecologies remain in a strong alliance. For both disciplines, strict divisions into subject and object are criticized. As we have seen, where terms are said to be merely relational, a shift is directed from a vertical, hierarchical to a more horizontal, spatial organization. When it is shown how language organizes society, humans are deessentialized and their positions are rendered changeable. Arguments are made for the "ends of man." Rather than going to *woman,* the anthropologist opens it out onto a broader category of the *living*.[24] Humans are decentered in nature and consigned to a status as a species, to a living category whose rights are limited. Humans are in, and part of, a nature that does not preexist for them, as Cartesian thought wants us to believe. It is through social organizations, through languages and customs, through *ethos* and *habitus,* that humans attempt to make sense of a world that, in the last analysis, escapes them. Lévi-Strauss points to the cultural construction of myths, to the destructive aspects of the Occidental Project but also to the problems inherent in an association between humans and a fertile, peaceful, that is, anthropomorphized, nature. Nature is not peaceful; it is not a matrix that "receives," or gives birth to, humans. By the same token, as it comprises physical and chemical processes, nature is everywhere. Because of his belief in a total social fact of human greed rather than the purity of cause, Lévi-Strauss does not appeal to the social critics who base their theories on the Manichean divisions between good and evil.[25] Is his a "conservative" view? Probably not, since he allows for diversity *and* for change. But he is critical of a black-and-white view of politics and of a historical telos.[26] His argument for respect of the living and his insistence on the quality of life signals how the work had begun to mesh ecological awareness and feminisms from its beginnings in the 1940s to its full development over the following three decades.

Jean-Paul Sartre wrote from within perimeters that enclose a Utopian belief in progress through technology.[27] Today, much knowledge is rediscovered in popular customs and knowledge.[28] And from within all these differential structures that attempt to give meaning to life and read the world, Lévi-Strauss writes against the modern Western notion of the self as ego. The self and personal identity are a trap that cuts humans from the world.[29] Deploring cultural ahistoricism produced by a self that disregards

prohibitions and taboos that protect life and nature, Lévi-Strauss puts a certain dialectical philosophy into question:

> He who begins by steeping himself in the allegedly self-evident truths of introspection never emerges from them. Knowledge of men sometimes seems easier to those who allow themselves to be caught up in the snare of personal identity. But they thus shut the door on knowledge of man: written or unavowed "confessions" form the basis of all ethnographic research. Sartre in fact becomes the prisoner of his Cogito: Descartes made it possible to attain universality, but conditionally on remaining psychological and individual; by socializing the Cogito, Sartre merely exchanges one prison for another. Each subject's group and period now take the place of timeless consciousness.
>
> (Lévi-Strauss 1962a [1966]:249)

The danger consists in losing sight of ecological interaction of myths and ideas and of taking for universal a localized and historical truth. Descartes, he adds in his rejoinder to Sartre (in 1962), wanted to found a physics separating Man from Society. Sartre, who claimed to found an anthropology, in fact cloistered his own society from others. A Cogito—which strives to be ingenuous and raw—retreats into individualism and empiricism and is lost in the blind alleys of social psychology (Lévi-Strauss 1962a [1966]:249–50).

We can go to foundational myths but we also must recognize the very transitory nature of our discourses. No group has universal privilege. All need to recognize their differences, their limits, and their rights. Human rights are complicated by those of nature, specifically by those that prevent extinction of species.[30] Natural ecology displaces human subjects from their myth of occupying a central position in the order of the world. They simply become a participant in the whole. The endless and ever-changing braid of myths enable humans to organize the world temporarily, and Western history is just such a myth woven into them.

HISTORY AGAIN AND A POSTSCRIPT

In the version of structural history that pertains to ecology, the concept of history appeals to humans because it allows them to identify events dialectically as always being mental projections and reconstructions. Things never really "happened that way," if indeed they ever happened. Lévi-Strauss's severe reading of history in its attempt to make meaning, a reading that stretches its area of concern toward cycles of revolution that begin to resemble geological divisions, carries an important ecological component.[31] Societies, anthropological historians discover, live in complex ecosystems. They themselves are also complex systems. Humans, in an effort to control and feel secure, tend to order things according to neatly interpretive schemata. The persistent critique of a controlling view of nature helps us construct a history of ecology in ethical, rather than in moral terms. We learn to pay attention to complexities and interrelations, and to study areas of confusion carefully. In this light it must be remembered that some ways of reading the

world are more abusive than others. That is to say, some interpretive schemata work better than others from a point of view that seeks to safeguard pluralism and diversity. A happy congruence occurs when interpretive schemata and practical imperatives coincide. A practical imperative for ecological inquiries was clear in Lévi-Strauss's schemes that influenced so much of *la pensée 1968*. These schemes have not lost their force in the most recent piece of writing by Lévi-Strauss available to an English public. In "Saudades do Brasil" (1995) the author retrieves some of the photographs he had taken in 1935–8 during several trips made to Brazil. In his recollections, which span sixty years, Lévi-Strauss reiterates how much the remnants of civilization he found among the Bororo and Nambikwara Indians were not at all originary, but were sad remnants of greater and much more ecologically informed societies than ours. Ours has, in fact, promoted ecological disaster in order willingly to kill off these people.[32] The latter have since turned their own potlatch economies into Mickey Mouse simulacra. Lévi-Strauss notes that "the good old days," for the "irremediably acculturated"—in a Western sense—descendants of American indigenous peoples is:

> the period between the Second World War, before 1950 even, when their fishing and gathering economy had not yet been destroyed by regulations protecting natural resources plundered not by them, but by the big timber operations, commercial fishing, and organized tourism.
>
> (Lévi-Strauss 1995:21)

As for ourselves, we are:

> dispossessed of our culture, stripped of the values that we cherished—the purity of water and air, the charm of nature, the diversity of animals and plants—we are all Indians henceforth, making of ourselves what we made of them.[33]
>
> (Lévi-Strauss 1995:21)

No inverted scene of ethnocentrism informs the recent observations. It is clear that the ecological consciousness that Lévi-Strauss brought to France in 1955 and later was not at all abated in its intensity or its timeliness.

In addition, I would like to hypothesize that the coupling of nature and subjectivity, so resonant in the style of analysis that marks Lévi-Strauss's vision, enables a feminist argument of a social construction of women to be put forward, one in which the fallacy of the woman-nature equation is circumvented.

We have shown, by way of displacing Lévi-Strauss's clinching arguments of *The Savage Mind* into our time, that Sartre's philosophy of man ceases to be intelligible in a contemporary ecological perspective. Sartre's ignorance and overquick rejection of nature belong to an era that can no longer think or conceive of problems and solutions as it did then. Today, as it was not the case for postwar dialectical philosophy, social critics and theoreticians cannot neglect to see the overlap and interaction between ecological problems and social myths by which humans live. In that area we begin to see the tactical role that anthropologists, philosophers, and culture critics will play when the ecological implications of social myths are interpreted in comparative ways. Some dangers consist

in formulaic reduction of their narrative diversity. Myths now include not just narratives but stories that unfold at multiple levels: chemical processes, the exchange of different cultural signs, and the passage of multiple idioms through each other. We engage complex views of things that once had been reassuringly simple.

The structural analyses that Lévi-Strauss uses tend to disengage a view of culture as systems of signs that are braided over time into myth. Each society projects its own "soul" onto that of a universe that is built with the same forces and patterns of human behavior. World, body, and mind are of the same "mental architecture" (Lévi-Strauss 1962b:345ff.). Relational thinking that remains vital to myth does not feel a need to find dialectical resolutions. It also avoids the destructive consequences of teleological reasoning. At the same time, complexities that the mythic imagination introduces into culture have an aesthetic side, a sense of pleasure that refuses to reduce life to functional things only. In recording the myth of vanishing tribes and transformed landscapes and civilizations, while soberly noting the disappearance of biodiversity, the anthropology that Lévi-Strauss mobilized through politics, ethics, and aesthetics inaugurated a decisive critique of Western expansion and materialism. As a reaction against an obsession with subjectivity, the subject is done away with. Yet as a feminist I am not ready to let the political force of an ecological and feminist subjectivity be denied. To reintroduce an ecological "subject" in a world of differences, a "subject" that does not simply dominate an object yet retains some agency, will be a principal endeavor of the chapter that follows. I first wish to see how the themes of Lévi-Strauss's anthropology are reread in a more empirical British tradition loosely associated with Gregory Bateson. I shall then show how the anthropologists' conclusions open to reassessments of nature at the confines of science and philosophy in the work of Michel Serres and of Ilya Prigogine and Isabelle Stengers.

Chapter 4
Chaos and ethics
From science to praxis

In a world conceived as structure, all terms function relationally. A structural view that originates "from afar," when it becomes an object of study, can serve as a means of evaluating Western concepts that make of nature a background to social struggles. Critical of teleology and dialectical resolutions that relegate nature to a decor, structuralism is symptomatic of wider epistemological shifts. It has brought to knowledge what might be called a scene of "deep focus." All elements within its purview have an equal meaning of importance. Lévi-Strauss's brand of structuralism favors thus a diversity based on the right to live and on criteria of aesthetic pleasure taken from contemplation of the world that is not motivated by profit alone.[1]

At slight odds with Lévi-Strauss on how myths ground and maintain culture, the British ethnographer Gregory Bateson exercised a decisive influence on many French thinkers of 1968. He also deals with mental patterns that shape the world and studies how humans interact with each other and their environment. It was he who coined the concept of "ecology of mind," a science of the interrelations of ideas and of the relation between ideas and habitat, to show how dynamic interactions of ideas give form and meaning to the world. Combining science and humanities, he explores relations between nature and the living. Lévi-Strauss's reading of human endeavors focused aesthetically on the multiplicity of ways in which humans adapt to the world. Bateson, more attendant to information theory and the efficacies of communication *per se*, is interested, on the one hand, in the mind (in what it means to think) and, on the other, in how ideas take hold, contend, struggle, or push each other out.[2] The question becomes one pertaining less to cause and effect than to operating constraints. What Lévi-Strauss developed in a more philosophical key, through structural methods, Bateson interrogates from the point of view of information theory and cybernetics.[3]

In "Pathologies of epistemology," Bateson conceives the mind as a system with written programs in which differences are transmitted (Bateson 1972:478–87).[4] Living systems consist of networks of pathways. Along them move differences—rather than impulses—that are transmitted on neurons.[5] These notions give a different conception of the world and new ways of thinking about mind. Bateson's systems are said to consist of loops or networks of pathways. Events are energized by the respondent part rather than by impact from the triggering part. The system's self-correctiveness leads it in the direction of homeostasis and/or in the direction of runaway. Mind is a function of the appropriate complexity wherever it occurs. It extends beyond cerebral areas into nature where total systems, whose energy is supplied by their metabolisms, act in variously self-corrective ways. The metaphor can be extended to human societies as well. Many events are energized by the respondent part, not by the impact from the triggering element of the

chosen part of the system (Bateson 1972:482–3). Bateson's theories of closed and interconnected loops have been discredited. Theories of pressure relations, however, still hold in science and humanities.[6]

Rejecting physical metaphors like that of energy, the exclusive topic of thermodynamics in the nineteenth century, Bateson articulates models of behaviorism from materials in biology and information theory. Physics (the domain of thermodynamics) is complemented by biology—or the logic of life—via cybernetics and information theory.[7] Energy, stored in the body, makes possible the flow of information. The interrelation between thermodynamics and information theory can be assumed largely responsible for explaining the functioning of life, no longer as "essence" but as "differences" continuously transmitted. Information is a *techné,* a writing of sorts that makes life possible. Mind consists of myriad circuits and loops located throughout the body and not simply in the cranial area.[8] Body and mind go much beyond the entity contained by the envelope of skin that we can call "self." Information is transmitted along circuits distributed throughout the body. The interaction—that is, the fictitious lines across the pathways along which information or difference is being transmitted—constitutes a unit. But these lines are not *boundaries* of the thinking system.[9] They are not limits in a traditional sense that work along lines of inclusion and exclusion. What thinks is the total system, that is, human being *plus* environment.[10] In other words, ecology, for Bateson, is not understood primarily in its derivative sense of "defense of nature." It emphasizes the interrelation of organism *and* environment as a system with exchange and feedback. Humans are no longer independent agents who act on nature, or impose order as they would like. They are a priori in exchange with their environment.[11]

The idea of interdependences and relations that Lévi-Strauss develops is set in a different context. Bateson hinges his concept of mind on the notion of feedback and self-correctiveness (that is, the body compensates for certain pressures), which stands as the criterion of thought or mental process. To maintain internal variables, humans have a certain autonomic level of thinking. Similarly, the machine controls its own internal functioning.[12] Bateson locates the fallacy of Western thinking, which he sees stuck in a nineteenth-century Darwinian evolutionary scheme that has as the basic unit of survival the family, the species, or the subspecies. Locating evolution in organism *plus* environment alters the Darwinian notion of ecology as adaptation and survival of the fittest:

> Formerly we thought of a hierarchy of taxa—individual, family line, subspecies, species, etc.—as units of survival. We now see a different hierarchy of units—gene-in-organism, organism-in-environment, ecosystem, etc. Ecology, in the widest sense, turns out to be the study of the interaction and survival of ideas and programs (i.e. differences, complexities of differences, etc.) in circuits.
>
> (Bateson 1972:483).

Leaving aside some of the lines of Bateson's vision of interconnected loops and circuits, we can none the less say that stress interaction, at molecular and environmental levels alike, changes drastically our understanding of ecology. It becomes obvious that with cybernetics no mode of being, or mythic organization, can fail to be ecological. This

affects all our previous notions of being.[13] When the world—or cosmos—is read in terms of structures and systems, ecology becomes an axiomatic part of thinking. We do not choose ecology the way we choose a political party.[14] Cybernetics shows that the world as system functions a priori in an ecological way: organism+organism+environment. But ecology refers simply to their interaction, not to value judgments. The new eco-logic is concerned with perpetually changing constraints and the dynamic equilibrium of systems. In the guise of a behaviorist, Bateson ponders what "happens when you make the epistemological error of choosing the wrong unit. You end up with the species versus the other species around it or versus the environment in which it operates" (Bateson 1973:491–2). "Man" against nature. We end up with polluted lakes and rivers, deforestations, extinction of species, drought, and famine. Breakdown of natural ecosystems is paralleled or followed by breakdown in social ecosystems.

> *There is an ecology of bad ideas, just as there is an ecology of weeds, and it is characteristic of the system that basic error propagates itself.*[15]

Like parasites, "bad" ideas attach themselves to their host. And Bateson reminds the reader that an organism that destroys its environment is known to destroy itself.[16] The basic error is linked to modes of exchanging and to construction of subjectivity that posit the self as an autonomous unit that gains an identity when it is cut off from other "loops."

Projecting these findings onto social categories, but without overtly risking the construction of an allegory, we can say that individualism and self-centeredness that disregard relations with and of the group lead potentially to runaway conditions. This can be thought out at the level of individuals or of nations, of a certain type of social or economic organization over another.

> When you narrow down your epistemology and act on the premise "What interests me is me, or my organization, or my species," you chop off consideration of other loops of the loop structure. You decide that you want to get rid of the by-products of human life and that Lake Erie will be a good place to put them. You forget that the eco-mental system called Lake Erie is part of your wider eco-mental system—and that if Lake Erie is driven insane, its insanity is incorporated in the larger system of your thought and experience.
>
> (Bateson 1973:484)

Bateson's comments on a regional lake—a subset—can be generalized at the global level—a holistic but open whole—for, in retrospect, the problems of Lake Erie may seem benign to those now facing humans on an international scale. The ecological consequences of the Occidental Project, that is of Cartesian and Darwinian philosophies and the illusions of dialectical resolution, are felt nowhere as in ex-colonies where it can be verified daily how mental ecology cannot be separated from natural ecology and how ecology and economics interrelate.[17]

Stories of disregard for looped structures tie in with principles of homeostasis and runaway and can serve to criticize the mental and physical pollution created by

philosophies of profit and accumulation. They are, for Bateson, related to Western ways of thinking the self that he contrasts with Eastern philosophies:

> You and I are so deeply acculturated to the idea of "self" and organization and species that it is hard to believe that man might view his relations with the environment in any other way than the way which I have rather unfairly blamed upon the nineteenth-century evolutionists.
>
> (Bateson 1973:484)

Indeed, systems theories and complexity undo the very notion of a self contained by one's skin. The containment of self by one's skin is indirectly inherited from notions of self developed by Descartes and his followers.[18] Of importance will be *what* difference we choose to make a difference and how we draw the lines of distinction. The danger of drawing a line *between* self and other is the creation of a rapport of opposition and of emphasis on a lethal type of narcissism.[19] The unit of mind as developed by Bateson presupposes a much more fluid, hence ecologically viable, organization between organism and environment, self and collectivity.

How do these tenets relate to what we have drawn from the ecological inflection of Lévi-Straussian structuralism? The ethnographer and writer claimed that structuralism was a science whose discourse appealed to physical and chemical properties of life. By contrast, Bateson shows how cybernetics and information theory are derived from the life sciences. Critical thinking with ecological awareness resides in the social sciences, but also in the "hard" sciences and in the theories they put forward about the state of nature. We are now ready to assess the impact of some of these theories when they are projected onto the history of the concept of nature.

Three emblematic figures are paramount. First is Michel Serres, a celebrated writer who brings together the history of science and literature and who has recently turned from some informative and invigorating treatments of thermodynamics and cybernetics (in three volumes entitled *Hermes*, 1972, 1974, 1977), specifically to ecology. Second are Ilya Prigogine and Isabelle Stengers, who coined the title *La Nouvelle Alliance* (the new alliance) to suggest that nature is not so mechanistic or determined as Newtonian science or even well-informed theories of relativity might have led us to believe (Prigogine and Stengers 1979).[20] The combination of an ecological awareness with ethics that emerges from these authors' treatments of science opens to a praxis that brings into closer harmony the labors of applied action, such as in micro-areas of one's own context (wetlands, social matters in an environment where subjects ponder about its future) and the abstraction of science (models that reach such a high logical category that they become thought itself).

MICHEL SERRES: A COSMOS OVER CHAOS

Serres, a philosopher of science, claims that "systems", whether of logic, ecology, the fine arts, or communication, are no longer governed by the great and timeless equations that are the bedrock of inherited knowledge. He argues for a world of confusion by appealing to the ways in which thermodynamics and information theory have dealt with

the concept of irreversible time. Information is emitted, transmitted, and received. For Serres, information theory is seen thus as the "daughter" of thermodynamics (Serres 1982b).[21] Like Rhetorica, Information wears the clothing of a female. Philosophy and psychology, instead of addressing questions of life and matter directly, uncover vital links between thermodynamics and information or its derivative, communication theory with its concepts of information, noise, and redundancy.

Serres directs information theory, which he bases on scriptural metaphors, toward a broader view of languages and manifold systems of signs.[22] The shift he proposes implies a critique of Cartesian perspective that made possible the separation of body and mind based on perspective and the importance accorded to strictly rational schemes. Within information theory, Serres focuses especially on communication and distinguishes between noise, meaning, and redundancy in all discursive activity. He inflects cybernetics toward language. But here, language is the property not only of mind but of body as well. Critical of the Cartesian separation between mind and body, Serres avoids the trap of simple reversion to an essence that conflates the two. Mind becomes a mobile *part* of the body. He too declares the end of "man" by describing the "living organism" as that which is made of interlocking information or language systems, the most complex of which is biological language itself, that which orders all social organizations in humans.[23] And like most organizations that depend on articulation of their component parts, they are liable to produce redundancies or drift into disorder. In fact, disorder seems primary and order the result of contingencies.[24] Reversing the accepted paradigm, Serres is deconstructing a classical ontology with its classification of timeless beings, its desire toward homeostasis, and its implicit and explicit hierarchies.

Such deconstruction alters again notions of ecology. We move from harmonic to dynamic equilibriums to ever-changing patterns of "orderly disorder." Ecology becomes more and more synonymous with evolution itself. Once again, the reassessment of the term "ecology" tends to make humans less central than they had been assumed to be for the last three hundred years.

> Right in the middle of the traditional classification of beings, a classification that no longer makes sense since matter, "life" and "sign" are nothing but *properties of a system*, we find exactly what I want to talk about: *the living organism*.
>
> (Serres 1982b:80)

We can recall how Lévi-Strauss urged for a shift in attributes, from "human" to "living" being. Serres, under the sway of cybernetics, extends the line of reasoning further, downplaying the "humanness" of humans by showing that they are, structurally, similar to *all* of creation, both organic and inorganic. All binaries are constructs of the mind.

In his view, the individual organism remains a complex system of related and even unrelated parts:

> Most often conceived of according to the models we have already considered, the organism has been seen as a *machine* (by figures and movements, or by invariance through variations) from the classical age up to the recent notion of homeostasis. Equilibrium and mobility. It is

> evidently a thermodynamic system, sometimes operating at very high temperatures, and tending toward death according to an unpredictable and irreversible time (that of ontogenesis), but going up the entropic stream by means of phylogenetic invariances and the mutations of selection. It is a hypercomplex system, reducible only with difficulty to known models that we have now mastered. What can we presently say about this system? First, that it is an informational *and* thermodynamic system. Indeed, it receives, stores, exchanges, and gives off both energy and information—in all forms, from the light of the sun to the flow of matter which passes through it (food, oxygen, heat, signals).
>
> (Serres 1982b:73–4, my emphasis)

In all living organisms, information theory is coupled with laws of thermodynamics. Entropy is added to systems of difference and information, thus complicating notions of homeostasis or runaway. To take Bateson's formula, "bad ideas" indeed alter a system and can make it bifurcate. But irreversible processes are also endemic to the system itself. The system itself never attains equilibrium since "thermodynamic stability means death or inertia." It is in a temporary state of imbalance—or asymmetry—and it tends as much as possible to maintain this imbalance. It is subject to the irreversible time of the second law, since it is dying. But it struggles against the time of its mortality. Indeed, owing to the energy and information torrent that passes through the system without interruption, it is henceforth impossible to conceive of the system as something isolated and closed, "except, perhaps, in its genotypical form" (Serres 1982b:73). An open system, regulated by a *thermodynamics of open systems*, the living organism provides a complex theory for this state of imbalance. In and by this imbalance, it is relatively stable. But here invariance is unique: neither static nor homeostatic, it is "homeorrhetic."[25]

In addition to the figure of the *torrent*, Serres uses the metaphor of a river that flows and yet remains stable in the continual collapse of its banks and the irreversible erosion of the mountains around it.[26] Serres reverses the popular saying to claim that one always swims in the same river but one never sits down on the same bank. The river basin is stable in its flux and the passage of its "chreodes." As an open system, it always—stochastically—brings back the same water. While the fluid is stable, the solid basin is being slowly destroyed—hence the notion of homeorrhesis. The living system is comparable to a fluvial system, implying that the living organism is in equilibrium, but in a temporary state of imbalance. It is always located in time that would be a state of homeostasis or death only when it has dried up. A vision of universal movement is set in a cultural context that reaches back to atomism (Serres 1968).[27] Thermodynamics and information theory propel the living organism into movement. Human bodies are in constant flow, maintaining a delicate balance between stasis, redundancy, and disorder in themselves, among each other, and with the environment. Over time organisms lose their flexibility. Overloading makes the circuit break down or makes it bifurcate toward something entirely new.[28]

Serres reassesses the models of nature and of culture by following his river out to the sea; he appeals to the figure of an "island" in a raging ocean to show how order emerges from chaos, becomes perceptible and then, again, fades back into a froth of noise. Chaos appears primary, while genetic and cultural organizations are secondary, themselves a

mixture of chance and necessity, which allow them to exist for a certain time, in different epochal moments. The organization of the universe and the planet is reproduced at a microscopic scale by the living organism and by the human body. Important for our argument is the observation that *a body itself is an ecosystem that consists of multiple time-zones and functions both locally and globally*. Each organ functions at a given site but is networked so as to interrelate globally. Each unit functions according to a script, a protolanguage that culminates in human language, every organism consisting in "levels of integration or interlocking parts."[29] Borrowing from a model developed by the biologist François Jacob (one that has since then been reevaluated), Serres develops the idea of interlocking systems:

> The cybernetic model temporarily allows us to imagine certain links between these levels, from molecular activity to the organization of the cell, tissues, organs and so forth. In relatively simple cases, it would even be possible to write a mathematical model, a system of differential equations representing cellular activity. On the one hand, at the cellular or molecular level, a *proto-language* is already functioning; on the other hand, at the most highly integrated level, a language is still functioning, but now as individuated signals equipped with something like meaning.
>
> (Serres 1982b:74)

Serres sees all these languages as a progressive integration from noise to meaning. Information theory turns any cellular activity into a proto-language. The division between body and mind is undone not by "going back" to the body as a more "natural" site. The body as complex system creates "language" from information and noise. When Serres notes that there are as many mediations as there are integrating levels, he draws a line of demarcation between a sender and a receiver. In Serres's somewhat romantic vision, the final observer is the receiver who utters language at the chain's end. The initial dispatcher at the other end is unknown. The receiver, confronted with "a black box, a box of boxes, and so forth" (Serres 1982b: 82), can never fix an origin. Of more importance is his assertion that all living organisms are organized in a similar way. They are self-regulating, interacting among each other *and* their environment. Self-regulation has nothing to do with stasis but with organisms ever-evolving in such a way that ecology becomes synonymous with evolution itself. The general tenor of Serres's review of the history of modern science is that ecology has moved away from classification of species in order to become a science of complex systems. Indeed where the genetic order is more conservative, the cultural adaptation of ecosystems is continually changing so that the process becomes the result. The rate of change varies. Lévi-Strauss's cool societies change at a slower pace than hot societies. Nature is in constant evolution. Currently, with human and technological intervention both locally and globally, the rhythm is much accelerated at all levels.

In such a perspective, an existentialist view of defining oneself against nature, by tearing oneself away from nature, is superannuated. An organism is always a priori in nature. But this nature is not brute; it itself is always part of an organization, of an ordering, however temporary the ordering may be. *Techné*—a writing of sorts—is already located inside the organism. Such an ordering that works by virtue of writing

changes notions of subject and object, of "being subjected" or dominated. There exists no more a centralized power that one learns to resist. Serres recalls that genetic information replaces the figure of "interior and exterior world." The term "macromolecules" refers to any crystallized solid forms that contain "the system of the world," in other words, anything that comprises the entity that goes under the name of self.

In light of these shapes that are the way they are, any distinction between inside and outside, or between deep knowledge and objective knowledge, no longer has currency. Knowledge is linked to an observer who lives immanently in a system that is structured just as he or she observes it to be. The observer's position changes only the relationship between noise and information—or disorder and order. These two presences cannot be effaced. Separation between the subject, on the one hand, and the object, on the other (an instance of clarity and an instance of shadow), is not possible either.[30] This separation makes everything inexplicable and unreal. Instead, each term of the traditional subject/object dichotomy is itself split by something like a geographical divide (in the same way as are "you" and "I," who speak and write today): disorder, and chaos—or, as Serres would have it, noise, on one side; complexity, arrangement—and distribution—on the other.

> *Nothing distinguishes me ontologically from a crystal, a plant, an animal, or the order of the world;* we are drifting together toward the noise and the black depths of the universe, and our diverse systemic complexions are flowing up the entropic stream, toward the solar origin, itself adrift. Knowledge is at most the reversal of drifting, that strange conversion of times, always paid for by additional drift; but this is *complexity itself, which was once called being*. Virtually stable turbulence within the flow. To be or to know from now on will be translated by: see the islands, rare or fortunate, the work of chance or of necessity.
>
> (Serres 1982:83, my emphasis)

In this hypothesis, being—no longer separable from information—cannot define itself against another being, or an object. It is a complexity, both microcosm and macrocosm, part of a larger micro and macrocosm, but without all the trappings of concordant harmony that came with the Ficinian vision that circulated the idea in Neoplatonic circles in the Renaissance.[31] If the figure of the microcosm and macrocosm can be used, it must be remembered that configurations and organizations continually reorganize and rearrange themselves, even less by necessity than by contingency. Actions of certain subjects that have repercussions on others will have repercussions on still others in the circuit, which may or may not be contiguous. Emphasis is on rewriting the living organism as complexity and maintaining that a closed structure is always part of an open system in constant transformation.

It comes as no surprise that a philosopher committed to criticizing the opposition between subject and object, human and plant, would turn his attention more specifically to ecosystems. In the work that follows his digests of cybernetics and thermodynamics, Serres goes on to fashion a theory of ecology, derived from order and disorder, and based on a mix of information and noise. It is conceived for the purpose of exposing the social

contract at the basis of society and for urging that a similar contract with nature be signed by all human beings (Serres 1990).[32]

As a complex system, nature inscribes what is global in all things local. Because of the new proximity of the world at large in every perceptible phenomenon, Serres envisions ecological *engagement* in terms of a bet, a modern Pascalian wager that must be staked in all activity. If we lose, we lose nothing. If we win, we have everything to gain. It follows that he impugns the Occident for thinking in short terms and with narrowly defined goals. Humanity consists of "I"s and "we"s. Serres thus replaces the more narcissistic "I+you," which can be read as an oppositional, specular construct, an "either/or," with a local or global "we" or *Mitsein* translatable in a spatial relation (without a connective or divisive comma, dash, or slash): "both and." Moving deftly between culture and science, he maps out not just an abstract human communality but a physical communality. This physical communality is often overlooked. A great many humans form a "plaque," a formation that *disturbs* its functioning. Water, temperature, other living and inorganic species are becoming disturbed by human plaque.

On the planet earth, it is less humans as individuals or subjects that intervene in present massive changes than their collective effect. The ancient hero of the myths, of philosophy and the historical consciousness, the canonized couple of master/slave, social groups such as parties, nations, armies, villages, or other local agglomerations count less than these *plaques* or physical *scoria* of humans that are encrusted upon and overlap the globe. Here we encounter an entirely new definition of human subjects that seems to expand on Lévi-Strauss's more restrained and sober view, which stated how much our era will be remembered for the population explosion. Also using Batesonian vocabulary, Serres notes that it is crucial to consider the subject as singular but also as part of a group or a community in relation to a habitat. The singular atom combines into a network, but also a physical *plaque*. Humans spoil natural resources but they also cannot survive without them.[33] Emancipation cannot be thought outside of a link through habitat. The Occident, still obsessed with social issues and construction of subjectivities in a vacuum of its own creation, has to close the Cartesian project of self-mastery and shift its modes of thinking to include habitat in a theory of open systems. And while genetic structures cannot be altered very quickly, cultural structures—or ecosystems—can be. As we know from our answering machines attached to telephones and electronic software, if codes cannot be changed, messages can be erased and replaced at the flick of a finger.

The concept of immanence that resides in Serres's local-global connection becomes complicated when demographic statistics are brought into view. As humans ascend in numerical mass, they descend on the scale of individual being. Not only does complexity supersede being, it is also complicated ecologically by the consequences of sheer physical quantity. When saying "we," we really no longer know what we say. Humans still speak in terms of individual *Dasein* when their existential dilemma has been complicated by a physical dilemma. And next to the contemporary praise of cities—in the wake of Walter Benjamin—for their rootlessness and social mobility, Serres reminds the reader that cities neither think nor graze. They weigh! Their weight has consequences for the politician who, henceforth, will also have to be a physicist.[34] He or she has to understand all the chemical and physical areas grouping population on urban infrastructures and the movement of humans over the globe. Population mass replaces

local and individual *Dasein*. Individual actors and groups, he says, need to think in terms of their existence in relation to others and the world.

Taking the example of the butterfly—that when flapping its wings may produce a hurricane on the other side of the world—Serres shows how a simple cause can produce a calamitous effect. The relation between cause and effect is not linear but looped and paved with constraints. The global city that is implied by the analogy invites contemplation of new and differently intertwined relations between individuals and subgroups, their tasks, their object-worlds, their knowledge and gatherings that, little by little, lose their relation with a locus, a place, a neighborhood, or proximity. The being there is rare. The singularity associated with atomism opens to a network, to a system said to be decentralized, disturbed, and truly acephalous.[35]

Over the longer patterns of history, humans have thought little about their condition on the planet, except when they are jolted by earthquakes, when their belongings are carried off by floods, or when crises of available energy change daily practices. The old social contract that Rousseau had so brilliantly formulated for the ends of democracy guaranteeing everyone's "natural," inalienable rights, Serres urges, ought to double itself with a *natural contract* between humans and nature:

> In the situation of objective violence, one cannot but sign it. At least, war; at best, peace. The "rational" kills the "real," hence what we call "rational" may be problematic. This is not to say that the "real" does not exist. But the real is organized through systems of signs that, to a large part, construct our ecosystems. The rational exists too as "truth" embodied in science. But the supreme clarity associated with total mastery will never reign. There is a gap between our ways of knowing, our ideas, and the "real." Material and cultural pollution have invaded the planet. Pollution is brought about by the desire of mastery and possession.
>
> (Serres 1990:57)

Cast over the passage are the shadows of Lévi-Strauss and Bateson: certain *ideas* pollute; the mind cannot entirely "master" the world; ideas of mastery and power are ancestral. Pollution is largely connected with "wrong selections," or "wrong ideas" programmed into faulty ontologies. Therefore, "grassroots" politics are helpful as long as the ideas that lead to pollution will, as it were, be intellectually weeded.[36] By definition, exchange that goes hand in hand with such politics will be reciprocal, multiple, complex. Changes are ongoing. The parasite may kill its host (pp. 64–5).[37] The biggest killer is the human *plaque* that continues to attach to—and suffocate—every organic inch of uncovered ground. The politics in the contract thus aims at a true diversity that would benefit many and would imply the coexistence of different ecological speeds among things by lowering profits that are reaped by the few in favor of smaller gains made, over longer durations of time, by many.

Extrapolating the ecological component of Serres's recent writings, we can say that what is called rationality is not an original form. It emerges from chaos, from an immanence of atoms, particles, or crystals. Far from posing a threat to a rational program of consciousness-raising, the model of chaos can enhance ecological politics: impermanence and change are cast onto a broad scale; affectivities are heightened. New

orderings of sensitivity that give equal value to all forms of language and objects—meaning the body in dialogue with itself in the world—can displace self-centered philosophies. Complexity shows us a new "reality," always in process. The perpetually open condition of world-systems has repercussions on notions of self and collectivity. Communities are henceforth at once local and global, in constant variation, always part of ever-transforming, complex systems. Being is interacting, as a complex living organism, with other organisms on the planet, and the cosmos serves as a great matrix for infinite numbers of communities figures in an atomistic vision of a habitable world built over a "ground" of chaos.

THE NEW ALLIANCE AND MORE CHAOS

At the conclusion of their revised edition of *La Nouvelle Alliance: Métamorphose de la science* (1979 [1986]), Ilya Prigogine and Isabelle Stengers avow that "the orientations of this book are…married with diverse fate and fortune to the different currents of the so-called structuralist wave." What they call "statistical or molecular" structuralism, which they associate with Lévi-Strauss, Jakobson, Lacan, and others, also shares much with scientific positivism of the early 1900s, a movement that tended to see the self "dissolved" in the world. Their book also pertains, they say, to a "molar" spirit that characterizes these "stout" cultural objects that are the epistemological foundations of Foucault and the cognitive structures of Piaget (Prigogine and Stengers 1979 [1986]:358). An affinity with a type of theory is disclosed, but a debt is never really acknowledged. The authors diverge from the conceptual ground that informed *la pensée 68* by underlining how all of the thinkers whom they cite do not in their analyses (of complexes, forms, and structures) take account of the relations their objects "are likely to hold with turbulences, noise, processes, that are more or less informed by them" *(ibid.)*. They see in what we have been using as a provisional foundation a desire for determination and finality—if not of truth—where chance and chaos are more the rule than the exception.

Ilya Prigogine and Isabelle Stengers place science in a world of creative invention.[38] The techno-sciences are wrong to disregard humanities, a domain where, in fact, poetic invention can thrive.[39] The origin of science, we can say, shares much with that of myth and poetry. It comes from the mind that offers through language various ways of reading and of organizing the world. Realizing that organization never follows a unilateral itinerary, an order simply imposed upon matter from the outside, Prigogine and Stengers reintroduce into nature open-ended concepts of time and becoming. Nature, like all living organisms and their milieus as they were discussed by Serres, works according to feedback principles and irreversibility. Moreover, what they call the arrow of time inflects a direction and produces irreversible processes and change.[40] Change is not just cyclical, nor can it be put into easy ideological formulas (such as "Plus ça change…"). They speak of bifurcations and mutations that challenge the notion of eternity in nature and further account for trends in Western thinking that are bringing humans back to thinking of a dynamics of nature inscribed in reversible and multivalent temporalities. By "alliance" they mean that the humanities and sciences can construct together a common poetic vision that organizes the world out of chaos. Science produces meaning that is always subject to modification. Like other disciplines, it cannot be separated from the

culture in which it is being elaborated. Sciences are tied to the constraints of meanings that we never cease to invent and create. It is with contemporary sciences in the alliance with the humanities that we open a new dialogue between subjects and nature.

Chaos theory delimits the "object." A scientific, "objective" study inevitably conjures up the image of a detached observer. Open systems and pressure relations make it impossible simply to arrest and delimit an object. The authors countenance limits as new constraints that alter a context or produce thresholds. Moments of bifurcation, even mutations, yield totally new organizations in a system consisting of differences. In ecological terms, the science they study shows that unforeseen climatic changes or even quick fluctuations can make or break plant, animal, and human life, and entire civilizations. Often technology, formerly in the service of exploitation, leads to these discoveries, ultimately confirming how much the study of ecosystems is tantamount to the testing of hard scientific rules.

Visionaries of invention, Prigogine and Stengers argue that sciences derive from dreams and passion.[41] They envisage the world as consisting of coextensive layerings and slippages (*gisements* and *glissements*). They contradict Thomas Kuhn's almost axiomatic concept of paradigmatic and determined totalities of thought and of "epistemological ruptures" that define scientific revolutions by asserting that bold insights are possible by subjects who work to change science (Kuhn 1962). Relying heavily on anti-Cartesian philosophers (Bergson, Deleuze, Leibniz, and Whitehead), they, like Serres, rejoin the Greek world of Epicurus and Lucretius, philosophers who reach an accord with nature through the concept of atomism. Science is included in a program that appeals also to poetry and to myth. Prigogine and Stengers contend that the dramatic changes are elaborated in the head of the dreamer as well as under the critical eye of the scientist (Deleuze 1967:282).[42] Psychological dramatizations, inventions of the mind that is never separate from the body, find echoes in areas that are at once geological, geographic, biological, and ecological. These stagings create spaces in which models turn landscapes topsy-turvy, determine migrations, establish competitions, and record mutual amplifications between processes of growth, proliferations, slow erosions, and brutal disintegrations.

The metamorphoses of contemporary sciences are not seen as sudden ruptures. Rather, they consist of a reintegration of different types of knowledge that Cartesian and post-Cartesian thought believed it was able to neglect. Science of complex systems as elaborated by Prigogine and Stengers becomes a true "physical science," since it admits the autonomy of things and not only of living things. Prigogine and Stengers argue that intervention cannot be one-sided. Organisms have their intrinsic *time* of development that has to be respected. To disregard that development may lead them to bifurcate, if Bateson's terms can be applied, in the direction of runaway, which will produce chain reactions that reverberate and clash through the entire system. If we extend the analogy to societies, we begin to understand the interaction of the local and global in terms of both natural and social ecology. Local intervention will induce changes in an ecosystem that will leave impact on the world at large, just as thousands of "micro-events" of intervention taking place all over the world are inflecting the way that nature is functioning in one's own ecosystem.

Issues of implementation and the intervention of science in nature throughout *La Nouvelle Alliance* show that Heidegger's "Question concerning technology" (1949) is

being addressed from the standpoint of theories emanating from the applied sciences (see Chapter 5, pages 76–9). In the eyes of its authors, the question is approached paradoxically. The sophistication of scientific and technological inventions, which would seem to move away from the world, leads back to a broad reassessment of nature. But this new nature that is uncovered is one of becoming, a nature that cannot be riveted to deterministic categories, that cannot be the image of a regression to a pristine stage of things. It has its history, has undergone its own changes, changes that have been accelerated by travel and migration. It is populated by machines and technics, the development of social and cultural practices, the growth of cities, continuous and autonomous processes, in which one can intervene for modification but the intrinsic time of which has to be respected under the threat of failure. The problem posed by the interaction of human population and population of technical apparatus no longer has anything in common with relatively simple problems that can be mastered by the construction of such and such a machine. The technical world that classical science contributed to creating needs concepts that are quite different from those of Western science, which Stengers and Prigogine attribute to its most dramatic development in the Cartesian and Newtonian phases, which believed in mastery.[43] Machines have shown a rupture of symmetries, harmonies, and equilibrium. Equilibrium is thus always dynamic, a temporary "order" in a universe that is inherently chaotic. Nature has a history and that is never stable. Nature transforms itself and is itself in movement, slowly, at times abruptly.[44]

In a narrow sense, the authors take to task a highly "masculine" code of thermodynamic laws that characterizes much of nineteenth-century science, literature, and art. Thermodynamics is founded on a need to *control* a nature that is felt to be effectively beyond control. In the thermodynamic realm, an obstinate need to simplify or to repress the qualities of nature becomes obvious. "Entropy," "irreversibility," "the end of time," and other components of thermodynamic laws are built on a fear of biological complexities that risk destroying the closure of isolated systems:

> If the obsession with exhaustion, the reduction of productive differences, was a determinant for the interpretation of the second law [of thermodynamics], the biological model was what constituted the decisive inspiration in matters concerning the history that followed: the abandonment of the restriction of thermodynamics to systems artificially removed from the world, and its metamorphosis into a science of the world inhabited by beings capable of evolving and of innovating, of things whose behavior, unless we enslave them, is neither predictable nor apt to submit to control.
>
> (Prigogine and Stengers 1979 [1986]:320)

The history of science thus is not directed from fixed laws of the past that assure the identity and genealogy of the world. The *future* of the world is forever written into its investigation. The recourse to pre-Socratic philosophy to explain the chaotic quality of nature leads the authors to assure the pose of a Heidegger who meditates the "paths" or "roads" in the forest that inspire reflection and poetic creation.

> The paths of nature cannot be foreseen with certitude, the role that accident plays being irreducible, and far more decisive than Aristotle would have believed: bifurcating nature is one where *tiny differences, insignificant fluctuations*, if produced in opportune circumstances, invade the entire system, and give birth to a new regime of functions.
>
> (Prigogine and Stengers 1979 [1986]:361)

In a broader sense, following their conclusions about change and the possibility of impact that women can have on ecosystems (or even, if a neologism is fitting, the *oikosystem*), with Prigogine and Stengers we can envision a code of conduct that respects both the creations and the improbabilities of nature. By looking to the open quality of its systems and its future, Prigogine and Stengers ask: what is this world about which we have learned anew the necessity of tact and respect? A decade after their first pronouncements, these words may sound somewhat tepid. But the lesson to remember is that nature has been reassessed. In the conception of the classical world and the world in evolution of the nineteenth century, it was a question of mastery and of dualisms that were written both into Newtonian mechanics and thermodynamic reason. They opposed the controller to the controlled, and the dominating to the dominated. Nature as clock or motor on the path of progress leading toward us, here and now, constituted a stable reality of which humans could be assured. By contrast, our world can be understood *"as natural at the very moment that we understand that we are part of it"* (Prigogine and Stengers 1979 [1986]:390–1, my emphasis). In other words, humans are no longer in the world, but part of nature and matter. Given the importance that is placed on what humans do because they inhere in nature and matter, from this world—no longer separate from us as it has been for the last three hundred years—have also disappeared, all of a sudden, old certainties: be they those of science, law, or the arts, no model or single code of conduct can pretend to be legitimate, none is exclusive (see Prigogine and Stengers 1995). In nature we witness interventions only as multiple experimentations, always more or less risky, ephemeral, degrading, or successful. Experimentation is not one of neat continuity and steady progress. No singular "truth," no "true ideology," nor any "better" system that results from experiment to explain the world can be simply measured in terms of technological achievement. The world does not necessarily grow in the shape of a tree or develop in linear fashion, a belief to which many still cling. In *La Nouvelle Alliance* the frequent returns to Lucretius, Parmenides, and Heraclitus reveal that the couplet *new=better* does not hold. "Progress" is replaced with "change." Nature that goes against the stability of classical science has fewer permanent laws:

> It is such a cultural climate that nourishes and amplifies the discovery of unsuspected objects, quasars with formidable energies, fascinating black holes, the discovery too, on earth, of the diversity of experiences realized by nature, the theoretical discovery, at last, of problems of instability, of proliferations, of migrations, of structurations. Where science had shown us an immutable and pacified stability, we understand that no organization, no stability, is as such guaranteed or legitimate, none imposes itself by right, all are the product of circumstance and chance.
>
> (Prigogine and Stengers 1979 [1986]:391–2)

A chaotic cosmos—or chaosmos—now points to the moment where active intervention in ecological matters is possible. What we perceive as rights, including human rights, is always the result of part chance, part context and part historical and cultural configuration.[45] A radically unstable nature becomes the stage on which everything appears to be the product of chance more than necessity. Atoms collide by chance and form networks that cannot be entirely controlled. Henceforth, no human order, no natural order, is legitimate. Every configuration is but the temporary order that comes out of disorder. Anything that justifies itself does so by decree. No discourse is lasting, or legitimate. These conclusions can lead to different consequences. They can open to the worst *laissez-faire* enacted on the environment. Since nothing can be controlled, nothing is of importance. This point of view has become predominant on current political agendas in industrial nations with conservative (and predominantly male) leadership.[46] They can also indicate that the future promises an infinite becoming. In any event, the destabilization that comes with a world that is not given to reason affects the rapport between humans and nature by changing the idea we had of ourselves as self-willed, conscious subjects endowed with projects, or subjects endowed with stable identities and well-established customs, that is, as citizens in the fold of a world that we believed had been made for us. Write Prigogine and Stengers:

> It is quite dead, this finalized world, static and harmonious, that the Copernican revolution demolished when it launched the Earth into infinite spaces…. *Nature is not made for us, and it is not given over to our will….* Scientific knowledge, drawn from dreams of a revealed, that is to say supernatural, revelation, can be discovered today at the same time as a poetic ear lent to nature and a natural process in nature, an open process of production and invention, in an open world, productive and inventive.
>
> (Prigogine and Stengers 1979 [1986]:392–3, my emphasis)

Prigogine and Stengers reassert that science comes out of ordinary, which is to say, "poetic" language. Only a specialized usage makes the terms scientific. A nature that does not exist for human appropriation becomes a precious tool in the arsenal of ecofeminism. This does not mean that association between women and nature can exist only in feminist fiction. But nature has been reassessed. It is no longer the opposite of culture. Quite the contrary: *techné* (as writing) precedes life and organizes nature in ways that are, from a human perspective, said to be more or less abusive, to assume the risk of becoming in the world means to construct the future without any certainty. Hence an ethics that would extend from feminism to praxis in general would make it an almost axiomatic necessity to tread lightly and treat humans and nature with tact and respect. Nature cannot simply be submitted to our will. Prigogine and Stengers conclude: "Time has come for new alliances, tied long ago, unrecognized for a long time, between the history of men, their societies, their different types of knowledge and the exploring adventure of nature" (1979 [1986]:392–3).

The scientific dimension of Prigogine and Stengers' meditation envisions nature in terms of a primary disorder, chaos, and instability out of which (like Serres's islands) some orderly organizations may grow before they, too, retreat into chaos. This is radically different from the mechanistic concept of the universe upon which all dualisms

or dialectical theories were founded. Lévi-Strauss had questioned the philosophical division between subject and object as defined by the socio-empirical approach of dialectical existentialism, a point Bateson also ratified in a different way. Prigogine and Stengers claim that turbulence and dissipative structures are originary. It is what we call order that is but aleatory and subjected to chance:

> Our vision of nature is undergoing a radical change toward the multiple, the temporal and the complex. The unexpected complexity has led to emergence of new conceptual structures that appear essential to our understanding of the physical world, a world that includes all of us.
>
> (Prigogine and Stengers 1979 [1986]:392–3)

Rather than predicting complete apocalypse, Prigogine and Stengers argue for qualified hope *and* caution for the future. Hope, because no order is stable or legitimate. Any order can be challenged and will change. Caution, because bifurcations may bring about unexpected and disastrous catastrophe. As they say in the conclusion to the English edition of their work: "It is quite remarkable that we are at a moment both of profound change in the scientific concept of nature and of the structure of human society as a result of demographic explosion" (Prigogine and Stengers 1979 [1986]:313). As Michel Serres had pointed out, humans do not just dwell as individuals, they weigh on the earth. Cities may be cultural havens, but they also exert pressure on the environment that cannot be separated from their existence. As a result, a need arises for new relations to be forged between humans and nature and between people. We can no longer accept the old a priori distinction between scientific and ethical values in the way we used to think of the unassailable gap between the "two cultures." This was possible at a time when the external world and our internal world appeared to be in opposition. Now we know that time is a construction and therefore carries an ethical responsibility. Or, as Prigogine and Stengers sum up the point:

> Ideas of instability, of fluctuation—diffuse into the social sciences. We know now that societies are immensely complex systems involving a potentially enormous number of bifurcations exemplified by the variety of cultures that have evolved in the relatively short span of human history. We know that such systems are highly sensitive to fluctuations. This leads both to hope and a threat: hope since even small fluctuations may grow and change the overall structure. As a result, individual activity is not doomed to insignificance. On the other hand, this is also a threat, since in our universe the security of stable, permanent rules seem gone forever. We are living in a dangerous and uncertain world that inspires no blind confidence, but perhaps only [a] feeling of qualified hope.
>
> (Prigogine and Stengers 1979 [1986]:313)

The conclusion they reach does not disqualify local action or a remobilizing of subjectivities at local levels but rather it sheds new light on the notion of agency. More than before, humans are conceived as creatures immanent to their environment rather

than fully autonomous, conscious subjects. But they are not entirely victims of what history and genealogy have bequeathed on them either.

In the evolution of Michel Serres's reflections on the history of science, cybernetics, and information, a marked increase in ecological awareness is made manifest. It moves from study of the "open" nature of ecosystems to a vision that perhaps recalls the earlier work on Leibniz's monadology, of the thousands of autonomous but interconnected local systems that are affected by one another and their infinite sum. But he goes further by noting that the human component in the system must now forge a "contract" with nature in order to horizontalize (or democratize, but to a radically different degree than that which is connoted by the term) the position that "man" holds in the overall configuration. Implied is a politics of nature so revolutionary that it would stand to reposition the relation of the human with other organisms. By contrast, we see that research led by Stengers and Prigogine in the applied sciences yields a vision of nature congruent with that which Serres obtains both from his work in critical theory and from his relation to atomistic philosophies: nature cannot be fixed or determined by attempts at isolating behavior, as was the case in both classical physics and thermodynamics. Nature slides along a trajectory defined by an "arrow of time," between the past and the future, such that it remains, as it had in medieval allegories, an unpredictable force of fortune. The improbability of nature, its trait that makes it resist human control, can be at once a salvation and damnation.

The conclusion tells us that the philosophy and history of science has covered a good deal of ground since 1968. In contrast to the human sciences, an ecological awareness becomes acutely present, even giving a foundation for an ethics and a politics of science that affect the long-range planning of the globe, if indeed any coordinated effort were to be made to draw up a contract with nature. What has been gleaned from Bateson, Serres, and Prigogine and Stengers, I would like to argue, is the need for partisans of ecofeminism to map out the terms of the natural contract. At this juncture in time, men in general would be unable to do so. The political record left by the majority of males in industrialized nations does not show much evidence of any kind of ecological awareness.

It is not because women are nearer to nature that they are better able to bring a sense of tact and a sensible agenda to the world. It is because women as a category have a biological power that men lack, and with that power, if it is ever put into global concert, one of the fundamental issues concerning the future of the globe, demography, can be affected.[47] Resistance to this is of course everywhere, heard from those who wish to control women's rights to their own bodies, from antiquated religious policies to male-centered political regimes. It is important for women to rethink their relation to the child.[48] While it is important for women to be able to choose whether or not to have children, it is of equal importance for them to show concern about the welfare of children, which cannot be outside of a context of natural and social ecology. Clearly, the findings of science can attest to the ways in which a binding of women's movements and the environment can change the future, despite its improbability, in the direction of more humane organizations of ecosystems both small and large, natural and social. The next chapters will take up issues of ecology and technology in a reassessed, chaotic nature. So far, we have seen how the critique of the full subject led to a temporary evacuation of all subjectivity. We now shall have to rethink singularity—and resistance—no longer to criticize the power of the reigning bourgeoisie in a disciplinary society but to unmask

mass-produced subjectivity in societies of control with their consequences for natural and social ecology.

Chapter 5
Motor ecology

In an interview with *Paris Passion* in 1991, discussing the fact of his eventual disappearance from the world, Lévi-Strauss was asked what he thought about recent ecological movements in France and the world at large and, gave the following answer:

> I sympathize with ecology, but not with ecologists. First of all, their politics often interfere with their positions. Secondly, they are essentially preoccupied with the well-being of humanity. I am concerned with the well-being of plants and animals that are threatened by humanity. I think ecologists make the mistake of thinking that they can defend humans and nature at the same time. I think it is necessary to decide if one prefers humans or nature. I am on the side of nature.
>
> (Lévi-Strauss 1991:35)

Without directly saying so he argues that ecopolitics need to turn away from humans and all of their organic trappings by adhering to a simple ideology: elements of nature are far more varied than the human consciousness that had become the focus of Western philosophical investigation.

Structuralism had done away with the full subject in its reassessment of nature. Systems theories—though their proponents are urging to reintroduce some agency—had pointed to an indistinctness between human and inhuman, even animate and inanimate. So far, we have seen only oblique mentions made of technologies that both wreak havoc on natural and social environments and enable humans to reassess nature. For this purpose, in this chapter I would like to specify how a collective ecofeminism can be crafted from some neo-Heideggerian writings in the contemporary French critical canon.

Up to this point few allusions have been made to the crucially ambivalent figure in the formation of ecological awareness that has been associated with the labors of 1968: Martin Heidegger. In his writings, Lévi-Strauss makes little or no mention of *Being and Time* (1927), "The origin of the work of art" (1936) or "The question concerning technology" (1949). But Michel Foucault probably could not have conceived the plan of *Les Mots et les choses* (1968) without the help of "The age of the world picture" (1938), in which the impact of Cartesian rationality is measured in the historical growth of the applied sciences and their progressive disengagement from the nature and language on which they depend but are compelled to deny or relegate to insignificance.[1] It could be admitted that Jacques Derrida's concept of *geopolitics* is woven into his long and problematic relationship with Heidegger in both *De l'Esprit* (1988) and earlier essays in *L'Ecriture et la différence* (1967a).

Heidegger's investigations into nature and technology are important elements in the critical heritage that concerns us here. He is concerned less with reassessing nature than

with technology's enslavement of humans and nature. In order to glimpse how his thought percolates through ecofeminism or writings that can place ecology on philosophical and political agendas, I would like to reiterate some of Heidegger's meditations on "the question concerning technology." I shall then turn to a study of Paul Virilio, whose work carries the bonus of sharing some conceptual affinities with the questions that the German philosopher raises about the nature of nature.

DEHUMANIZATION THROUGH *TECHNE*

It almost goes without saying that Lévi-Strauss, Bateson, Serres, and Prigogine and Stengers were adamant about showing the complex ramifications of the interactions between humans and nature that spring from places where other philosophers appear to equate technological progress with the liberation from the impediments of body and matter.[2] While we cannot help but ratify such thinking, it becomes clearer and clearer that interaction and liberation are neither opposed nor equivalent. Nothing may be due to humans in a world without purpose, but a growing awareness concerns the necessity to make humans realize their interdependence with a reassessed nature.[3]

In this context Heidegger wrote of individual *Dasein*, dehumanization and enslavement of nature at a time of intense change. Anticipating future cultural transformations through electronics, he himself dealt more with heavy machinery and thermodynamics. Several decades later, relations between humans, nature, and machines have been complicated by the electronic and cybernetic revolutions. Yet the rapport between humans, *techné*, and machines has been so long debated that the dilemmas he inaugurated have become stereotypes. Does technology expropriate and denature humans? Does it make them lose their being by enframing them? The essence of technology, Heidegger (1949) concludes, "is nothing technological." For the German philosopher, the essence of technology predates the scientific revolution rather than being its consequence. It is part of the West. As *techné*, it is part of a poetic process of revealing being. As technics, it threatens, since it may overwhelm man, being, and all other possible ways of "revealing" the "essence of life." For Heidegger, such a danger is inscribed in the essence of technology.

The danger entails ordering both nature and man, of challenging being in a way that aims at total mastery and doing away with mystery. Technology is at once a prosthesis at the service of man and an apparatus that helps man dominate nature and other humans. But it also, in turn, dominates man. "Domination" might require qualification. Heidegger stresses that the technological framework is inherently expansionist and can reveal only by reduction. Its aim is to enclose all beings in a particular availability and manipulability. This is called "enframing," or *Gestell*. Enframing reduces man and being to a sort of "standing reserve" or stockpile in service to, and on call for, technological purposes. But enframing cannot overpower or even reveal either its own historic, essential unfolding or indeed the arrival, endurance, and departure of what Heidegger as a philosopher calls "being." Behind the manipulations of the technological will to power, something escapes, something remains mysterious about technology that cannot be explained or enframed.

In the line of a long theological tradition, Heidegger opposes man to machine. Technology does away with humanness. Technology and machine dominate nature and dispose of mystery to which all humans must be availed. In his argument that depends on a willed confusion of poetry and religion, Heidegger does not explore the path of other subjectivities or of different configurations between man and machine that might escape the oppositions he outlines. Because his epoch is limited to the years between the world wars, Heidegger writes mainly of "heavy machinery" that bears the evidence of thermodynamics, such as hydraulic apparatus (earth shovels, timber cutters, snow plows, etc.). He does not deal with electronics, computers, transputers, and simulation or virtual reality, although he does anticipate the changes in subjectivity that future technologies have already confirmed. Heidegger's notions of technology are associated with an era in which machines are thought to dominate man and the world. He writes at a moment of transition, between a philosophy of the soil (and its *Lebensraum*, of importance to Nazi ideology) and the advent of advanced technology with its attendant rearticulation of time and space. Heidegger is attached to the soil and the individual *Dasein*. Technologies show how the *Grund* of Heidegger's reflections are composed of language and how, to a certain degree, the "question" he poses concerns how poetry can inhabit the languages of technology.

The poetic element that haunts technology insists on "mystery." We can shift the terms of his argument by stating that the "question concerning ecology" is asked only in view of nature's domination by technology and the resulting loss of humanness. Either we look in nature for a guarantee of human values, or we dominate and manipulate a disenchanted world. How to re-enchant nature without appeal to "auratic" formulas, or to invent technologies that will respect and imitate "natural" ecosystems, is a major issue that confronts every reader of Heidegger. For ecological purposes, what might be called "practical enchantment" involves how we can think of a nature that is not submitted to systemic violence for simple reason of the technologist's will to dominate.

> In the famous discussion of the bridge over the Rhine versus the hydroelectric plant, Heidegger is not concerned about the fact that industrial pollution has destroyed all animal life in the Rhine. What concerns him, is that the river has been put to man's service.
>
> (Prigogine and Stengers 1979 [1986]:33)

Yet the river, as we have seen, can never be completely put to "man's service," even if it were to become biologically dead.[4] Against technological mastery as proposed by politics of the right or the left, adepts of Heidegger follow suit in their critique of technology's enframing.[5] Technology is said to do away with revelation of being, with mystery and poetry, and leave us with purely informational automata.[6] In view of the all-encompassing pollution resulting from the "becoming-technological" of the world, can we counter by saying that new technologies not just pollute but alter both our very modes of being and our rapport with nature and ecology? Can it serve to bring about existential mutations and a new ecological consciousness?

Let us take a detour through poststructuralism's theoretician of speed. Paul Virilio would be one of the first neo-Heideggerians to say that technology is neutral, and that it can be implemented either for or against ecological programs. Virilio's connections with

critical thinking of the 1960s are wired through the "French" Heidegger that took prominence with Foucault and Derrida. But in his formation as an urban architect, Virilio moved away from philosophical or deconstructive issues to wide critical essays on technology and the environment in relation to public policy.[7] None is easily classified, each being reminiscent of futuristic poetry but also anchored in social history. The essays are written in a delphic style that—like the kind of writing we shall see Donna Haraway propose for cyborg authors (see Chapter 6)—resists taxonomy, is ironic, and even, to a controlled degree, resonates with terrorism. Virilio has spent the last two decades showing how contemporary technologies have altered our perception of time and space. Compression of space has been so intense that only time remains, but a *present* time, a time of electronic transmission that zaps us without delay or anticipation. The effect on humans has been, paradoxically, one of extreme temporal acceleration but also of slowing down to the point where we witness ourselves progressively immobilized as a human populace riveted to electronic terminals. Virilio further denounces technology through the electronic revolution by locating the loss of sensory perception of humans and their deracination at the hands of technology. Acceleration through technologies alters the perception of time and space. A neo-Durkheimian anomie ensues, a feeling of disconnection that makes people blind to the body and the physical world, utterly anaesthetized to the public realm of experience. This is part of a "conspiracy" by an invisible power that was first tied to the military and now, he argues, to transnational corporations that continue in the economic sphere the dream of mastery that is at odds with findings in the scientific and social registers.

Noting that most technological innovations begin in the military sphere, Virilio shows in *Bunker Archeology* (1975) how the air wars of 1938–45 altered our perceptions of time and space. German bunkers on the coast in Northern France, now bequeathed to tourists of Brittany and Normandy, were conceived as works of art, as anachronistic gifts of culture to nature. In an era of accelerated transformation of geography and history, they became rapidly defunct as works of defense or art. Bunkers are aligned at the extremity where land meets the sea. They were built to protect civilians who could no longer be protected once airplanes flew over the line of demarcation to bring war to the civilians *inside* the country. The phenomenon of what Virilio calls "Pure War" that the concrete monoliths reveal is linked to the disappearance of traditional Euclidean space, a disappearance perfected through telecommunication and transportation that further deracinate entire populations of subjects. Boundaries no longer surround and demarcate a territory, they crisscross *inside* every territory.

THE TERMINAL CITIZEN

Ecological struggle, Virilio repeats over and again, *is the only one worth fighting for*.[8] In the experience of everyday life, perhaps in what Donna Haraway, as we shall see below, calls the "homework economy," subjects no longer work where they live; they go to and from home and work, to and from a "place of election to a place of ejection." They have no control over what happens to them. More and more citizens are telecontrolled. On the one hand, invisible threads of communication link the world of those who have access and own their means of production, that is, mainly computers and technical knowledge—

in Tokyo, New York, Paris—but exclude or bypass those who do not have access. On the other, average citizens are exploited by being immobilized more and more in what is no longer their own space.

Virilio posits that the denaturing of experience, that is, the loss of a sense of time and space, is linked to a takeover by electronics that immobilize citizens. Electronic technologies manipulate them in ways that control their consuming habits. The blueprint of a neo-Heideggerian dictum is clear: Virilio notes the disappearance of space through the ways in which the world projects images of itself. Humans are dissociated from the perception and apprehension of geophysical space. Telecommunication eradicates duration and affects our public and domestic space so strongly that we cannot yet know what its reality will be. Urbanization of space is followed by urbanization of time.[9] The most efficient electronic devices allow certain corporate agencies to gain the international market. The standard oppositions of dystopia and utopia are being replaced by the concept of a teletopia, a world that is neither here nor there but insipidly pervasive, a world that has a dull attractiveness because of the ease it seems to offer and that is ultimately soporific. Telepresence allows one to be in two or more places simultaneously and to simulate physical proximity. New deictic relations that result from interfacing comprise a non-place of teletopical technologies (such as the interface of human and machine), a regime or nodal point of teletransmission.[10]

Heidegger's concerns are pushed a step or two further:

> One by one, the perceptive faculties of an individual's body are transferred to machines, or instruments that record images and sound; more recently, the transfer is made to receivers, to sensors, and to other detectors that can replace absence of tactility over distance. A general use of telecommands is on the verge of achieving permanent telesurveillance. Critical here is no longer the concept of three spatial dimensions, but a fourth, temporal dimension—in other words, that of the present itself.
>
> (Virilio 1993a:4)

Yet the disappearance of space and time eradicates the very distance necessary for the establishment of surveillance.[11] Henceforth, it will be much more a question of "deterrence" (the term is Baudrillard's) or diffusion, in such a way that authority—like power—is located everywhere and nowhere. Electronic technologies isolate the present and cut it away from a durational sense of sequencing. They isolate "present" time and establish another space composed no longer of our "concrete presence" in the world, but of a "discrete telepresence."[12]

> How can we fail to understand to what degree these radio-technologies (based on the digital signal, the video signal and the radio signal) will soon overturn not only the *nature of human environment and its territorial body*, but also the *individual environment and its animal body*, since the development of territorial space by means of heavy *material* machinery (roads, railways, and so on) is now giving way to an almost *immaterial* control of the environment (satellites, fiber-optic cables) that is connected

> to the terminal body of the men and women, interactive beings who are at once emitters and receivers?
>
> (Virilio 1993a:4, my emphasis)

The major coordinates that bind human subjectivity—that is, the way we experience time and space—are reorganized. A collapse of any kind of polarity ensues. Telecommunication networks that now span the globe can only be perceived on computer-generated maps. And because they are invisible, consequences on humans and environment are not immediately noticeable.

Electronic equipment is linked to urbanization, or to what others have called "the global city." Humans are not yet aware of how this urbanization affects them. People are immobilized, such that with a differential organization of space many traditional social bindings disappear. These transformations create new relations with nature and the environment but they are primarily experienced as a loss of territory and an aggravated sense of spatio-temporal disconnection. Humans may become blind to the "real," to a world of nameless objects but also to their body and the environment. If the revolution of modes of transportation of the last century had witnessed the emergence and popularization of the dynamic automotive vehicle—bicycle, train, motorcycle, car, airplane—the current electronic revolution is blueprinting the plan for the ultimate static audio-visual vehicle. For Virilio, a *behavioral inertia* becomes the human condition of the receiver-sender, and in the optical world a passage is effectuated from the "retinal suspension," on which the illusion of cinematic projection was based, to the "bodily suspension" of the plugged-in human being in a neutral zone between what has as its defining loci the subject and the object.

THE DISCONNECTED SUBJECT

Now the inertia, what Heidegger had been calling the effects of dehumanization or enframing, is exactly what has consequence for our understanding of new ecosystems. The wired, "plugged-in human," in the words of Virilio, is free to do other things than attend pep meetings or rallies to raise consciousness. I can go to the health center and plug in on a tread mill. I can also take my computer to the wilderness and have access to the world from the cabin in Voyageur Country or Montana. For souls having these privileges, offered is the condition of possibility of a sudden mobilization of the illusion of grasping, of scanning an entire world that is telepresent at every moment but really quite removed from one's sensorium. Far from being simply immobilized, the telewriter can go through the screen, browse and meander along the information highway, connecting and disconnecting at his or her leisure.[13] I can make contact anonymously with many users—"folks" like myself—and tell my story on the computer, in a way that lacks repression, irony, or even the slightest doses of quirkiness or even craziness. More distressing is the creation of new lines of inclusion and exclusion, new affluent communities of neo-Cartesian rationalism oblivious of those who are not "logged on," or who do not think along "bussed" lines of electronic reason.

Virilio puts a new spin on Heidegger's disquiet about technology. Speed is not a phenomenon but a *relation* among phenomena, in other words, relativity itself. It is

experienced as soon as we move, beyond the paradigm of public transport, in the organization and electromagnetic conditioning of territorial space. Such is what is implied by revolution in "transmission" and of environmental control in time that has since replaced traditional ways of living in territorial space.[14] Speed is not used solely to make travel more effective. It is used to perceive and to conceive more intensely the present world. In the future, we can predict with Virilio, speed will be used more and more to act over distance, beyond the sphere of influence of the human body, thus entirely changing the accepted notions of territoriality that depend on an experience of space. Loss of social bindings is linked to telepresence. The decline of effective demographic subgroups, or what Guattari has called *groupuscules*, can be seen in spatial terms.[15] In the industrial revolution, the extended family turned into the nuclear family, which had become the single-parent family, and which is now entering into a world-wide homework phase. Individuality or individualism was thus not so much the fact of a liberation of social practice as the product of evolution of *techniques* for the development of public or private space. As cities are growing and sprawling at unforeseen rates, the familial unit shrinks, loses its cohesive force, and is dispersed.

The altering of human experience and interaction cannot be seen in simply negative terms that blame technology for its ills. Rather, it is the use that is made of them that leads, on the one hand, to pollution created by ideologies of growth and maximized profits and, on the other, to the oblivion of those (people, fauna, and flora) who live at different, generally slower, ecological speeds. In addition, despite evidence to the contrary, humans are encouraged to continue living as if they were at the center of the universe. New technologies in the service of ideologies make us blind to the fact that electronic space and physical space coexist in an acceleration of compression.

The problem occurs less where Virilio would have it. Though aware of the political implications of his remarks, he does not stress enough that electronic transmission and simultaneity promote control and exploitation.[16] It indeed may deracinate people and shuttle them around. It may control them through invisible threads. But it also allows those who have access to technology to redefine space for the sake of profit and control.[17] Electronic transmission becomes problematic when it puts at a disadvantage those who do not have access to its means, namely, at least three-quarters of the world's population. A new form of colonialism, all the more threatening because it remains largely invisible, extends all over the world through the divisions wrought by the technoscientific apparatus. It separates those who are part of the new "knowledge society" from the others (Druckner 1994; see also Drucker 1993).

TELETOPICAL COMMUNICATIONS

Virilio chooses to focus on the disappearance of space for all humans when the detrimental, cultural consequences of electronic technology are also ideological. The sense of disconnection from place and time leads to a new logic that organizes the impression of chaos. The logic of this sudden "teletopical commutation" perfects what until now had been the fundamental "topical" quality of *the old human city* that often remained the measure of cultural criticism of the 1960s. The topical quality of life, an inherent sense of lived space, has been said to disappear.[18] Light, as measurement, is

immaterial substance. The domination of "man" over matter seems absolute when light becomes the *prima materia* of electronic and optical technology. Therefore, light as a phenomenon of speed becomes an organizing element of experience. So, at one level, technology appears to render unnecessary any sense of nature. Yet, at another level, it is precisely through high technology—in that it "sheds light" on what we do not know—that humans can measure their own interdependence with nature and the cosmos and thus reject a science that claimed to separate subject and object. The overprivileging of the level at which technology seemingly divides us from nature is particularly threatening, since it is at that level, precisely, that the internationalization of consumption can be located. Thus, claims Virilio, both the urban geographer and the political scientist find themselves torn between the permanent necessities of the organization and construction of real space, with all its basic problems, including geometrical and geographical constrictions about what is central versus what is peripheral, and new constraints on the management of this real time of immediacy and ubiquity with its "protocol of access," its "transmission of bundles," its "viruses," and the chronogeographical constraints of nodal and interconnected networks.[19] An extended time works in the direction of the topical and architectonic interval (the high-rise building), and a short, ultrabrief, even inexistent time in the direction of the teletopical interface (the network).

We are living, if we follow Virilio, the aftereffect of the collapse of measured time and space. The time of the speed of light serves as an absolute standard for marketing and instantaneous telemarketing. The intensive duration of the present moment replaces duration.[20] As a consequence, the extensive time of history is subject to control. Present time includes at once the past, the present, and the future. Telecommanding, the so-called *tact* at a distance, simultaneously alters and brings to completion the former technique of telesurveillance of what is kept at a distance. Temporal and spatial disconnection, and the ensuing blindness to a "real," underline an array of political problems now facing global humanity. It is linked with what Virilio calls an "electronic dazzle" that blinds humans to ecological problems that refuse to go away: climatic upheavals such as droughts and floods and the correlations in society—that is, famines, civil unrest, collapse of nation states, and increases of ethnic strife and tribal wars.

Electronic devices and television give humans a radically different access to the world. The distant places we used to read and hear about through travel narratives multiply and are simultaneously broadcast (or "simulcast" as horse-racing jargon puts it) on television.[21] We learn about distant happenings, about current weather in Asia and in Latin America on a televisual network. We can bet on thoroughbreds running at any track in the country at the same time. Distance is annulled through mobilization of the image or the speed of light. In the midst of the collapse of space-time, physical and seasonal rhythms of growth continue to exist, though human intervention tampers with them more and more. Different ecological times of people coexist, from the rainforest in Surinam to Africa and the corporate electronic world of New York, Tokyo, or London. Different geological and cosmic times also coexist. However, it is the world's operating according to the speed of light that most impresses us to the point where we theorize on it while neglecting its others.

No matter how much global temporalities work at speeds different from technologically imposed time, the communication revolution changes notions of space and city planning primarily when it is linked to marketing.[22] Infrastructures are

increasingly replaced by immaterial airwaves of telesurveillance and telecommanding.[23] Humans become more immobile and lose their sense of physical connection. For Virilio, interactive beings, consigned to inertia, transfer a natural capacity for movement and travel into probes, into detectors that inform their users immediately about distant realities, but to the detriment of sensory faculties. Examples include the para- or tetraplegic who is able to teleguide his or her environment or inhabited space as a model of what Virilio calls not domestic but "domotic" spaces and "smart high rises" that will soon respond to every one of our perceived "needs".

ECOLOGIES AND INFORMATION

Grounded in the vision of the political left of 1968, but informed by Heideggerian philosophy, Virilio points to the political and ecological consequences of teletransmission in the service of democratic capitalism. Like the revolution in transportation a century ago, the electronic revolution produces economic shifts and reorientations that have pronounced (or even devastating) effects on our sense of the environment. A small new elite of "symbolic analysts" and technicians who own their modes of production coexist with a still growing reserve army of labor that struggles against unemployment and poverty. At the very time of demographic explosion, fewer and fewer people are needed on the planet. By being "clean," the electronic revolution can easily excel in bypassing ecological problems that are not felt as directly by those who have access to technology. Technocracy can segregate itself from the urban centers and live in remote areas, "hassle-free."[24] Traditional cities become the rubbish heap of marginalized humanity. For those with technological means, new towns and suburbs spring up anywhere and everywhere, complete with golf courses, swimming pools, and shopping malls. Electronic equipment brings all forms of entertainment to each occupant's house. In addition to teleports, airports connect people with the most distant parts of the world. Almost invisibly, new lines of inclusion/exclusion are drawn. Public transportation is not available and so makes access to metroplexes difficult for poorer sectors that are socially immobilized. Speed gives an advantage to those who have access to it and leaves others hopelessly behind. What looks clean and efficacious is built, so far, on exploitative economic paradigms. The very segregation of a corporate world of symbolic analysts produces for the empirical space even more pockets of poverty.

From this we can hypothesize that Virilio's studies of urban ecology are so inverse to Baudrillard's that they figure as exactly what the grand theorist of totalized simulation would like to repress. At this point it can also be asked if, contrary to Baudrillard, Virilio assigns any space to subjectivity and to action. In these areas could be born the elements of praxis and specific types of ecofeminism in the electronic age. Virilio in fact holds to a classical definition of the subject who subjects but who is also subjected. Electronic machines give agency to the subject but also subjugate. They immobilize. Virilio hesitates and hovers between several explanations of electronic compression and repression. If electronics do away with topicality, they also impel us to substitute images for bodies moving in space and time. The crisis of the notion of physical dimension thus collides head-on with the politics and administration of public service. Politics too move in present time alone.

His concern is that the "image" does away with real people moving about in both private and public space. Can it be implied that, from what Virilio shows, effective speech is reduced, diversity lost, and the body annihilated? Virilio focuses less on how to reintroduce speech and writing, to impose political awareness through education, or to suggest new territorializations and ecological practices, than on what is being taken away by the onslaught of technologies that—as shown especially in his later writings—have shifted from the military intervention to economic wars waged on the world by high technologies. He not so much suggests new practices as he exposes the semiotics or the "standard operational procedures" of current technology and the massive consequences for citizens. Transformations of subjectivities become inevitable.[25]

Despite their fascination, these changes have to be exposed, not just celebrated, and some of their implications and consequences brought to light.[26] Virilio's ecopolitics are located in their *exposure* of massive shifts in the realm of space and subjectivity.[27] He rightfully shows that mobilization of the semiotic networks benefits a transnational business elite at the expense of an ever-growing number of unemployed people. If *writing*, a crucial technology in ecofeminism, had already been criticized for its impairment of human memory, can computers lead to a productively viral spread (in the sense that will be suggested by Donna Haraway) or to an unfortunate control? The separation of sign and referent is completed in such a way that images win over things. But in addition to immobilizing consuming subjects, automation affects the structure of the labor force. When the archaic "tyranny of distances" between people who have been geographically scattered increasingly gives way to this "tyranny of real time," Virilio notes that this is a matter not merely for travel agencies—as optimists might claim—but especially for employment agencies, because the more the speed of commerce grows, the more unemployment becomes *globally massive*. Since the nineteenth century, the muscular force of the human being is literally "laid off" when automation of the "machine tool" is employed. To this, with the recent growth of computers and "transmission machines," comes the dismissal or widespread erosion of memory and conscience.[28] Eradication of memory, like that of biological diversity, is a necessary step in the program of transnational capitalism.[29] Absence of memory dulls the impact of critical thinking. Memory loss is tied to what Virilio calls an absence of delay, the shortening of a feedback loop, hence the absence of movement in space, and the advent of a culture of instant gratification. In compressions of this order, the opposition between local and global forms may seem impertinent. Virilio implies—but only implies—that coordination of critical thinking is tied to re-establishment of *memory* built on topical spaces, local experience, and shared discourses.

Behind this critical transition, how can we fail to wonder about the future conditioning of the human environment? If the revolution of transportation in the nineteenth century had already prompted a change in the surface of urban territory on the whole of the European continent, the current revolution of interactive transmissions is, in its turn, promoting alteration of urban environment. "Images" win over the things they are said to represent: the city of the past slowly becomes a paradoxical agglomeration in which relations of immediate proximity give way to interrelations over distances. In fact, the paradoxes of acceleration are frequent and disturbing. One—the first—of them runs thus: when things "far" are brought into immediate proximity, those that are proportionately "near"—such as our friends, kin, neighbors—turn what is proximate—family, work, or

neighborhood—into a foreign, if not inimical, space. This inversion of social practices can already be seen in the urban planning of modes of communication (maritime port, railway station, airport) and is underscored and radicalized through new means of telecommunication (the teleport) (Virilio 1993a:21).

Transformations brought about by electronics are what Virilio labels an experience of loss. In his recent *L'Art du moteur* (1993b), Virilio continues what he calls his ecological struggle. Ecology has less to do with nature than with loss of habitat due to politics of acceleration and transformation of time-space coordinates.[30] Ecologists misplace their efforts when protesting against nuclear plants instead of acceleration of particles. In view of what we continue to learn about the aftereffects of Chernobyl, Virilio's efforts appear somewhat misdirected.[31] But ecological issues are more than ever linked to the *takeover of information* that leads to the decline of what he calls the "reality of facts." Witnessing this decline, Virilio launches a manifesto, celebrating the process of writing (words) against the screen (image, display of information). Virilio reads the control of information in a sense that connects it to totalitarianisms and Nazism:

> During the period where different principles of the same massive attack against the living were developed—in Auschwitz as in Hiroshima—Claude Shannon (1938) and Norbert Wiener (1948) manifested the same complicity in the elaboration of a current of thought that took us from the old biocracy to a telecracy destined to constitute this "common collective conscience" of which Stefan Zweig expected the progress of humanity and which, in the end, is but the realization of a social cybernetics founded upon the cult of information.
>
> (Virilio 1993b:171–2)

He goes on to cite the example of a female worker who complains about the repetitive motion at work imposed by the computer. She contrasts her present situation to an earlier one, before the machine, when she had more control over her rhythm.

Once an earlier condition is no longer available to be recalled, memory losses get linked to marketing strategies. Amnesia is created in order to produce a blank surface of consciousness that can be exploited. In Virilio's world, different types of information are not distinguished. He derides the present state of things controlled by an exploitative telecracy that reduces everything to sound-bytes, logos, and slogans. However, when information functions as a writing or inscription, it becomes an inscriptive process and a dialogue, neither a representation nor, I would argue, a simulation. Writing links information to the body, to the history of the subject.[32] In Norbert Wiener's terms: "Information is neither mass, nor energy; information is information" (Wiener 1948).[33] From this dated view of what can be assimilated into ideology we begin to see the limits of old-style cyberneticians that include Gregory Bateson: *information* can be read as reduction of "poetic" language to simple transmission of publicized, mass-mediated "fact." Even if it can also be taken, as Bateson had shown, as the transmission of differences, as the functioning of the brain that does not, in any way, exclude elements of poetry, information becomes a space that can be controlled and used for colonization and dishwashing of the brain. Virilio puts the rather rarefied "steps to an ecology of mind" into a history of power relations.

The politics of writing, a process exercised on a local scale, is best practiced when it sets itself apart from televisual information. It resists or else articulates in creatively perverse ways the manipulation of quotidian fact and reality that circulates in screened presentations of information. Distinctions have to be made between information as *techné*, which makes life possible, and that which is manipulated by ideologies for purposes of control.

Virilio takes a feminist tactic in a different direction. Like Heidegger, some of the feminists denounce dehumanization by technologies that implement phallocentric economies. Since electronics do away with topicality, Virilio notes as frightening and devastating consequence the *non-critical reception* of information that is presented as isolated fact. Viewers are glutted at teleports and listen to discourses aimed not at normalization but at the establishment of a unilateral and immobile consuming subject. People are not often aware of how this urbanization affects them:

1 it gives the illusion of independence from nature (natural ecology);
2 urbanization of real time entails the denaturalization of one's own body, an organ that is plugged into various interfaces (computer keyboards, cathode screens, and gloves, even cyberclothing), prostheses that turn the over-equipped, healthy (or "valid") individual into the virtual equivalent of the well-equipped invalid (mental ecology);
3 automation does away with human labor (social ecology);
4 it exploits and functions as a new type of invisible colonization (especially, but not exclusively, in the Third World), increasing the gap in the homework economy between those who have access and those who do not.[34]

As compression does away with time and space, Virilio asks: how might we reintroduce time and space, even narrative or writing, in the image? Again, there is no mention of economics. The image here can be read as a narcissistic construct, a mirror that prevents humans from thinking through issues. This is not an idle question. A need is felt to reintroduce agency and be critical of a dominant discourse with its specular models. Recovery of time and space and lived experience cannot be achieved through a movement back to pre-electronic memory or to photographic contributions of reality. The task involves combining technology with more humane economic practices, with a practice of decompression, with respatialization and exertion of pressure from minoritarian groups, the most massive and important of which is the international population of women. The point is crucial for the politics of this book: if ecology is what Virilio calls *the only struggle worth fighting for,* the logical corollary to his argument is that in the shrunken condition of time-space throughout our *oikos,* women, and women better than any other collectivity, can mobilize world-wide environmental change.

Women can identify a global community in the midst of technological takeover, and they can work at once on local and global issues. Women can fight to recover an art of the eco that would otherwise be wiped out by acceleration of technologies and simulation. But that art, as Brennan reminds us, cannot be separated from different economic practices. The results of the conferences at Rio de Janeiro, Cairo, and Beijing, on the environment, population, and women specifically, showed why. Therein women discovered a source of power. Women indeed *can* control the future of the planet by keeping reproductive rights and agendas in their hands. The rights and the agendas can be shared and globalized electronically. There could be massive tremors in the home-work

economy if women also pooled and coordinated energies in ways that would follow, first, through peaceful sabotage and extensive control of ideologies, and some of the long-term planning measures applicable to the globe. These "steps to an ecology of the world" may seem, in light of Virilio's delphic pronouncements, at once Utopian and terroristic.

They are, but to the degree that they serve as a countermeasure to Virilio's analysis of the techno-electro-cratic dystopia in our midst. The virtue of his arguments and the relations they hold with "French" Heideggerian philosophy make apparent what ecofeminisms can do over the next century. It may be that the paranoid regression to anti-abortion terrorism, militated murders, and the spew and froth about the evils of "governmental control" signals a fear over what women can do. Accession to education and environmental consciousness, two sides of the same medallion, mark the worth of the kind of *writing* that makes the labors of figures as diverse as Virilio and others, such as Donna Haraway, converge.

But what of the stakes of writing in a broad sense? Known as an intransitive and elemental force, in the culture of 1968, *écriture* extended its aura to almost all areas of conscience. It moved between literature, the fine arts, the applied sciences, and even political practice. In the remaining chapters I would like to see how the heritage of *écriture* can be reconsidered, first, for the purpose of further articulating ecological action and feminism and, second, for that of reevaluating the *era* that produced it. I now wish to see how the pragmatic definitions of space and subjectivity, the disappearance of which Virilio mourned, are reintroduced in the writings of Félix Guattari on ecology. I shall also show how Guattari glosses over some ecofeminist findings that often take the philosopher's declarations a step further than he proposes.

Chapter 6
New ecological territories

Many of the photographs that adorn French manuals tracing the history of the new novel and new philosophies that emerged after 1968 display groups of hirsute intellectuals, squinched together to fit the frame of the picture, smiling and smoking, seemingly chattering about their labors in the midst of an intermission. In some we see a balding novelist, such as Michel Butor, who lets the locks on his temples and the back of his skull reach his shoulders. In others, philosophers—Gilles Deleuze and Jean-François Lyotard—wear tie-dye T shirts and bell-bottom jeans that make them resemble refugees from the Peter Sellers feature, *I Love You, Alice B.Toklas*. With *la pensée 68* there seemed to be corresponding sartorial codes. Lévi-Strauss always offered an elegantly aquiline image, of a sculpted face resembling an Indian mask, but a face perched over a three-piece suit that seemed almost as resistant to fashion as were his myths. One of the many ironies of the context of 1968 was just that: bevies of *soixante-huitards* wore Califoraian attire all the while they acknowledged an unending debt to their guru in the *Collège de France*.

Clothes made the difference. Until 1974, the thinkers who read and were inflected by Lévi-Strauss made sure they paid intellectual homage to the post-dialectical and post-Cartesian master. Michel Foucault flatly stated that the two greatest thinkers of the "outside"—*le dehors*—were the "collective" and "anonymous" authors Maurice Blanchot and Lévi-Strauss (Foucault 1967)[1]. Roland Barthes applied transformative oppositional categories from *Elementary Kinship Structures* (1949) to radicalize the heritage of Racine, in a work that exploded the reigning literary canon under the control of the Sorbonne (Barthes 1966). Gilles Deleuze (1968) mobilized much of *La Pensée sauvage* (Lévi-Strauss 1962) to look at American literature from new perspectives. In many articles, Marc Vernet showed how Hollywood film constituted the force of myth that Lévi-Strauss had been elaborating in his studies of North and South American anthropology. The list could go on.

Many of the acknowledgments turned to silence after Lévi-Strauss applied for entry to the French Academy, where he was soon enshrined after the death of the arch-conservative, almost fascistic writer, Henry de Montherlant. In 1974 it was academically correct not to say much about an event that would, were it to take place now, need the kind of "damage control" that partisans made manifest when Paul de Man's pro-Nazi writings were dredged up in the early 1980s from his wartime past. In 1974, Lévi-Strauss became a piece of taxidermy. He seemed to lose his remaining prominence after the election to the French Academy. Perhaps many of his devotees were reminded that he had expressed distaste for the 1968 rebellions in arguing that the occupation of the French university was suicidal given its greater potential as a site for generating counter-ideologies. Lévi-Strauss may have been mistaken in the short run, but in every event his views and his enthronement—indeed, apotheosis—in the bastion of intellectual

conservatism had already been spelled out in *Tristes Tropiques*, in a play he said he wrote in a hammock, in order to kill time and boredom, which he entitled 'The Apotheosis of Augustus', in which the hero has dreams of being divinized in, of all places, the French Academy (Lévi-Strauss 1955:433–41). If Lévi-Strauss was so divinized, the sequence of imaginary and real events may have dealt a blow to the ecological awareness that his writings had been championing, let alone to any kind of implied political correctness.

In this chapter I would like to see how it is reinterpreted and, as it were, pragmatized for issues that faced—and still face—intellectuals, ecologists, and feminists in the 1990s. Structuralism, in its critique of existential humanism and a nature/culture division, had evacuated all subjectivity from the greater landscape of long durations of history. The critique of an evacuation of this sort has as much to do with feminism as it does with ecology, at least if it does not revert to forms of prestructural thinking, as in Luc Ferry. We have seen how problems in natural and social ecology change the relations between humans and habitat. If the loss of ozone and air quality can produce disease, demographics can also alter human relations. However, as we have read in Virilio, acceleration and compression make many people lose a sense of habitat and a quality of everyday life. An art of the eco in a place of election is replaced by a place of ejection. Humans lose their vital mobility and are reduced to the status of valid invalids. How to reintroduce an art of dwelling that goes with a sense of existential territory based on a reassessed nature and a critical relation with technology becomes of increasing importance. The sighting point of a new ecological subjectivity is a polemical pamphlet, *Les Trois Ecologies* (1989), which is authored by one of the former *soixante-huitards* who once wore long hair, sailor jeans, and chromatic T shirts: Félix Guattari.[2] In all of his writings, the main hypotheses of Lévi-Strauss's ecology are mobilized, but also updated and diverted, for the sake of an active and pragmatic politics in which there resides a complicated relation to ecofeminism.

When Guattari began writing *Les Trois Ecologies*, the works of Gregory Bateson had been available in French over the previous twelve years. For anglophone readers, Guattari's tract may read like a time-warp. He picks up material with which the Anglo-Americans had been quite familiar and have since forgotten. In France, Bateson enjoys a renewed popularity. Guattari uses *Steps to an Ecology of Mind* (just reprinted in French in 1980), a collection of articles that had been a popular poetic for many American dissidents in the later 1960s. Its strong and unmediated commitment to ecology made it an enemy of everything that underwrote, condoned, or remained silent about the war in Vietnam. In this light, *Les Trois Ecologies* seems both fresh and, paradoxically, quite dusty.

Guattari reorients Lévi-Strauss's critique of Sartre. Where the anthropologist had obliterated the subject entirely, Guattari, without going back to prestructural thinking the way Luc Ferry had done, includes many findings of contemporary science and chaos theory for the purpose of navigating between cognitive automata or cybernetics (as devised by Francisco Varela (1988)) on the one hand and, on the other, an existential subject moving on a Heideggerian *"Grund"*. Guattari goes through and beyond structuralism to devise an eco-subjectivity that is immanent and in constant becoming. Constraints are continually changing in a cosmos that has become what he calls a chaosmos. This new eco-subjectivity is not purified without leaving an existential residue. It unfolds in a territory, in the subjective experience of time and space. It

continues to experiment and by doing so resists hegemony and creates new modes of being. Taking over where Bateson left off, Guattari envisages ecology being divided into components that are mental (movements of thought), social (citizenship and cultural production), and natural (or environmental). But all the while he remembers that the "eco-subject" is immanent, moves about in the real and, in the wake of Lévi-Strauss, figures in a continuously reassessed nature. "Eco-subjects" have to resist a global economic onslaught that advocates a separation between nature and culture for the sake of economic profit alone.

Reading information theory by way of Bateson, Guattari devises an ecopolitics that is conscious of feedback principles and interrelations on a global scale.[3] He makes it clear: "There will only be a true answer to the ecological crisis at a planetary scale on condition of a political, social and cultural revolution that reorients the *objectives* of material and immaterial production" (Guattari 1989:13–14, my emphasis). In other words, we cannot simply celebrate the shift from material to immaterial goods, the more so as these changes are always tied to economic strategies. Changes and power reversals will not do. Aware of the transformation of the cosmos and the decentering of "man" through atomism and particle physics, he seeks to re-establish existential territories that people have lost under the crushing force of the media power and the time-space compressions wrought by capitalism in all its stages of development. Guattari avoids extremes; he navigates between the complete loss of a subject and a return to an autonomous subject. He argues for a mobile subject, an existential territory and agency. A subjectivity—or, for my purposes, an "eco-subjectivity," thus reassessed—is crucial to obviate its leveling by the media.

DETERRITORIALIZATION AND RETERRITORIALIZATION

Media power insists on a perpetually present time and separates people from environment and habitat.[4] It reduces complex differences to slogans and sameness. And loss of differences threatens the existence of life. In order to maintain one's difference, one has to have a minimum of *existential territory*. Guattari's concept of existential space that is lived affectively undoes its inherited existential frame. It no longer deals with a division between subject and object. Beings, neither quite autonomous nor endowed with an immutable foundation, assembling for affective reasons on a common *"Grund,"* an existential territory in movement and transformation, open onto becoming and process. A series of assemblages between humans, animals, plants, cosmos, and machines constitutes an open whole. Assemblages are complex and differential, rather than binary. Territory is a physical *and* mental space that allows for movement between and toward subjects. No moment of sublation or resolution is possible where there prevails an infinity of modes of becoming with moments of intensity, plateaus, thresholds, and points of bifurcation.[5]

Aware of the relations extending between what he calls (1) mental, (2) social, and (3) natural ecology, Guattari respects as fact that one does not act unilaterally *on* an object but that much is triggered by the respondent part, an "interlocutive" part of a dialogue, with origins or causes that may be far away.[6] Interrelations of myriad responses and demands produce a world that, because of its aspect that resembles Brownian

movements, can be called a "chaosmos." Humans interact with each other *and* the planet. A political change cannot be the equivalent of a simple power move exerted on single areas of limited social units. It has to be accompanied by a rethinking of our values and implies a new ethos, habitus, and an existential mutation affecting the world at large.

It appears that Guattari reformulates Bateson's dictum: "Our values are wrong." Ecological problems are not as much the result of technology as of dominant modes of valorization of human activity translated into political and economic programs. On the one hand, dominant values subordinate everything under the imperative of a world-wide market that laminates particular systems of value and puts material goods, cultural goods, and natural sites on the same level of equivalence. On the other, they put the whole of social and international relations under the power of police and military machines. The states that are in this fix have little input and are under the double sway of the market and military-industrial complexes.

The implicit question asks how we might bring about existential mutations that would remedy the situation, how we can be enabled to disengage ourselves from dominant cultural values, and how we can construct another culture. How do we, in Guattari's words, deterritorialize and reterritorialize ourselves? How do we move away from ossified ideological constructions? At a time when the East/West block dissolves, for real changes in politics to occur, he proposes we might wish to effectuate changes in values or *mental ecology*. We cannot simply substitute new multipolar stakes for the old class antagonism and dualisms. New states that correspond to a very intense "complexification" of social, economic, and international contexts, are coming to the fore. Bateson's teaching in matters of ecology are being revived and displaced. The demise of dualisms, of unilateral and linear thinking, and the verification in all domains of feedback loops, many of which may not even be known to humans' consciousness and attention to complexities, make action exceedingly complicated.

Until now it has been implicit that class struggles inherited from the nineteenth century have contributed to bipolar, homogeneous fields of subjectivities. The concepts of left and right, issued from the French Revolution, became crystallized in our century and culminated after World War II. We have seen how the structural revolution assailed much of what is now perceived as the outmoded dogmatism of leftists. After 1968, structuralists, a group then including the French feminists Hélène Cixous and Catherine Clément—also adepts of Lévi-Strauss's teachings—bifurcated from dogmatic, reductionist versions to a more intellectual type of textual leftism. During the second half of the twentieth century, be it through consumerism or the media, whatever attracted intellectuals to join the French Communist Party in the first place and thus to sympathize with the working class dies off.[7] As adepts of Virilio would have it, the immobile citizen in his or her static audio-visual vehicle is lulled to sleep and thinks little about citizenship and social involvement. Though class differences are lived along a much sharper and much more extreme division with new inclusions and exclusions, different social classes now share the same imaginary and the same fantasies. Immobile citizens, rich and poor alike, watch the same media productions, regardless of class or even geographical location. These unidimensional aspects of the West have been taken over by parts of the East and the Third World. The implicit notion of control replaces that which was exerted formerly by institutions. While a certain inevitable massification results from rapidly rising demographic growth, an objection to a concerted leveling effect, instituted by the

mass media, focuses on universal equivalences that fall under the sign of maximization of profit. As a result, economic exploitation as well as natural and social ecological deteriorations become painfully more obvious in the 1990s than they had been in an accomplished but far more limited way two decades ago.

The temper of *Les Trois Ecologies* can be attributed in some measure to that very difference. The overall political edge of Guattari's argument is sharpened by several propositions. First, ecological struggle means above all a re-equilibration or a reorientation of technological means to construct a culture not dominated solely by values of competition, war, and profit. This has nothing to do with an anti-scientific and anti-technological stance. Guattari does not argue for the return to a pre-technological world but for an urgent necessity to reorient technology towards humanity. Existential mutations that are necessary for this imply a new understanding of the biophysical functioning of the world *and* a change in values. Second, ecological problems can be solved through sagacious use of technology turned *toward* humans, when ecology is redefined as the art of dwelling, of occupying a mental and physical space, and of mapping out a territory (see de Certeau 1980c). Urbanization of time and space, for example, can be inflected differently when technologies are reoriented.[8] On a smaller scale, reforestation or rebuilding of wetlands, for example, cannot be done without changing the inherited mental "diagram" that maps out what is believed to be human *habitus*.

ECOLOGIES IN HIERARCHY

In order to deterritorialize and reterritorialize along the lines of what he calls a generalized ecosophy, Guattari posits that there must exist a reconstruction of subjectivities. Traditional dualistic oppositions that guided social thought and geopolitical cartographies for decades are now, he says, a thing of the past.

> We are no longer dealing, as with earlier periods of class struggle, with what is needed to make an ideology function in an unequivocal way. In the practice of everyday life, in the reinvention of democracy (including architecture, the arts, sports, education), *at stake is the production of mechanisms that will go toward critical reflection, toward individual or collective singularization, rather than a mass-media type production of the same imaginary*.
>
> (Guattari 1989:58, my emphasis)

Ecosophy, to repeat, consists of three registers. Mental ecology, the most important, includes myriad relations from which we make selections and draw diagrams that contribute to the construction of ever-changing ecosystems. Humans construct time and space and, to a strong degree, these constructions inflect changes in the world at large. Mental ecology is prolonged into social ecology, which involves the everyday practices of citizenship. Both the mental and social spheres influence the ways in which humans deal with nature, that is, their interaction with fauna and flora. Following the continental tradition that believes it has succeeded in liquidating nature centuries ago, Guattari

attaches the least importance to natural ecology. Environmental ecology serves as a paradigm for a broader reconsideration of nature, promising and prefiguring a "generalized" ecology with the goal of "radically decentering" present antiquated modes of social struggles, including those of archaic and folkloric groups of nature-lovers and "card-carrying specialists" who "refuse all large-scale political involvement" (Guattari 1989:48). The bumper sticker of Guattari's program would probably read, in black (not green) upper-case, sans-serif bold type, "ACT GLOBALLY, THINK GLOBALLY," contrary to the Sierra Club and Audubon Society, which encourage us to "ACT LOCALLY, THINK GLOBALLY." This last point is not denied. The importance of fixing a common objective at the local level in the shaping of the world has been evinced in 1995 in Europe's successful boycott of Shell Petroleum Products in reaction to its plan to let a spent oil-rig collapse in the North Sea. Ken Saro Wiwa's organization of the Ogoni people in Nigeria may have been halted temporarily when the poet and environmentalist was executed, but may prove successful on the long run. Guattari would say that local action around a common objective can only be temporary, one "step toward" a generalized ecology.[9] Local and global visions are thus articulated, but always with a preference given to broad, global ecological questions. Differential thinking here subordinates the local to the universal.[10]

No one will deny that a problematic issue in *Les Trois Ecologies* is found at the hinge of matters local and global. Environmental awareness begins not only with a perception of degradation of habitat (for example, the expansion of interstate highway systems in residential neighborhoods) but also with the perception of degradation of a social or minoritarian group (hence the central importance of feminism, since women are more apt to be disparaged than men, a point that is a total social fact). Guattari is most sensitive to the ways in which the mass media resemble a form of totalitarianism that, by promoting stereotypical slogans about order, expropriate humans from the world. Therefore, resingularization offers a mode of resistance most necessary as has been reaffirmed throughout this inquiry. Bifurcation, or the breaking off from a totality, singularization, has been figured in particle physics by the atom that collides with others merely by chance.[11] It still does not prevent solidarity or collectivization represented by the network.[12]

Guattari uses the analogy to show that in order to maintain diversity, (re)singularization is necessary. Transformations "cannot be simply *communicational;* they have to bring about *existential* mutations" (Guattari 1989:51, my emphasis). In other words, our cultural values are wrong. Reorientation of communication in a polluted system the values of which have been interiorized will not improve natural and social ecology.[13] To put it yet another way, words that organize have to be prolonged by action, but also they have to be part of an *ethos and habitus*. Guattari appeals to a new existentialism, a mode of being—always in process—of living *in* the world-chaosmos. For this, it is important to establish links between social and environmental degradation, between ideology and erroneous values. Technologies—from the use of teleports to biological engineering—transform human subjectivities. What compresses and immobilizes, however, is an ideology of profit and exploitation. Guattari's program focuses on mental ecology. In so far as its aim is to reinvent the subject's way of being in relation to the body, to space and time, it obviates some of the time-space compressions imposed by current economic strategies. He searches for antidotes to mass-mediatized

uniformization and manipulations through publicity, and electioneering. Transformations in mental ecologies have repercussions on the other ecological registers.

Mental ecology will be one of invention, hence closer to the artist than to the psychologist, who remains too close to "outworn ideals of scientificity" (Guattari 1989:22–3). Technology falsely assumes even now that it can dominate the world and control nature.[14] These ideals are outworn, the more so as they presuppose "objectivity" or a division between subject and object, of framing and delimitation. We need to think less, he argues, in relation to subjects and objects than to a territory that is more mental than physical in its articulation. Eco-subjects can deterritorialize and reterritorialize themselves continuously. Chance and contingencies operate in the formation of territories. Constraints may cease to operate. Yet subjects also make active decisions. And that is where the invention of a future, taking from the here and now, is of importance. To see how Guattari proposes his new discipline, we can invoke Henri Atlan's distinction between the scientist who devises certain scientific "truths," the politician who "prophecies," and the culture critic or philosopher who invents new modes of being (Atlan 1992). The environment then cannot be thought outside of several overlapping mental, social, and natural registers. Mental ecologies shape our construction of nature and culture. They influence citizenship and determine our rights. The concept pertains to ways of being as a singular being (both particular and universal) or in a group. It makes social and natural ecology intersect. Mental ecology consists of multiple relations in and with the world. By deterritorializing and reterritorializing, the subjects break off from a territory and build new, virtual worlds with the imaginative wherewithal that an ecological mode of thinking is best able to provide.

The relations between language and psychic phenomena are useful for mental ecology. Guattari considers that the apprehension *(saisie)* of a psychic fact is inseparable from the enunciation that gives it body. A kind of relation of uncertainty is established between the seizure of the object and the seizure of the subject, which puts in question all reference myths, including those of science. Meaning is always secondary to the affective creation of an existential territory: in Guattari's words, "a putting into existence" (Guattari 1989:26). The frame is exploded. Everything becomes inflected by the speaker and the speaker's affect. The relation between subject and object cannot be asserted with clarity. By loosening the anchoring, one accedes to existence. Being is always processual. It remains unfixed, existing only through enunciative acts that create existential territories.

Such a vision of mobile sets and wholes frees us from anchorings in meanings and beliefs. We trace new lines of flight, new diagrams. In mental ecology, everything evolves in continually changing assemblages.[15] All is seen to be coevolving, just as constraints are perpetually changing.[16] While we have no control over some changes and contingencies, we can decide to inflect assemblages that will be turned toward life or engaged in deadly repetitions. Rather than going back to the unproductive illusion of a peaceful nature in pre-technological settings, we can turn to the uncertainty of the future and combine subjectivities that are not "enframed" by technological breakthroughs. In Guattari's poststructuralist terms: "What is now on the agenda is a 'futurist' or 'constructivist' opening-up of fields of possibility" (Guattari 1989:28). Ecology is no longer separate from *technè* and artifice. It is a technology, a writing. "The unconscious remains bound to archaic fixations only as long as no assemblage exists within which it can be oriented towards the future" (ibid.). And in the future that faces us, temporalities

of both human and non-human nature will demand just such an existential reorientation. In other words, we shall do away completely neither with human time nor with *physis*. But we will also have to recognize the non-human time of machines.

In the social sector that Guattari associates with international capitalism, the danger is that control and manipulations will be (and already are) established by profit-oriented powers. Those developments—the formation and remote-controlling of human individuals and groups—are also governed by institutional and social dimensions. In order to bypass appropriation at the hands of agencies armed with technological inventions, ecology has to be continually rethought. It cannot rely on the conventions of objective discourse.[17]

> Like artists and writers, the cartographers of subjectivity should seek, then, with each concrete performance, to develop and innovate, to create new perspectives, without prior recourse to assured theoretical foundations or the authority of a group, school, conservatory, or academy…. Work in progress!
>
> (Guattari 1989:30)

ECOLOGICAL PRACTICES

In order for Guattari to define his ecological platform in *Les Trois Ecologies* (and by now the reader will have noted the polemic quality of its rhetoric), he has to appeal to two currents of thinking. One is the consciousness of the tesselations of mind and nature that characterizes hard-core structuralism, of Lévi-Straussian signature, which was vital for study of the relations of humans to environments. The other is the late-coming version of pragmatic ecology, the "mental ecology," that he cribs from Gregory Bateson's *Steps to an Ecology of Mind* (1972). Bateson uses oppositions of "controlled" and "runaway" structures to show that, as Guattari quotes in the epigraph to his pamphlet, "there is an ecology of bad ideas, just as there is an ecology of weeds".[18] The principles that structural ethnography put forward are latent in the text, residing here and there, *en sourdine*, and are invariably overshadowed by the revival of the empirical strand of Batesonian investigation. Guattari's "mental" ecology derives directly from the "ecology of mind" that had launched environmental awareness in British and American contexts two decades earlier. Structuralism and poststructuralism were vital in separating language from referent and in showing how everything is a construction or a composition. They also evacuated subjectivity and opted for non-intervention in nature. A return less to an "eco-subject" than to subjectivity is important as long as it integrates the lessons of these movements, in particular those of construction, non-mastery and of decentralizing humans. The structural character of ecology is felt when Guattari writes:

> It is quite simply wrong to regard action on the psyche, the socius, and the environment as separate. Indeed, if we continue—as the media would have us do—to refuse squarely to confront the simultaneous degradation of these three areas, we will in effect be acquiescing in *a general infantilization of opinion, a destruction and neutralization of democracy*.

> We need to 'kick' the habit of sedative consumption, of television discourse in particular; we need to apprehend the world through the interchangeable lenses of the ecosophy.
>
> (Guattari 1989:32, my emphasis)

We witness a focalization of an issue that might appear, in the world of philosophy and myth discussed in the chapter above, ungrounded. Chernobyl and AIDS, Guattari reminds us, have abruptly revealed to us the limits of the techno-scientific powers of humanity and the turning back of the lever that "nature" has in store for us. To this, there have been added famines, and massive destructions of habitat that lead to human expression in local demonstrations or in insurrections. From this evidence in the "ecosophical" context, a taking charge and a more collective administration to orient technology and sciences toward humans are necessary. But, it would be absurd, he infers, to go back to reconstitute old ways of being. Never again will human work or habitat become what they were, even a few decades ago, after the computer and robotic revolutions, after the development of genetic technology and after the globalization of markets. Any claim to return to a former time, even if it would be Lévi-Strauss's parodic identification with the Neolithic Revolution, falls into the trap of sentimentality and nostalgia. In a certain way, writes Guattari, one has to admit that one has to "make do" with the current state of things. But doing so implies a reeomposition and reorientation of objectives and of methods of all social movements in *today's conditions*. It is a question not of going "back" to a nature that can be controlled by the delimitations of certain factors in a structural analysis, but of constructing the future in such a way as to ensure diversity and relieve suffering.

None the less, though downplaying the part of natural ecology, Guattari remains faithful to French ethnographic traditions and argues not only that nature cannot be separated from culture but that, in fact, nature is a universal. To understand the interactions between ecosystems, the mechanosphere, and the social and individual universes of reference, we have to learn to think, in Guattari's terms, "transversally." He convincingly shows that as the waters of Venice are invaded by monstrous, mutant algae, so television screens are peopled and saturated by "degenerate" images and utterances. In the realm of social ecology, many human forms of algae are proliferating unchecked. Those whom they condemn to poverty are the social equivalent of the dead fish in environmental ecology.

Disasters of social ecology include the deterritorialization of the Third World, which affects the cultural texture of entire populations, and devastates both climate and human immune defenses. Child labour is rapidly growing far beyond its nineteenth-century proportions. Poverty of women and children is increasing and further destabilizes many parts of the world despite real (slow) gains of women world-wide. Despite advanced technologies, humans find themselves repeatedly on the brink of situations of catastrophic self-destruction. How then is it possible to regain "control"? When Guattari signals "control," he changes gears. All of a sudden the Batesonian ethic of maintaining steady-state environments (as opposed to letting chaos "run away" and cannibalize ecosystems) is used to politicize what had been drawn from the social reforms that had been on the agendas of protesting students and workers in 1968. He argues that while change is unavoidable and desirable, current acceleration, over the last three hundred

years and especially over the last thirty years, is due to application of outworn ideas: that is, "weeds," which include a paranoid drive for *mastery* or a sense of *laissez-faire*. In such a system, corrections are only forcefully implemented. And this system is linked to a way of thinking, a martial behavior, that gets varnished over by economic warfare and competition benefiting a happy few. Such a fossilized, rigid system in which everything is objectified or commodified has to be replaced with ecological thinking *and* a practice, or an art, of the eco. Guattari writes:

> Process, which I counterpose to system and structure, seeks to grasp existence in the very act of its constitution, definition, and deterritorialization; it is a process of 'setting into being' instituted by expressive subsets that break with their totalizing frame and set to work on their own account, gradually superseding the referential totality from which they emerge, and manifesting themselves finally as their own existential index, processual lines of flight.
>
> (Guattari 1989:36)

The tenor of the sentence betrays the history that has informed it. First, the couplet "system and structure" derives from Anthony Wilden's attempt to reconcile Lacan and Bateson (Wilden 1972). For here we see that "system and structure" are somewhat quickly taken to be static entities, monoliths, in which nothing that was heterogeneous to the system was allowed to circulate. As was observed in Chapters 3 and 4, structural anthropology and systems theory was anything but that! In fact, as methodologies passed from the mid-1960s to the later 1970s, "structuralism" became more and more associated with what it was not, structural formerly being understood as a dynamic and evolving set of relations.[19] It may be that an "intellectual futures" market tended to identify "post"-structuralism with what for strategic purposes it had decided to repress or set aside. Here Guattari appears to be turning on a tradition that informed him. He finds greener grass on the other side of the Channel and perceives his own yard to be a bed of weeds. He is seduced into thinking that pragmatic anthropology can provide long-term solutions to the many ills he dispassionately lists in his treatise. In the same sentence, however, in the second clause, he returns to what had just been assimilated into Bateson; freedom from "referential totality," an "existential index," and "processual lines of flight" recall more directly the tenor of structural ecology, which had built its case, as we have shown above, in complicitous opposition to dialectical thinking. Guattari wants an existential process, but he does not wish to leave it anchored, as did Lévi-Strauss before him, in dialectical philosophy. In fact, when the pragmatics of Guattari's ecological resingularization become too pragmatic, he reveals a deeper affinity with the long-range ecologies of *La Pensée sauvage* (Lévi-Strauss 1962a) and its variants.

We have come back, in other words, to an existential vocabulary whence we began, but with a difference. Far from dealing with subjects apprehending an object, we now speak of the double seizure of "subject" and "object" and of the creation of existential territories. These territories—natural, social, and mental ecology have this in common—are a finite entity or, in Sartrean terms, a "for-itself." They are singular and singularized. They can open into deadly repetitions or into praxes that enable them to be rendered "inhabitable" by human projects.

By way of existential territorialization, the reader of *Les Trois Ecologies* can continue to deduce that ecology is as much an "art" as a science. The very point was advanced in the first chapter of *La Pensée sauvage*, in which myth-making was seen as a conflation of primitive art and science, an ideal but also a practical way of thinking and working through issues pertaining to matter, environment, and life. In daring to show that primitive science is technology's art, Lévi-Strauss collapsed the opposition that C.P.Snow had long ago shown to be inviolable in *The Two Cultures* (1959). Now Guattari mobilizes the conflation to show more clearly how we can understand what an ecosystem is. Attempts at controlling or arresting them are not possible. There are no closed "systems" any more. By definition, the "art of the eco" is *process* itself. A practice based on openness constitutes the very essence of an *art* of the science of ecology that goes through all existing ways of domesticating existential territories, modes of being, the body, the environment, the contextual assemblages of ethnic groups, including general rights of humanity. Vertical, hierarchical power assemblages *(pouvoir)* are replaced by horizontal, spatial assemblages *(puissances)* that enable social change.[20]

If such a mental ecology is to have an impact, however, either on individual level or collective life, it will not be necessary to import readymade concepts or practices. We need mental ecologies that enable us to reevaluate work and human activities in terms of criteria other than those of profit and productivity. We have to see how natural and social ecological problems are part of the same error of thinking. Ecosystems are process, and ecology is less an objective, scientific discipline than a mode—an art—of thinking differently, in relation to subjective assemblages, to constitutive existential territories rather than a clear-cut way of dividing between a subject and an object, or of assigning limits and boundaries.

ECOFEMINISM: A REMAINDER

A nagging problem remains. If Guattari shunts aside a critical current that inflected the revolutions of cultural theory in May 1968, and if he appeals to Batesonian models to assure that "open" and "non-runaway" systems can be maintained to produce a deeper and almost unconscious environmental awareness, he only infrequently touches on what the stakes of ecofeminism might be in the overall deontology. He implies that anti-environmental organizations have always reified females, but that no "analytical methodology" comes forward to solve the problem (Guattari 1989:57). The experience of institutional analysis is needed, and so is an "immense construction of social cogwheels, in order to take care of the unnatural waste and human garbage that Integrated World Capitalism has produced. No sooner than they are mentioned do women disappear into thin air. In a coda, I would like to argue that the issue of women and ecology is problematic for Guattari, and that it has to do with a broader network of concerns. Although these concerns lead him to a heightened degree of awareness, the same awareness is attained, to a strong measure, at a high cost of exclusion.

One of the dominant leitmotifs in Guattari's work resounds in *Les Trois Ecologies*, while another, which will be taken up in the following chapter, is practically absent. He invokes the "machine" or "machinic" virtue of all praxis to rearticulate the concept that was developed in *Mille plateaux*, co-written with Gilles Deleuze (1980), of the "CsO"

(corps sans organes) or "body without organs" (ciphered in English as the BwO), which fits into a polemology that uses "war machines." The other, which is hardly resonant here but is outlined at length in *Mille plateaux*, is the process entitled *devenir-autre* and its combinative possibilities: *devenir-animal, devenir-femme, devenir-tique, devenir-loup, devenir-plante, devenir-cafard* (becoming-animal, becoming-woman, becoming-tick, becoming-wolf, becoming-plant, becoming-cockroach), etc. Both are interwoven in the earlier study but now seem to diverge under the stress exerted by Gregory Bateson. An important passage is illustrative:

> The particular principle of environmental ecology states that everything is possible, the worst catastrophes as the most supple of evolutions. [Guattari footnotes Bateson's "budget of flexibility," which illustrates the ecology of the acrobat on a high wire.] In the future, natural equilibriums will require greater human intervention. A time will come in which immense programs will be needed to regulate the balance among ozone, carbon dioxide, and oxygen in the atmosphere. Environmental ecology could be easily requalified as *machinic ecology* since, both for the cosmos and for human praxis, machines are everything, and I would even add war machines. Since time immemorial "nature" has been at war with life! But the acceleration of techno-scientific "progress," when conjugated with the enormous demographic growth of the moment, implies that an escape forward needs to be engaged immediately if the mechanosphere is to be controlled.
>
> (Guattari 1989:68)

Hence he argues that "defensive" strategies of saving forests, sea, or deserts must be turned into an "offensive" program of repair and global maintenance. Bateson looms large because present are an ideology of *control* and an impulsion to contain ecologies that would overflow or turn into runaway structures. In the rhetoric, the world is no longer an organic mass, no longer a site under the benevolent maternal auspices of a Goddess Natura or a *Mutter Erde*. It is a driven "object," expanded into a chaosmos that can be adjusted and tuned or refitted with materials set in place with what he and Deleuze called the help of the "philosopher's toolbox," containing conceptual socket wrenches, feeler gauges, calipers, lock pliers, and timing adjusters.

In this metaphorical matrix the world becomes a body-without-organs, in so far as its non-organic and mechanical strengths are underscored. But at the same time, Guattari does not articulate a strong ecofeminist bias in the vision of praxis. It still remains, because of the persistence of Bateson's paradigms, an essentially masculine world. In the *Mille plateaux* the body-without-organs was a kind of homunculus, inspired by Antonin Artaud's vision—"'now tie me up if you like, but nothing is more useless than an organ'" (Deleuze and Guattari 1980:168), which is done with all the "organic" responsibilities that Western history has assigned to different parts of the body. It becomes not an object but a site of intensities (ibid.: 189) where a variety of "plateaus" (Deleuze and Guattari actively avow their allegiance to Bateson, the originator of the term) defines regions of continuous intensity that are not crowned or tipped by an exterior terminal, such as a finger, a toe, a nipple, a meristem, etc. The body-without-organs is constituted by a

thousand or so plateaus that refuse being named by codes that might translate caudal shapes into different taxonomies.

In 1989, when Guattari revamps the body-without-organs to typify the world, he bypasses an extraordinarily potent, feminist formulation of a similar concept, the political and ecological virtues of which are more evident than what can be obtained from Bateson: the *cyborg*. In Donna Haraway's "Manifesto for cyborgs" (1985), a broadly based, non-schizoid (but ironic) tract argues for a redefinition of the "woman" who had once been shackled to figures of generation, gender, birthing, production, goodness, abjection, filth, beauty, and the like, but who is now *remachined*. She calls the cyborg a cybernetic form, "a hybrid of machine and organism, a creation of social reality as well as a creature of fiction" (Haraway 1985:65), that changes "what counts as women's experience in the late twentieth century" (ibid.: 66). She uses it to replot women's social and biological reality and to revolutionize the relation of nature and culture in the *oikos*, the world-household. It is more biotic than biological, more simulated than represented, more a surface-effect than a product of depths and origins; it produces noise rather than heat; its parts are constructed along modular rather than fictional lines. It does not reproduce but replicates. The cyborg does not fit in "community ecology" but world-wide *ecosystems* (ibid.: 80), and if it is related to war machines, it is better imagined in the context of *Star Wars* or *Blade Runner* than the European and Pacific theaters of operation in World War II. "The cyborg is a kind of disassembled and reassembled, post-modern collective and personal self. This is the self feminists must code" (ibid.: 82).

And that is what she does with cyborg ecology as well. In their current state, organisms are no longer "objects of knowledge" (Haraway 1985:83) to be studied on the basis of something unknown that inhabits their inner depths. As Bateson would say, they have become "information processing machines," but *now*—and here is Haraway's brilliance that turns the memory of the schizoid, frenetic body-without-organs into a real form of praxis that neither Bateson nor Guattari would have imagined—their character of difference allows for "probing the history and utility of the concept of the ecosystem" (ibid.: 83). Because the cyborg shows that "the difference between machine and organism is "blurred," and because "mind, body, and tool are very intimate terms" (ibid.: 84), its feminine being can attack, like a replicating virus, the "homework economy" that has plagued the female in the development of international capitalism, that is, the *oikos* in which women have turned into impoverished bodies in the wake of the overall deskilling of labor.[21] It is the Third World and the *tiers-mondialisation*, the "third-worldification," of life in general that the female has been one of the first to experience. Haraway uses her own body to illustrate the phenomenon. She admits having striven to become "herself, her body," not by force of subjectivation that would follow the individuating process of ego or oedipal psychology, but as a result of greater historical forces:

> A Ph.D. in biology for an Irish Catholic girl was made possible by Sputnik's impact on U.S. national-education policy. I have a body and a mind as much constructed by the post-World War II arms race and cold war as by the woman's movement.
>
> (Haraway 1985:91)

The consciousness of having been fashioned as she has before she was born both likens Haraway to the cyborg and articulates a concomitant ecofeminism that lives along boundaries, but in fact also espouses *writing* without relapse into rehearsing myths of wholeness, which is done with eschatology and myriad scenarios about "the end of time" or the "end of history." The ecofeminist writing on the part of the cyborg advocates a politics of noise and pollution that rejoices in "the illegitimate fusions of animal and machine" (Haraway 1985:95). Why, at this juncture, can we not posit that a lyrical and practical "terrorism for our time" is written into the cyborg? It is a war-machine more effective than the regulatory schemata that Guattari borrows from Bateson. It is more anchored in sociotechnical realities of class conflict and oppression than the Deleuzian and Guattarian "body-without-organs."[22] It constitutes a dynamic praxis of ecology much more fitting for our historical moment than Luc Ferry's antiquated Republicanism of informed, consensual, blandly neo-Habermasian debate; or no less Jean Baudrillard's seductive phrasings about self-contained, self-regulating, history-generating simulation. The cyborg accounts for all of these phenomena and has not lost its use-value since its foundation over a decade ago.

The historical origin of the cyborg reaches back, as Haraway's autobiographical insert about *sputnik* reveals, to the international heritage of what founded *la pensée 68,* and what she calls, in allegiance with what Lévi-Strauss had put forward in *Tristes Tropiques* (cited in Haraway 1985:106, n. 31), a writing that materializes "the basis of seizing the tools to mark the world that marked [women and women "of color"] as other" (ibid.: 94). The writing aims at illegitimacy, "not of women born" (ibid.: 96), so that they will not play out scenarios of victimization or creative individuality that would afford them personal or literary signatures. The relation that the cyborg holds with writing recalls the tidal wave of 1968, but it does so in regard to ecological components of structural thinking of that time.

In ending this chapter I do not want to say that Guattari, forceful as his ecological proposals may be, should be faulted for having overlooked the politics of Donna Haraway's ecofeminism. Nor do I want to admonish him, after developing a review of his ecological positions, for straying away from a strong basis of eco-practice that had been mapped out in Lévi-Straussian mytho-logics. I do, however, want to maintain that the feminist element of the "three ecologies," of "existential reterritorialization," or of the "war-machine of bodies-without-organs" cannot be underestimated if it is transposed into a context of ecofeminism. For the purpose of charting out the history and the future of ecological practices that exploit the fabulous advances that women made in the 1980s, we must not fail to see how they are affiliated with some specific elements of structuralist ideology.[23] If we recall, for example, that the thrust of *Tristes Tropiques* was oriented in a direction that sought to draw "man" away from a central position in the world and to diminish the importance of "his" effects on the biosphere, we can note some of the broader affiliations that Donna Haraway's ecofeminism shares with a tradition associated with two decades of critical theory. The same theory reaches back to Baudelaire's remark about landscape painting in the *Salon* of 1859, in which he excoriated French paintings for inserting humans into their landscapes, or to the poet-critic's taste for illegitimacy and misanthropy in general.[24] Or it can roll back to Montaigne who, in the *Apologie de Raimond Sebond* (1580), a founding anti-Cartesian text *avant l'heure,* flatly stated that "nous n'avons aulcune communication à l'estre" (we haven't the slightest relation with

being).[25] We have in this quasi-infinite degree of cultural theory, from Montaigne and Baudelaire to Lévi-Strauss, a critical "ground" that allows for a continuous reshaping of ecological and feminist agendas. To see further how they can be articulated, and how their awareness changes according to time, discipline, and context, I would like to see how a local politics and a praxis of reterritorialization have also emerged from the thought of Michel de Certeau, in the concept and organization of "spatial practices."

Chapter 7
Everyday life
Ecological practices

By now, what has been chosen as a "founding" moment in this inquiry, the heritage of 1968, may have reached some of the limits of its effectiveness. In the preceding chapters, the urgency of a reassessed ecofeminism becomes clear for political agendas that will animate the inert "state of things" that Paul Virilio uses to describe electronic technology under the hegemony of informational capitalism. What he surmises about Heideggerian "questions concerning technology" are indeed prods or catalysts that are more than likely to turn environmental awareness into programs of action. We discovered that the work emphasizes how a political force will be gained from *writing*—against publicity, images—or by acceding to collective, interconnected contacts that succeed in articulating ecological and political issues; that will, if occasion permits, disseminate them; that will, it is hoped (in the best of all possible worlds), yoke ecological policy to the international coordination of women's movements. In arriving at these conclusions a corner was turned in respect to the itinerary that began with *la pensée 68*.

As in the rhetoric of the period, it "had a dream." It foresaw the overlapping of the human sciences or, in the words of Lévi-Strauss (1955:63), the melding of Freud, Marx, and geology. It sought to create a practicable life in the future based on a Utopian moment without tomorrow in the present.[1] It may best be known for having wished to wrestle free from constrictive ideologies by abandoning itself to the intransitive but exhilarating process of writing. No matter what the results, these and other aspects of the loquacious revolution seem pale in view, now, of what faces the world in the next century.[2]

Michel de Certeau is not a household name in the worlds of either ecology or ecofeminism. He does not figure in Carolyn Merchant's valiant and powerful *Radical Ecology* (1992), although his writings anticipate many of the conclusions she lists when summing up the contributions of radical theorists and radical activists (Merchant 1992:236–41). He is absent from Val Plumwood's *Feminism and the Mastery of Nature* (1993), but he had already laid the historical groundwork that ratifies its hypotheses: in his various studies of state reason, official piety, and mysticism, when in both *L'Ecriture de l'histoire* (1975) and *La Fable mystique* (1982) he outlines the overall politics that constitute the mastering of nature. Teresa Brennan does not mention his psychoanalytical views of environmentalism (in *La Culture au pluriel* (1993)), developed from a long collaboration with Jacques Lacan, in her *History after Lacan* (1993), a work that relates psychoanalysis and history to political economy and ecology. Were de Certeau alive today, he would no doubt respond with spirited enthusiasm to her analysis of the "fixity" of things, while perhaps agreeing that he—and Lacan—had, after all, neglected the real economic dimension by concentrating on scriptural, and not political, economy. Here we

begin to see clearly the age-old difference between cultural and economic theory. We can also fathom the limits of cultural theory, especially when it enables us to persist in making pronouncements completely separate from the political and economic practices upon which our existences are founded. Undoubtedly, this contradiction was not yet felt as sharply by de Certeau, who seemed to live what he preached.[3]

Until recently, de Certeau has figured in the margins of the aftermath of 1968, despite the evidence that he remains one of the most articulate and most copiously published spokespersons of the May rebellion. The articles published in French dailies and weeklies during the turmoil may have been eclipsed by the more commanding writings he authored in the human sciences (see de Certeau 1994, chs 1–4:29–87). The marginality of de Certeau may be caused by the fact that, as a historian of religion, a theorist of history, and an adept of heterology, the extreme focus of his environmental awareness has never become known in any complete way. Or else, because he refused to be affiliated with any site or institution, his nomadism kept him from being identified in any ideological topography. As a consequence, the ecological reflections are mosaic in quality, "like bits of truth" that resemble what he picked out of Freud's *Moses and Monotheism* (de Certeau 1975: ch. 9; 1994:267).

In this chapter I would like to map out how and where that may be the case. Most of my attention will be directed toward his studies of everyday life, to microgroups in Third World nations and, more implicitly, to his ongoing practice of writing, a theme that ultimately ties feminism and ecology to poststructuralist theory. For this reason the implicit work on writing and the environment will serve as an evaluative measure for the final chapter, in which I shall return to the tradition of a feminine writing in light of the issues opened in this and the preceding chapters.

De Certeau argues that European history has been indelibly marked by the influence of the "State." It was, in the age of Louis XIV, an inclusive system of rationality that the minister Colbert mobilized for the ends of centralization, although in fact the brilliant and enterprising administrator really actualized what the geographers of Henry IV had mapped out to determine the relation of the king and his subjects. Although the *ancien regime* in France was toppled in 1791, one form of central dictature was replaced by another. The growth of capitalism put economic powers at the hub of national and political space. Now, with decentralized conditions, at the end of the twentieth century a "state" is none the less visible in the control that strategic operations—or collusions of dominant economic groups, the media, and governments—exert over billions of world subjects. Systems of "hard" and "soft" repression are ubiquitous.[4]

When individuals are faced by repressively "hard" systems, de Certeau observes that "social atomization lends nowadays a political pertinence to the question of the subject" (de Certeau 1980c [1984]:28). He insists that faced with the loss of any speech through technocracy and mass-mediation, the "subject" is required to splinter off from a totality, to *resingularize* or, as he would have it, reopen the question of agency. People react to technocracy and mass media with a reaffirmation of the local sphere: "The proof, the symptoms represented by punctual actions, local operation and even the ecological formations that, by definition, are preoccupied with collective management" (ibid.). For de Certeau, ecology intersects on a margin between the natural, social, and cultural spheres. A defense of nature is also the defense of a right to live, to be and become. Resubjectification, an attempt to reappropriate the system in ways that *do not* serve

reigning ideologies, is based on inventions and creations of consumers that aim at a therapy of social worlds in deterioration. De Certeau thinks transversally, making a link between ecosystems that international capitalism seeks to polarize and ecological issues that pertain to local cultures. Ecology takes on the double meaning of being at once a social and natural concern aimed at measuring habitability. It is the dominant, technological system that enslaves people and pushes them out of habitat.

> When faced with a system that tries to impose its control, a way of using [it] constitutes resistance to a historical law of a state of fact and its dogmatic legitimations. A praxis of an order established by others redistributes its space; at least, it opens to play. In other words, it opens a space in an area of repression and compression: This is where the opacity of popular culture, the black rock that refuses assimilation, would be manifested…. There are a thousand ways of playing with and against the other, that is the space instituted by others, and that characterize the subtle, tenacious and resistant activity of those groups that, since they have nothing of their own, have to make do with what they have.
>
> (de Certeau 1980c [1984]:59–60)[5]

By opening a little space for play, no matter how narrow its window, something is being dislocated.[6] Instead of focusing on representations of behavior of a society, de Certeau proposes to look at how groups or individuals *make use of*, "do with," or "tinker about" social space. He deals with physical activities and affective reactions that, despite the presence of manipulation, still hold: what does the television spectator "fabricate" with the images she or he receives? What does he or she do with the urban space, with the products bought at the supermarket or the narratives told by women's magazines or the daily newspaper?

The ordinary citizen's "fabrication" is an active production, a poetics concealed and hidden, because it is disseminated in regions defined and occupied by television and commercial urbanization, and because, increasingly, totalitarian extension of these systems does not leave consumers a space where they can mark what they do with imposed products. To a rationalized, expansionist and centralized, noisy and spectacular production, corresponds another, a production qualified by "consumption." The consumer balks at the product or refuses to use it. This response that de Certeau calls "ruseful" may simply be, as in Guattari's program, affective. It does not signal itself through products but through ways of *using* otherwise the concept of the commodity as it was advertised by a dominant economic order.

In other words, consumers are also poets who invent their techniques, their arts of doing and of living. They cultivate an "art of the *eco*," in Guattari's terms, and are no longer passive recipients of whatever a strategic center, a state, or an ideology imposes. De Certeau too shows that no unilateral circulation passes between subject and object. The respondent part triggers something. Consumers open a habitable *space*, an abstract or a concrete *territory*. They less react to a situation than they open an *elsewhere*. Though dealing with a power that eludes them, a power that if they were to face it directly or dialectically they would be murdered, consumers can make use of an oblique struggle that will not reduce them to utter passivity. By introducing a wedge in the system, they

dislocate something that can lead them to a continual reorganization of their cultural space. Such agency occurs in quotidian creations. “These ways of everyday practice, these procedures and ruses of consumers constitute the network of an antidiscipline” (de Certeau 1980c [1984]:14). Such a space that has to do with words and enunciation is different from consensus or polls that are but applied technologies in disguise. It is just such an applied technology that attempted to dominate nature and human subjects.[7]

As we saw by way of Virilio, technological systems in the hands of corporate strategies often reduce people to immobile, inert, and terminal conditions. They proscribe exchange of language, use information instead of enunciation, and turn the individual into a valid invalid. What the subject can do is to deter imposed orders by reintroducing *space* and *time* into discursive activities. The tactical subject is he or she who punctuates language with different cadences, or who measures speech according to a ground covered on foot or crossed by self-propelled means. Creative use of space and time in symbolic relations jostles the meaning they impose. Montaigne once said, “My thoughts go to sleep if I sit them down” (Montaigne 1588 [1988]:828) and Nietzsche was the choreographic philosopher who conceptualized as he danced. In an ordinary condition, then, merely to walk or talk is to remain unproductive. How to walk, how to dance, these are the questions. A *tactic* of play in and about space and time is opposed to a *strategy* that is used to control the subject by silent or purely spatial means. Words spoken (that is, inscribed, marked, exchanged, or *written*) renegotiate information that is generally circuited by means of spatial control.[8] To be ostensibly unproductive or to use images by scrambling them into new ways constitutes a new tactics.

We have seen time and again in this inquiry that centralized power is dispersed in what are no longer even nation-states. De Certeau would not have disagreed, but he would have argued that more than ever there devolves upon the subject a need to skitter about and to borrow identities that are both multiple and variable. We are no longer escaping from an all-powerful, centralized gaze of a state organ, the eye of the law. It is we, as consumers/ producers, who must become aware of the pressures that we ourselves exert on the world and parry those that are being exerted on us.[9]

Yet de Certeau’s distinction between strategies of takeover and tactical ruses has strong ecological resonance. The tactician is adapted to his or her context, and to the world at large; he or she opens systems that ideology would wish to keep closed. Those practices are “ways of doing,” what he calls “operational performances,” that go back to the Greek goddess Metis as well as to plants and fish. They come up from the ocean and are linked to nature. Tactics, by definition, remain localized. They resist the powers they are deflecting, and, in doing so, they actually reinvent culture. They perhaps well sum up the mood of a moment that learns to recognize and resist a technological power that dresses bodies, and that is said to dehumanize and expropriate. The inverse of Foucault’s more stark analyses, de Certeau’s model calls for ruseful play with power. The tactician invents means that loosen the webbings of controlled space. De Certeau’s ordinary people, all tacticians, walk where they escape the controlling regimes (of the visible) and fray their own passages. On this score, de Certeau makes a distinction between *locus* and space. On the one hand, power is generally visible wherever it is toponymical. The names of streets and places in industrialized cities celebrate those responsible for strategic enterprises: in the United States the streets of every major city are named after the founding fathers of 1776, while in France street-names follow the parabola of revolutions

of 1789, 1830, 1848–52, and 1871.[10] On the other hand, the ordinary person can "re-cite" toponymical space by telling *(réciter)* or writing about it in many different ways. It can be an art of speech, an aesthetics and a politics that introduce a wedge in dominant discourse, dislocating—or deterritorializing—something.[11] Ruses of speech invent or re-invent the world through words that make limp or elasticize the *locus proprius* of power. Speech and writing that are conjugated with space and movement enter an ecological rapport with the world.

> Space would be to locus what the word becomes when it is spoken, when it is seized by the ambiguity of an effectuation, transformed into a term that has to do with multiple conventions, posed as the act of a present (or of time, modified by transformations due to successive environments). At the difference from a locus, it has neither univocity nor the stability of a proprius.
>
> (de Certeau 1980c [1984]:206)

We can say then, that space is a locus *with* a practice that opens onto an existential territory. Geometrical, centuriated, neo-Cartesian space is transformed by experience *in* space that deterritorializes the city, and that reterritorializes in turn, its historical relation with nature.

In this revolutionary configuration, space becomes existential and existence becomes spatial. Now, the difference is between the place that can be reduced to a name (or toponym) and space that can function as part of a practice. Subjects moving about in space are always conditioning the production of this space, a production that is often coordinated with the production of a history. It is easy to see how the birth of the Occidental subject originates when he or she travels in order to be and become.

De Certeau writes in a tradition that sees domination and dehumanization as the logical development of the Second Scientific Revolution and Cartesianism. By now it is clear, if the work of Serres, Prigogine and Stengers, and Guattari is recalled, that such a position belongs to an order of things that theories of open and complex systems have called into question. Nature cannot entirely be dominated by strategic orders. The city, which de Certeau uses as model of the rational space, has undergone many changes. Its proper space has been transformed by electronics. Disciplinary societies with their places of enclosure have given way to societies of (electronic) control. The nation-state, the model of de Certeau's analyses, is rapidly becoming a thing of the past (see Kuehl 1994). It survives as a mere function of international investments. The Cartesian perspective at its basis is now wired by fiber-optic cables and "paved"—if a metaphor that symbolizes the aftereffect of the nineteenth-century city at the end of the twentieth century can be distorted—with "data highways." The appeal to a configuration of travel between urban centers shows that even in the electronic age the idea of walking or ambulating is discouraged. Hence it is all the more imperative that de Certeau's *marcheurs* or *Wandersmänner* resist systems that produce ideal diagrams or maps of life, no matter what their technologies may be. These itinerant souls undo its production of *proper* space from where popular inventions are banned by scientific strategies.

In the context of "open systems," and "non-deterministic" definitions of nature, it can be said that de Certeau takes the present state and orients it toward the future without ever

wanting to achieve a Utopian finality, without proposing any solution to all solutions. In the place of his subjects who escape power are substituted subjects that do not have power, but who decide to assert themselves without creating a totality.[12] The substitution entails *a way of inhabiting the world.* Linking gestures and steps, fraying meaning and direction, travel and the narratives, it articulates another, poetic geography upon the inherited meaning of things. In de Certeau's terms, the anonymous travelers:

> …insinuate other voyages in the functionalist or historic circulation…. What makes them walk are some relics of meaning, sometimes waste, the inverse remains of great ambitions. Nothing, almost nothing, symbolizes and orients the steps. Names that are no longer proper.
>
> (de Certeau 1980c [1984]:191–2)

They do not conquer space by conceiving their bodies as a center to an environing space that is inscribed in an ever-extending circumference. The conquest of space and territory through movement, action, and totalizing narrative is replaced by time, partial movements, and story-telling.[13] De Certeau undoes the constraining order of linear classification through a tactics of movement. Functionalist order precedes poetic disorder (writing).[14] Poetic critique follows functionalist order.

Pushing his model in the direction of ecology, we can say that de Certeau arrives at an ecological practice when he lays emphasis on the interaction of subjects, a site that is a federation of sorts, that he hopes will replace an increasingly antiquated idea of a centralized nation-state.[15] In such a model, practice may "begin" with a parody of the order, with a wedge in, or a break with existing orders. Dislocation or deterritorialization is followed by reterritorialization and production of new configurations. In this respect, de Certeau's analysis of the Indian movements in Central America in the 1970s is critical.

ECOLOGY AND MULTICULTURALISM

"The long march of the Indians" (de Certeau 1980b [1986]) serves as a transition from the private to the public, from a singular and local to a more collective and global (but *not* homogeneous) sense of space. Reviewing modes of resistance expressed by South American Indians in protests and manifestos in the early 1970s (in fact in concert with the impact of 1968), de Certeau shows that the indigenous tribes collectivize and, without sacrificing their particularities, produce a politics of their own temper, free of the antiquated "party" system that in their words is "foreign to our American reality." A long memory of the brutalities and the tortures branded on the Indian body since the Columbian encounter and the establishment of the *encomienda* economy prompts different groups to conceive of a democratic but *self-managing* form that works in ways other than what is known under the name of international democracy, a system of false dialogue that has "oppressed and occulted" their voices. Basing his research on the Act of the Confederación de Indigenas de Venezuela (1973) and other documents, he notes that individual practices can work within and against hegemonies wherever the particular (the local ecosystem) and the broader spectrum (Native America) can be coordinated.

Through the study it becomes clear for the reader that a double polarity of ecological practice inheres in de Certeau's vision. One must, first, decompress, by countering the cult of information, open and make habitable a chosen space. Second, the First World must express compassion for, and solidarity with, those who do not have access and who are invisible, hence forgotten, and those who do not "have" by remembering what ecology has taught us about interconnectedness and pressure relations rather than simple organic composition. Third, the First and Third Worlds must thus seek to meet on common grounds in such a way that complexities of interconnectedness replace the former dyad of self and other.

The Indians whom de Certeau describes are in movement. Walking, they engage in a spatial practice. But they are no longer content with moving away from a centralized power by "resingularizing" or reterritorializing. They claim that recent actions have changed their perspective and that more than a simple reaction against future extinction, growth, and development figure prominently in their objectives. But these objectives will not imitate dominant values. They will be reinserted in a different economic and political system. Living in an ecological speed that differs from those of the post-industrial West, they shape both in fact and in consciousness a peasant and Indian revolution. Two decades later, apropos the Chiapa uprising of 1994, the media talk readily about arson, and murder at the hands of the Indians. They say nothing about the everyday, lived, reality of economic, social, and cultural violence in which the Chiapas and scores of others have been exposed.[16] Indians, less caught up in audio-visual "present time," have a long memory where Westerners have lost theirs. They are oriented toward the future but they also remember the repressions inscribed on their bodies. They link their tortured body to that of the earth, in order to mark a beginning—that is, an initial step that will construct a political association:

> A unity born of hardship and resistance to hardship is the historical *locus*, the collective memory of the social body, where a will that neither confirms nor denies this writing of history *originates*. It deciphers the scars on the body proper—or the fallen heroes or martyrs that correspond in narrative to the index of a history to be made.
>
> (de Certeau 1980b [1986]:207)

The Indians remember the tortures but do not enclose their history into a fixed form, preferring to contemplate the future rather than the past. They make the analogy between their body and the earth and turn to the future for the construction of ecosystems through a politics of growth and development that would not simply imitate Western values based on a general equivalence of all goods. Indians construct their own history, which continues to be, for de Certeau, one with the earth.[17]

The political speech of the Indian seems to be linked to rural "strategies." Ideology—in the sense that de Certeau sees the term in a Christian and Marxist tradition—is usually absent from their demands. A *common* language would only create for the different groups a substitute body. It would replace the "earth," or a territory, with doctrinal speech and efface the federated ethnic groups by imposing an all-encompassing discourse that is counter to everyday ecological practices (de Certeau 1980b [1986]:227). Instituting alliances of each community with a body and a territory allows the real differences

between their respective situation of the nation and the colonizer to be maintained. The Indians exist not against, but *with* their territory and their body. They allow diversity and difference to stand. A loose federation or community interacts in solidarity. The actions the Indians take are directed less toward construction of a common ideology than toward the "organization" (a word that is a *leitmotif* in the essay) of tactics and operations. In this context, the political relevance of the geographical distinctions between separate places is echoed, on the level of the association joining different ethnic groups, in the distribution of places of power, and in the rejection of centralization.[18] Because of this request, Indian awakening has been democratic and self-managing in form; the group can recognize itself in the specific traits of its political organization without adhering to the sham of "dialogue" that Western democracy would otherwise impose upon it.

The Indians develop a political form of their own. They realize that they have a common economic situation with the poor throughout Latin America. Their linkage of *politics* to *economics* prevents them from being fixed or from fixing themselves into a cultural identity cut off from society and from history. Indians have no fixed "identity," the latter changing and coevolving with the political, economic, social, and natural environment. But they also avoid the disappearance of ethnic specificity in the generality of productive relations and class conflicts. The Indians prefer a third political way to avoid both the notion of cultural identity and the loss of self resulting from an imperialist domination of socioeconomic laws and conflicts imposed by the international market. That third way consists in transforming—following strategies of their own—the reality that places them in solidarity with the non-Indian peasant movements.[19]

Similarly, the Indians' specificity is not defined by a given, such as their past, a system of representation, an object of knowledge and/or of exploitation, but finds an affirmation in a "set of procedures," a way of doing things, an *art of the eco* or ecological practice carried out within an encompassing economic system that creates, among Indians and other oppressed formations, the foundations for new alliances. Cultural specificity adopts the form of a mode of being, a *style* of action that can be deployed within the situation created by economic imperialism.

The political determination of cultural specificity in the case of the Indians is the result of a long historical experience that has to do with the rootedness of the ethnic groups in a particular soil—which does not preclude a certain nomadism—to which de Certeau attributes their resistance to ideology. Connections with the earth lead neither to Western representation nor to the separation of mind and body. Summarizing and redirecting de Certeau's argument, we can recall, first, that colonization separated work force—or labor—from its means of subsistence. The Indians no longer owned the land or the tools. The fight for political existence and a lucid analysis of economic imperialism are inseparable.[20] Neither can be separated from an ecological struggle.

Second, the survivors' resistance has found political expression because they claim their *right* to the land. Through this collective alliance, they create an anchorage in the particularity of a place. The land serves as a reference point. It preserves local beliefs and prevents easy superimposition.[21]

This has made possible the designation of a *locus proprius* of enunciation and an existential territory. For de Certeau, it enables the resistance to avoid being disseminated into the occupiers' power grid, or being captured by the dominant, interpretive discourse (see Comaroff 1991). It maintains a difference rooted in an affiliation that is opaque and

inaccessible to both violent appropriation and learned co-optation. The unspoken foundations of affirmation have a political meaning, to the extent that they are based on a realization of coming from a "different" place (different, not opposite) on the part of those whom the omnipresent conquerors dominate. Now, these differences need to be maintained to ensure cultural diversity.

Third, in the case of the Indian, the *style* adopted by the Resistance is related to a particular kind of internal social organization. It has often been pointed out that coercive power is absent in Indian communities, except in times of war. It is the lack of vertical stratification and authority—or power—that can be underscored as the distinguishing feature of the political organization of these Indian societies, which reject a separate representation, or a leader, of the power that organizes them. The goal is the functioning of the collectivity. Authority is inscribed in practical rules, not set above them. Since the "alliance with the land minimizes the role a system of representations can play, and is expressed through gestural relations between the body and the mother earth, the totality of social practices and functions constitutes an order that no singular figure can detach from the group, or make visible to it in such a way as to impose obligations of obedience or offer all of its members supervisory or oversight possibilities" (de Certeau 1980b [1986]:230). Ethnic difference is affirmed using a different political and economic model—rather than conforming to a Western model in self-defense against it.

De Certeau sees the Indians as a Federation of Self-Managing Communities. Where the Western model eradicates differences and wants to expand its own norms to other cultures, these indigenous groups go in a different direction. For them, a new cultural and physical understanding underscores the need for a different economic and political approach as well as an ecological practice that insists on the all-important recognition of different ecological speeds. De Certeau justly predicts the loss of effectiveness of Western democracies, which he sees being undermined by the expansion of cultural and especially economic technocracy. Their slow disintegration is seen along with what had been that system's condition of possibility, that is, differences between local units and the autonomy of their sociopolitical representations. One can surmise that emphasis on self-management all over the globe is attempting to compensate for the evolution toward centralization by recreating the diversity of local governments. That is precisely where Indian communities that were oppressed by Western "democracies" can offer models. And de Certeau adds that it is as though the opportunity for a sociopolitical renewal of Western societies were emerging in its margins, where it has been the most oppressive. The historian of culture does not broach sexual difference *per se*.[22] He is interested in more general ecological practices and opts for singularization necessary for a collective management that would not be totalitarian.

Advocated here is an affirmative model of multiculturalism. It is a model adapted to rural societies and only viable in remote areas. It can, however, be of interest as a model for a kind of ecology that would coordinate environmental awareness and women's roles in the *natural contract* that has been studied in the preceding chapters. It suggests a different relation not only with power but also with nature. Diversity and multiplicity are kept for a better and more democratic functioning of a community that is based on the cultivation of differences.

The Indians hope that one day the white people will realize that all have to evolve together. In his Utopian view, de Certeau sees that day as "dawning." Many years ago, he

speculated that perhaps an age of "self-management" had been inaugurated by this strange coinciding of phenomena in the societies of Europe and America, and by their different forms of political return (de Certeau 1980b [1986]:231).[23] Today, economic war continues to be waged on the "homework" culture, women, unskilled subjects, environmentalisms, and the Third World (and Third Worldification) in general. The preservation of cultural differences and resubjectifications would be in keeping with the project of self-management that is beginning to gain importance not just in South America but everywhere. Opposing ideological exploitation, the Indians advocate an egalitarian labor of differentiation and cooperation, which appeals as much to the relation-ship of a network of communities to a foreign society, as it does to their relations among themselves.

Each would consider his or her singularity. They all would see themselves in a network in constant transformation. The Indians' requests are not to bring us "back to the earth" but to make us realize the existence of other relations with nature that are in accord with scientific evidence about the openness of its functions and the uncontrollable aspects of the future. "The Indian awakening" that de Certeau imagines dawning here breaks with a hierarchical power structure. In de Certeau's vision, Indians do not wish to go back to an anterior, "pure" state of things in a paradise-garden of the kind associated with the Biblical propaganda that had been used to enslave them.[24] Their self-managing communities do not conceive of unilateral power structures and, without an opposition or an enemy to define them, they recognize shifts in emphasis, pressure relations, and bifurcations. They stress the relation that humans have with their environment rather than separating social struggle from it. In other words, they emphasize the immanence of humans in nature and the need for a cultural pluralism that tolerates diversity and biodiversity at local and global levels. An ecological practice that we can formulate from this example consists in acting and thinking adventitiously, along horizontal lines that would foster interrelations both for subjects at large—ordinary people—and with a nature from which they have never separated themselves in the first place.[25]

"The long march of the Indians" figures among de Certeau's many political writings.[26] The effectiveness that the essay evinces makes clear a need for awareness, activity, and coordination of groups that have suffered at the hands of politics usurping the wealth of humans and nature. Its utopian style clearly dates back to the aura of 1968, but in the two decades that follow its initial publication, some of the main lines of its arguments still hold.

PATHS OF WRITING

The struggle for self-determination made manifest in "The Long March of the Indians" drives the South American Indians to construct *other* networks of debate that are not unrelated to ecofeminist practices. Concerted expression, for example, is needed to obtain the rights to inflect the environment for the safeguard of posterity. The work of de Certeau shows by implication that a coordination of women who espouse a non-organic identity will be better prepared to shape the future than any other single group on the globe. However much this speculation smacks of 1968-style idealism, it shows none the less how an orientation of critical thinking, born in a moment of euphoria and vision, has

become something both practical and practicable. To see how, further comparison may be warranted, this time between de Certeau's conceptual history of writing and its definition in Donna Haraway's Cyborg Manifesto."

In the wake of the Newtonian revolution, hypothesizes de Certeau, a "scientific, erudite, or political form of writing replaces the oral and differential writing that had been known throughout the popular middle ages and early Renaissance" (de Certeau 1980c [1984]:202). The new writing is a practice, "the indefinite production of an identity sustained only by a need to make, and to stock itself in the place that was vacated by former oralities." Language becomes "written" insofar as it can be quantified, fabricated, inventoried, and hierarchized. More drastically, the technique of writing is instrumentalized enough to make the writer he (but not she) who has the privilege of inscribing his laws on the servile bodies of others. The Indian, the woman, the slave, or the worker becomes the surface on which the normalizing law of the writing master is copied.

But de Certeau notes that the system is not opposed to orality as might the two terms of a Hegelian opposition, the third surmounting the two that precede it. What is plural or mixed is *already* (or in Derrida's translation of Heidegger, "always already," *toujours déjà*) originary, difference residing in the two at the same time. Only when writing becomes a silent authority, detached from voice, body, or inscription, does its technical project of domination become clear.[27] In the West, however, orality has come to mean whatever does not produce, or whatever wastes itself away, whatever idles about, jokes, or plays with itself; to the contrary, writing is said to ground reason and become the scientific inverse of the *magic* of speech. "A separation is set into the traditional cosmos in which the subject remained possessed by the voices of the world" (de Certeau 1980c [1984]: 199). A vacant space is opened or inaugurated, and a text is built in its place. An exteriority is discovered on the surface of the white page that is filled with writing. "The island of the page is a place of transit in which an industrial inversion operates: what enters is 'received,' what exits is a 'product'" (ibid.: 200).

As industrialism advances, writing becomes silent: the inventions of perspective, the printing press, and the technologies of ocean travel mark a rupture between a medieval world, founded on religious cosmologies, and the scientific regime, based on theologies of economic growth. Printed or automatic writing conceals speech such that, as founding deities become "hidden" in the early years of capitalism, so also are the murmurs of voice—of other humans, of trees, of animals, plants, and all things in general—that had defined the sensorial world for a millennium.[28] Human subjects who are instituted by the new laws are made mute. At given points, however, women shriek or go crazy. Their outbursts betray the only possible response they can articulate within the codes of the industrial network of writing. "From the first cry to the last, something else irrupts [in women's writing], that would be the difference of the body, at once infantile and spoiled, whatever is intolerable in children—"bad behavior"—such as the screaming baby in [Chantal Akerman's] *Jeanne Dielman* or that shrieking vice-counsel in [Marguerite Duras's] *India Song*'' (de Certeau 1980c [1984]:217). The beggar, the female, or the body that had been nature itself is the return of the repressed in writing.

What de Certeau reviews in his essay on "Scripturary economy" (in de Certeau 1980c [1984]) may indeed sound familiar. In the context of ecology and feminism its force may be attributed to the power that a differential definition of the medium can exert on

institutions and ideologies. The shifting, mobile, written-spoken, cosmic-scientific, expressed-stated forms of discourse work against the purely functionalist and industrial models for its uses, values, or futures. De Certeau's federations of Indians are therefore, in the strong sense, *writers* who are effecting changes in the history that tells about how they had been *written* since the Columbian conquests. The practitioner of spatial language or the person who subverts serious discourses through "ways of doing" can also be qualified as a writer. He or she has no monuments to built, no résumés or *vitae* to document or edify, no institutions to seek to place adjacent to a signature. An active practice is fashioned from what had been survivalistic, and the real virtue of this non-scripturary writing is that it disappears, that it is practical only when it is engaged immediately—that is, has no simple classification (it is not "speech," nor is it ever "logos," or just "verbal flow," "logorrhea," etc.). Above all, its politics do not play into the sham of democratic exchange.

Here I would like to argue that de Certeau plots out with historical coordinates the conditions and the virtual politics of a *feminine writing* and that in the perspective in which they are presented the definition of writing bears a strong affinity for those of ecofeminism. In order to see how we need only compare what de Certeau sketches about the recent history of writing to the telling remarks that Donna Haraway offers about writing at the end of her Cyborg Manifesto. "French feminists," she says, "for all their differences, know how to *write* the body, how to weave eroticism, cosmology, and politics from imagery of embodiment, and…from fragmentation and reconstitution of bodies" (Haraway 1985:92, my emphasis). Other traditions do the same from different points of view and with different emphases. More than the French, American women have "symbolic systems and the related positions of ecofeminism and feminist paganism" that speak to anyone who is haunted by what "the machines and consciousness of late capitalism" have done. She goes on to say that the constructions of "women of color" and the monstrous beings that populate feminist science fiction attest to the mixing of differences that make this heterogeneous type of writing unassimilable or incomprehensible for most democratic, well-intended, or merely liberally convicted beings. They threaten the present state of things, they are not dualistic schemes ("us" versus "them"), and the creations seem to be illegitimate forms, "not of women born" (ibid.: 96).

Haraway implies that a violent politics can issue from the coordination of this hybrid writing, and that it is up to women to know how to practice, decipher, transmit, and disseminate it if they are to change the world. A nascent politics is obvious in the manifesto, just as there had been, in the nod de Certeau gives to "everyday practices," to Third World federations, and an accession to differential writing. Within the two styles of the conception of writing we begin to see how an ecofeminism in fact has origins in the practices of both science and literature. In the last chapter I would like to return to the "scene of writing" in feminist circles of 1968 in order to see where a critical—and possibly "French"—strain of ecofeminism may have budded, what it might have done, and how and where it may go. I shall run some risk in reverting to a past that is done and gone, but for the purpose of moving toward the future with the idea of a grounding origin in view, I shall review and assess the heritage of *écriture féminine*.

Chapter 8
Back to writing
The fate of post-1968 feminine writing

At the end of the last chapter, comparison of the work of Michel de Certeau and the Donna Haraway's Cyborg Manifesto has revealed that a biologist and a historian of religion have some similar notions about writing, and that they both anchor an ongoing politics in its labors and pleasures. A strong degree of environmental awareness is made manifest in the radical definitions that they propose about writing. Now, as de Certeau emerged from the noise of 1968 as one of its most forceful poststructural theorists, and as Donna Haraway has given impetus to ecology through an "ironic" and creative practice of cyborg ethics, it seems propitious to ask how and where a specifically feminine writing, a celebrated style of liberated writing, has affected both the condition of the woman and the politics of environmentalism. In this chapter, I shall review where two prominent but very different francophone thinkers, both products of the ferment of theory three decades ago, are situated and are now writing in respect to the environment. I shall first look at the creative impetus of Hélène Cixous before retracing and assessing a consonant voice, that of Luce Irigaray, in respect to what has been called "mental ecology" (see Chapter 6, page 94).

HELENE CIXOUS: THE LANGUAGE OF FLOWERS

All of Hélène Cixous's voluminous, prolific work—fiction, "theory" and theater alike—consists in rewriting oppositions that she then turns into differences. Despite the apparent "essentialism" of her attachment to the causes of women, she makes it clear that in all areas of life there are no essences, only relations between terms that can be perceived in historical configurations. Presently in the Occident, she notes, differences are turned by reigning ideologies into oppositions and hierarchies (Cixous and Clément 1975). These she sets out to expose and undo through a medium that privileges writing "as" metaphor and "more than" metaphor since it replaces nothing. In the wake of structuralism she puts in question the division between nature and culture elaborated since the early Middle Ages. A phallocratic culture is founded on the exclusion of nature and of women. In at least two distinct moments, Cixous rewrites nature, an inherited term of an opposition, into difference by associating it with women. She begins with a damning critique of the Hegelian dialectic that had spelled death for women and nature. The second, more constructive if not equally dialectical, moment in her work, is part of a shift to Heidegger. In her affinity for the German philosophy she develops new modes of being that live in accord with nature.

In the beginning of "Sorties," her part of *The Newly Born Woman* (co-authored with Catherine Clément, 1975), Cixous notes that binary oppositions underlie most of Western thought. Woman is always on the side of nature, outside of culture, and thus relegated to passivity. Thought is structured by binary oppositions that are ordered hierarchically. A vertical order becomes law and organizes everything that is intelligible at a given moment into oppositions: dual, irreconcilable, sublatable, dialectical. These oppositions extend into Nature/History, Nature/Art, Nature/Mind, Passion/ Action. Theory of culture, theory of society, the whole of symbolic systems, art, religion, family, language, are all elaborated along the lines of the same schemata. And the movement through which each opposition is constituted is the same as that through which the couple is being destroyed. We are confronted with a generalized battlefield. Each time a war is being waged, death is always at work in the constitution of logical categories (Cixous and Clément 1975:115–17).

Cixous approaches the problem of nature from a perspective of philosophy and writing. A semiotic chain is established:

High:	Culture	Mind	Speech	Man
Low:	Nature	Body	Writing	Woman

The elaboration of culture in the Occident is directly proportional to a repression of nature. Culture privileges mind and represses the body. It favors full speech and presence to oneself and devalorizes writing based on absence, representation, and a *techné* or supplement. Man elaborates culture; woman is part of nature. Cixous revalorizes the woman by exposing the locus of her exclusion from a symbolic system. A transformation of hierarchies and oppositions into mere differences serves to disinter the repressed terms. Reasoning in dialectics that requires the death of one term so that the other can live is thus, in a strong sense, deconstructed, its genesis exposed. Masculine culture spells the death of woman and nature. Cixous's program consists of rewriting the opposition so that woman and nature can come back to life. Yet body and woman are always "cultural," "always already" written or ciphered, in the sense of both genetics (inhering in DNA) and cultural process in general (a result of imprinting). No life is possible without writing, without some kind of an inscription. Writing—or *techné*— is now believed to be anterior to speech, indeed to all forms of life. This information is in the flesh transmitted along neurons or pathways.

It has been said that, in a given culture, affective relations are linked to economic relations.[1] Hegelian dialectics deal with property, sameness, and refusal or denial of difference; in such a political climate, men accumulate women and goods and put nature at their service; in order to be identical to himself, man appropriates woman whose role it is to admire him. He derives his identity from an oppositional either/or logic that puts everything under the sign of unity, narcissism, and death.[2] Women die so that men can live. Cixous extends this deadly logic to Freudian psychoanalysis, the founding science of subjectivity, where oppositions are produced and repression sets in when a male order cuts the child from the mother's body and forces him or her to enter into an abstract symbolic realm.[3] The masculine subject asserts himself through negation of the other. He spirals toward the spirit and leaves the body (that is, nature) behind. The world of "natural" language, closer to body and affect, is lost. From there on, a phallocentric,

martial culture puts everything under the sign of grammar and repression, hence a condition that furthers *war*. In her nascent vision of a cultural ecology, Cixous outlines modes of exchange that would be different from those ordered by the masculine tradition and closer to the gift.[4] Subjects are urged to approach each other through tact, to give themselves to each other, freely, without seeking obligatory returns on their investments.

In a second step, important for the rethinking of woman and nature and for the creation of mental ecology, Cixous invents a language before any decisively originary cut can be imagined as that which is constitutive of subjectivity. Emphasizing the mother's (ciphered) body, she searches for a relation with the world that would be "harmonious."[5] There, a masculine language that divides the subject from the mother's body, and teaches him or her through grammar and rules to speak of things from a distance, is replaced with a poetic idiom of proximity. Technologies of application that repress the body have given way to a *techné* as *poiesis* in the wake of a terminology that is drawn from the work of Martin Heidegger. This *techné* is located inside the body. Writing in the sense of "instrumentality" is but secondary and derivative. It opens to a "poetic approach" of the other, by means of which both terms are altered but not annulled. The other is not idealized. A space is opened that welcomes the arrival of the unknown. To loosen the grid, to de-dialectize, is to de-alienate. The process is tantamount to bringing into harmony a relation established through poetic language that reveals being. In this apparent collapse of dialectics, women have a conscious and unconscious memory of their childhood as a paradise garden. They carry their childhood in them like a spring to which they not so much actively return as—somewhat passively—let rise in them. The nature-garden functions as a metaphor, as a paradise of sorts, before the fall, before symbolic separation, before the loss of nature or of the maternal body. The new feminine "subject" will not be cut from the language of nature. It has to listen to things, speak to them:

> I have an Oranian childhood that remembers the plants at the foot of the hills inside the *Jardin d'Essai*. What I can still understand of what the plants are saying, I learned from there. It was a childhood absolutely faithful to the world: natural…. We have been taught a language that speaks from above, from afar, that listens to itself, that has ears only for itself, the dead language of deafening, that speaks to us in advance. We have been taught a language that translates everything in itself, understands nothing except in translation; speaks only in its language, listens only to its grammar, and we separated from the things under its orders…
>
> But I have a childhood that knew. It dwells in the *Jardin d'Essai*. It still knows what I alone no longer know. What it knows, I have so much to unlearn, to know it again. Language distracts us. We let ourselves be led aside by grammar, we let ourselves be distanced from objects by sentences, we let language double us, let it throw itself surreptitiously in front of objects just before we can attain them.[6]
>
> (Cixous 1980:135–7)

In an idealizing gesture, Cixous urges women to return to a condition before the moment of exclusion, that is, before a language conceived as translation grounds all communication, at a time when they communicated and were in communion with nature through bodily immediacy. She condemns any language that separates and that by being imagined as preceding things smothers them.

In this view, identity means fixity, a condition deprived of becoming. It interrupts harmonious flows of giving and receiving. Imposed by society, from the outside, it is always related to arrestation and to death.[7] The language of translation immobilizes, enframes, and kills life. The feminine "subject," by contrast, is attuned to the language of things, to feeling, or pathos, as a range of affect that precedes any kind of translation. Cixous repeatedly emphasizes bodily communication along vibrations in "language" of the flesh without words. Women communicate with the body, through vibrations that go from blood to blood, through musical vibrations, and cosmic harmony.[8] In contrast to knowledge—and power—born from the fall and separation, Cixous proposes another type of knowing, an active condition, where the divisions between body and intellect (language) and between nature and culture are not clearly drawn. The separation between subject and object—here the maternal body and nature—hinges on language. Historically, this loss, beginning with the advent of modern science, is fancied to come about with writing and the printing press, with the shift that in communication depended on voice and the body to mental abstraction involved with the decipherment of fixed symbolic characters. A haptic experience is lost. The subject no longer walks in the world among things that freely give themselves to be seen but wills to apprehend and dominate the globe. The planimetric flattening of the world evidenced in both cartography and science is related to technology and the control of nature. The nature that is conveyed through especially oral or ostensibly prelapsarian writings is, by contrast, a *friendly* nature, benevolent, maternal, a French trellis garden, with English outcroppings, that ramify a bit like the branches of German philosophy. Writes Cixous:

> To enjoy blissfully a walk from the path of the summit ridge to the ground of the *Jardin d'Essai,* to make the trip faithfully, in accord with life, the body, we have to exit softly, leave all phrases of recommendation, and now live, simply live, live entirely there where we live, begin the way it begins, to let things happen according to their mode, let the rose be felt in a rose way, to descend toward the garden attracted, led by the appeal of its freshness, to descend trusting the body, the way my childhood descended, before I knew the names of the streets, but the senses know their ways, before the proper noun and the common nouns, along the perfumes, walking with feet in sandals in the heavy perfumes, in the movement of the marketplace.
>
> (Cixous 1980:139)

Contrary to the ascending movement proposed by men, Cixous writes a path into nature. Things are felt more by being caressed with discourse than being classified and named. They are felt in their essence. But such an essence depends on a *techné* which, paradoxically, remains as "natural" as possible. She makes full use of her poetic license so that she can slip and slide between *techné* and poetic plenitude. For her purposes it is

important that nature not be dominated or subjected to accelerated control, but that each thing possess its own intrinsic time. Nature for Cixous is harmonious and peaceful, the way it can be found anywhere but in "life itself." "Naturalness"—inspired by Heidegger's philosophy of language—privileges the anti-technological and anti-scientific. It rebukes *instrumental* technology and its application of distinctions of gender in favor of another *techné, in* the body through which the "naturalness of woman" is reinserted in a friendly, forever revalorized nature. Woman is in the role of both mother and daughter and now lives naturally, in this harmonious, unchanging nature set far away from a dominant, repressive discourse of grammar and logic that tries to master the world and that, by imposing the order of abstract logic upon it, would reduce nature, woman, and other cultures to silence.

Nature here is in movement. It flows as opposed to being cut off, congealed, retained, dammed up. Consequently, it does not allow for framing, arresting, or neat delimiting of a subject and an object at the level of language. Oppositions are spaced into a play of differences where one is in the other. It privileges "humanness" and subjective *Dasein*. Nature is born under the sign of birth, fertility, song, vibration, proximity, and an absence of symbolic language that separates subject from object. Nature consists of flora and fauna; it is a discursive herbarium and a bestiary, part of an archaic, unchanging world of immanence.

Cixous is not, however, simply oblivious to reality. Unlike Haraway's cyborg, Cixous's joyful woman poet directs her revolt still against a disciplinary society. Already in *The Newly Born Woman*, in an exchange with Catherine Clément at the end of the volume, she had stated her pessimism about contemporary culture in view of the onslaught of cultural and material imperialism. They advocated not a simple reversal of power in an exploitative world but the invention of *another* culture by means of another mental ecology and a writing that leads elsewhere. To reconnect with a poetic myth of immanence and harmony serves to displace a philosophy that divides mind and body and leads to the debasement of woman and the degradation of nature. Any possibility of social change, she said, has to come through linguistic change. Yet the latter is not simply epistemological. It cannot be separated from entirely new *ethos* and modes of being, from a writing in the body and, secondarily, on the page.

In these texts Cixous avoids the pragmatic sensibility that would imagine women as "saviors of nature." She does not advocate a going *back* to nature as much as she frees nature and women from ideological enslavement. If emphasis is placed on the side of nature, the scale is tipped to preserve something that escapes culture or that links women to presence, body, and affect. By looking—via Heidegger—for a poetics of being in the world, Cixous wants to invent a writing that brings its author as close as possible to the living thing. Such a poetic view of nature is meant to empower women and, by criticizing the moment of separation between nature and culture, to rehabilitate the mother-daughter rapport.[9] It shows that each thing has its own time to disclose and to reveal itself. Cixous's position remains staunchly anti-scientific and anti-technological, the rhetoric resonating with a willfully archaic ring. Nature is lyrical poetry, it is the age of Greek mythology and immanence that sparkles on the horizon of the Aegean archipelago and conveys pure sensation. Can it be said that the ancient is the most modern? Can we reconnect with Greek myth where a lapsarian event initiated the process of history? Can we go back to an origin, to a fantasy of attunement in a generalized, unmarked eros in

which men are absent? Even metaphors have a life and the equation of a peaceful, fertile nature and woman are among those that barely exist outside of feminist fictions, where they serve as devices to empower women.[10]

Yet the importance of Cixous's insistence on the necessity of giving the other an adequate amount of time, of letting the other—people or things—be and become, cannot be underestimated, for it brings the question of nature into a larger ideological frame. Space is lived as an area of invention, not of compression. Time is made to be extensive, not compressive. For one, Cixous questions philosophy but also psychoanalysis in the service of phallocentrism from the inside. She wishes to turn psychoanalysis toward women by impugning the motto "cut, lack, suture," which relegates the mother's body, equated with nature, to silence and absence. She, in turn, suggests a model in which no initial separation organizes life and history. Attuned to a mother-nature, women subjects freely move about. The subject-object rapport is undone. Women and nature are not enslaved. They are removed from their status as commodity with surplus value. Henceforth, exchange, or rather giving freely in *open* space and without fear of the compression of time, occurs among subjects. Cixous writes against the masculinist paradigm according to which the subject enters into the symbolic world by leaving behind the mother's body and nature. By analogy, the relinquishing of the mother's body is equated with the project of technological mastery over nature.[11]

LUCE IRIGARAY AND THE REINVENTION OF CULTURE

In many interviews, Cixous has explained how she consoles herself "poetically" from the dehumanization of a world dominated by values of profit and violence. Her refusal to engage politics in the practice of poetry makes her focus on textual and not on political economies, even when she tackles political corruption, as, for example, in her recent play, *La Ville parjure* (1994). A sense of urgency to remedy present situations of global stress is more directly and openly spelled out in the work of Luce Irigaray, a philosopher of language who makes feminism inseparable from a larger cultural critique of modes of exchange, economic relations and the reassessment of nature. A spiritual liberation cannot be thought without changes in economic and material relations. She too rearticulates the rapport between men, women, and nature when writing works, the "beauty of which," in her words, "is a support enabling women to go from nature to mind, while remaining nature" (Irigaray 1990:136).

Criticizing laws of exchange and communication, Irigaray, anchored much more in a Freudian psychoanalytic tradition than Cixous, focuses on language rather than writing. As she puts it everywhere, and especially as the title of one of her books, "to speak is not a neutral act" (Irigaray 1985 [1981]). It orders and organizes the world of nature and culture and, by extension, produces inscriptions and functions as a *techné* of which instrumental technology is just one part. Irigaray in turn works through Freud and Marx, through modes of exchange. Women and nature are commodified. They are being circulated for surplus value among full historical subjects—that is, men. As Irigaray puts it in "Des marchandises entre elles" (when the goods get together), men exploit nature and women for personal gain and aggrandizement:

> The trade that organizes patriarchal societies takes place exclusively among men. Women, signs, goods, currency, all pass from one man to another or—so it is said—suffer the penalty of relapsing into the incestuous and exclusively endogamous ties that would paralyze all commerce. The work force, products, even those of mother-earth, would thus be the object of transactions among men only. This signifies that the very possibility of the socio-cultural order would necessitate homosexuality. Heterosexuality amounts to the assignment of roles in the economy: some are given the role of producing and exchanging subjects, while others are assigned the role of productive earth and goods.
>
> (Irigaray 1977 [1981]:107)

Feminism cannot not deal with the double oppression of women and nature in an exploitative male economy. Women, argues Irigaray, circulated like commodities. They still do not have the means of production and are too often underpaid or unsalaried laborers, part of that standing reserve army (that Donna Haraway updated when she called it the "homework economy"). Their unpaid domestic work has no rank in a society that values surplus. Yet, because of their cultural status and biological function, women are closer to nature than other humans. Because they bear and rear children, Irigaray, who would no doubt inspire the ire of Luc Ferry and his colleagues, adds that they are also closer to the food chain and more sensitive to the violence exerted on nature and ecosystems.[12] Women, especially in the West, must realize that a simple power reversal in the present economic system will not do. Other modes of exchange have to be thought through. Like Cixous, Irigaray, by way of close readings of Marx and Freud, opposes men's tendency toward accumulation and retention with women's propensity toward free circulation and the gift. But whereas in Cixous these tendencies were the result of cultural organization, in Irigaray they are closer to bodily functioning and sexuality. Masculine unity and stasis are contrasted with feminine metonymic contiguity and exchange. Feminism works toward a transformation of peaceful exchange among subjects, among women, among mothers and daughters who are no longer alienated. Irigaray chooses to work in a psychosocial register to mark the difference between men and women that leads to what she perceives as a present cultural impasse. She too establishes an analogy between sexual economies and political economies. Men's sexual economy of tension and discharge lends itself to the present entropic culture in which we live. Women's economy, because it is based on irreversibility and harmonized with cosmic rhythms, is more open to life and tends to generosity. Irigaray marks the differences along similar lines to those of Cixous. In a style less poetic and more openly political, Luce Irigaray repeatedly criticizes what she perceives as the present cultural fiasco that degrades humans and nature. She argues for a new culture, a new approach to knowledge and science with other ways of relating to the body *and* the soul. This culture cannot be brought about without changes in laws of production and exchange. An alienated society that recognizes only exchange values, and works in the realm of the imaginary "either/or", opens onto death and cannot bring about any spiritual liberation. Irigaray is critical of a Western patriarchy that pollutes minds and bodies. Its false project of mastery through technology has done violence to women and nature. Technological mastery is related to an economy of appropriation. A negative culture of violence and

death has to be replaced with a culture of affirmation that invents a new *ethos*, new modes of existence that open themselves to a truly ecological practice. Women are the ones to reinvent this culture, which, by extension, can also benefit men. A new mode of existence arches back to certain philosophical currents before Descartes, and to Greek myth, in order to discredit a Cartesian division of mind and body and its Hegelian avatars.

This general theme, with its attempt to favor women, nature, and problems of exchange, underlies much of Irigaray's writing. Irigaray openly searches for an ecological practice along the lines of sexual difference that are set in the context of a general critique of phallocentrism. She too begins with emphasis on a destructive part. The Western project of mastery, though bankrupt, continues unabated. In its present manifestation of market economy, patriarchy enables technologies that kill life. It bears responsibility for the destruction of the environment and the general degradation of life. Degradation is being performed by men against women and nature. Irigaray specifically addresses these questions in the context of "Living after Chernobyl" (Irigaray 1987). The ecological disaster prompts her to wonder: what kind of a life do women and feminists want?[13] By looking through an ecological lens, Irigaray questions the very preconditions to another culture and another politics. She denounces the destructive nature of the Occidental Project devised by men and openly associates feminism with ecology. Given the urgency of the question, she makes it clear that she wants to speak of "human realities that require rapid changes to which *you* can contribute" (Irigaray 1987:221). It does not seem "ethical" to her to make lengthy, verbose epistemological elaborations without proposing simple and efficacious cultural changes that "give humans and nature a chance to (sur)vive."[14] There is a marked shift in her endeavor from a more poetic and philosophical discourse toward one that opens out on public policy and questions of citizenship.

Given, too, the urgency of the present situation, Irigaray asks all women to mobilize their speech and to act *now*. It is not sufficient to write about issues, we must also translate our words into immediate action. Women must stop present accelerations of production, think and situate themselves both individually and collectively as subjects in nature. Her critique is organized around several major points: symbolic practices; laws of exchange; subjectivity and identity. Culture functions according to masculine models. It is not enough to ask for equality when we try to survive in a polluted system of exchange; cultural mutation is necessary. Because the oppression of women in the Occident is equated with that of nature, feminism cannot fail to broach the problem of nature.

Irigaray adheres to a concept of a technology that is seen to have destabilized a harmonious order. She begins her essay with Chernobyl seen as "a *limit* to worldwide disorder" (Irigaray 1987:199, my emphasis). Reasserting her belief in an immutable nature, she adds that "it was possible to hope that the confusion or general entropy of our period would find a *regulation at least in nature*" (*ibid.*, my emphasis). Nature, with its eternal, cyclical temporality, would provide the last bit of stability in a destabilized world. In the nature that is being invoked here, order precedes disorder. Natural disorder is man-induced. The gender bias is deliberately stated. Nature itself is harmonious and appears to escape cultural construction. Its function is that of "energetic and vital regulation" (ibid.). Irigaray links a natural disaster to the cultural "mess" in which humans currently live and which has become unbearable. Certain modes of being and

cultural and political practices are related to natural—and social—degradations. Measures must be taken rapidly to "equilibrate our culture" (ibid.: 200). The move is to bring a world thrown out of balance *back* into a harmonious equilibrium. What are perceived to be an originary balance and harmony have been destroyed and must be restored. Because naturally—that is, through their bodily rhythms—they are closer to life and nature, and because culturally they have been kept from power, women are more capable of restoring balance.

The destructive urge of our culture can be linked with a patriarchy that organizes society according to a sexual model that is in fact a martial model. This martial model has its correlative in the economic model of competition and consumption that, while benefiting a few, has led to much of the planet's degradation, which destroys the well-being of many others. Patriarchy in its current model of market economy gives itself to be read as universal when it is really local and historically determined. People literally and figuratively "buy into it." But when solely emphasizing "equality," feminists neglect to think through the very economic system of which they are a part. For that reason Irigaray denounces what she calls Western *greed,* which is based on an avoidance of a questioning in relation to one's *identity of being and acting.* A different *ethos* and other modes of existence become the preconditions to an ecological practice. Irigaray strongly advocates realigning women with nature, while being critical of the technology—in the double meaning of technological application and instrumental technology—that brought about natural and social destruction.[15] A society based on acceleration, consumption, and the energizing derived from consuming objects as signs in which use-value has been replaced by exchange-value avoids adequate critical assessment of identity. "To remedy this refusal to be taken into consideration, I think that the 'people of men' need a full-fledged person who allows them to understand themselves and to find their limits" (Irigaray 1987:201). We need to reposition ourselves as subjects and decide how to act. That is, for our purpose, we need to know how to think ecologically.

For the sake of temporary activism, Irigaray reintroduces an opposition, even a rivalry, between the sexes: only women can play this part. Women are perceived as possible saviors because they do not belong to the patriarchal community as truly responsible subjects. Hence, they have a *chance* to reinvent this culture in which they have fewer implications than men and in which they did not produce themselves to the point of being blinded (Irigaray 1987:201). How are women to go about it? A new cultural ethics and a sexually differentiated politics, as well as a different language or *techné,* need to be implemented. Generalizing almost to the point of universalizing, Irigaray affirms that women, whose bodies are more attuned to "natural rhythms," escape the need to experience acceleration. Acceleration, demanded by an economic system and aided by technologies, puts "our bodies and minds" to test (ibid.). Since Western technologies pollute minds, bodies, and the environment, an ecofeminist practice must address different registers. Men's sexual economy predisposes them toward war. Women's is closer to nature's rhythms. Loss of virginity, menstruation, and menopause count among many bifurcations that open to change. Men's entropic model condemns them to repeat their bodily impulses.[16]

Irigaray argues against the progressive erasure of sexual difference that is enhanced by technology and simulation. We cannot but agree with her desire to mobilize women to oppose forms of unbridled development that do not think through the well-being of

humans or pay attention to fauna and flora. Yet when Irigaray exhorts women to take a position against environmental abuses perpetrated by men, several chinks appear in her argument. Irigaray maintains that women are better situated to fight against environmental abuses because they are closer to nature and that it is necessary to go back to less technologically developed regions in order to make cultural changes. While we have noted that, because of their proximity to the child, it is important for women to take a stance in matters of the environment, this is an active decision on their part. Advances in science and technology reveal more and more that all is nature. Yet it follows from this that women are neither farther from, nor closer to, nature than men.

IRIGARAY AT WAR WITH THE MARTIAL MODEL

In her hypothetical reinvention of culture, Irigaray begins by waging war on the masculinist, martial model that extends to economic competition. She criticizes the current Western model against which she holds up, as examples, more ecologically conscious interactions of earlier occidental civilizations like those of Greece and the Far East. She does not argue against cultural difference either; quite the contrary. Yet a slippage is evident between a universal model—that of male (sexual) agressiveness—and the specifically local and culturally determined aspect of the martial model adopted by Western males. The same model has been generalized and is applied when dealing with women, the body, and nature. In the West, it has been adopted by social and hard sciences, ranging from economics to medicine. Resources are plundered and the body is being robbed of its reserves. Market economy's motto is "have it now, pay later." Practices of "buying on credit" have repercussions at all levels. Elaborating on the model of male agressiveness, Irigaray suggests that, unlike in Eastern practices, Western science is more intent on fixing and repairing than on preventing. This is true too, she claims, not just for natural sciences but also for medicine, where the body has to be ill before it is treated. As a result, it will always value its traumatisms. A martial model that appears linked to a male sexual order consumes and destroys the object before deciding to fix it. It is incapable of non-violent, peaceful (symbiotic) coexistence.[17] In the martial plan, triumphant in the form of consumerism, we witness the detrimental impact of modes of exchange that equate women with goods and advocate the depletion of resources. In our era, Irigaray claims, technology endowed weapons with a power that goes much beyond the conflicts and risks taken among patriarchs.

> Women, children, everything living, elementary matter included, is carried off, bodies, goods and all. And death and destruction are not limited to war alone. They are in physical and mental aggressions to which we are constantly subjected. What is necessary, is a *general cultural change* and not only a decision about war as such. Patriarchal culture is founded on sacrifice, crime, war. It imposes as a duty or a right to men to fight in order to eat, to live, to defend their goods, and their family and fatherland as goods.[18]
>
> (Irigaray 1987:200, my emphasis)

Like Cixous, Irigaray urges us to move from a defensive and negative stance toward a condition of affirmation.

A mental ecology—that is, a practice of ideas and language that shape and continually reinvent the world—begins to take form. These ideas are never separate from bodily affect and prolonged by action. And just as Cixous had equated violent separation from mother and nature with technological mastery, so also Irigaray equates contemporary patriarchal culture with continued mastery and expansion:

> One has to kill in order to eat, subjugate nature more and more to live, or live on, to go and look on the most distant stars for what no longer exists here and now, defend by any means whatsoever one's corner of exploitation, here or there.
>
> (Irigaray 1987:200–1)

The emancipation of women has to be simultaneous with a total cultural change. Language and ideas lead to invention of new modes of being and new ecological practices. By going back in history to before the moment that marginalized women, to other philosophies, or by referring to different cultures that do not separate body from mind, Irigaray too wants to recover a paradise that would have existed before masculine technological intervention. Though aware of the historical frame of the repression of women and nature that was set in place in the early modern period, she too appeals to myths and to the idea of a new language, a new *techné* based on bodily affect. This *techné* is no longer added to the body but is already in and of the body. Between nature and culture, women's sexual model, based on bifurcations and mutations that open to life and change, has cultural repercussions.

THE CULT OF THE EARTH AND THE BODY

Demeter and Kore, Jocasta and Antigone, and Clytemnestra and Iphigenia are chosen as the "divine models" of a mother-daughter rapport. Patriarchy divided the human from the divine, but it also deprived women of their goddesses and their divinity. Beforehand, women and men were potentially divine, which means, perhaps, socialized. Imposed by men, patriarchal religion became violent when it was expressed in the form of sacrificial or redemptive rites. From that moment on, patriarchy operated through exclusion and repression. By contrast, in the history of women, maternal religion is one with the cult of the earth, the body, life, peace. The deadly either/or of male culture becomes a both/and, another version of *Mitsein*.

> In India, for example, or at the beginning of our Greek culture—but we are, for the most part Indo-Europeans—sexuality was cultural, sacred…. But few learned people or theologians have pondered the relation between mother-daughters and fecundity in relation to the respect of nature. Women close to nature are, from a certain moment on, qualified as witches, practitioners of magic, while, at the beginning of our history, the couple of mother-daughter represented simply the locus responsible for

> the cult of the body and natural elements…. The religious as devised by men masks an appropriation. The latter interrupts the relation to the natural universe, it perverts its simplicity. It represents a social universe organized by men. But this organization is founded upon a sacrifice: that of nature, of the sexed body, especially that of women.
>
> (Irigaray 1987:204–5)

The loss of the sacred is also connected to technological knowledge of "reality." Many superstitions and fears no longer hold.[19] But rather than unlimited conquest, advanced technology also shows the impossibility of mastery. In Irigaray we thus witness the oppression of women and nature that is countered—as it is in Cixous—by a search for a maternal genealogy attuned to the earth and the divine origin or a mother-daughter rapport. Irigaray reconstructs a mythic past that perhaps never was: there was a time when mother and daughter figured as a natural and social model. This couple was the guardian of fecundity of nature in general and of the relation to the divine. At that time, nourishment consisted of fruits of the earth. The mother-daughter couple insured the protection of the nourishment of humans and the locus of oracular word. This couple protected the memory of the past. The daughter respected her mother, her genealogy. The couple lived in rhythm with the present: nourishment was produced in the earth in the calm and peace (Irigaray 1987:206).

Immanence is contrasted with separation, alienation, social struggle—one with the loss of nature and the body—in contemporary culture. Irigaray asks defiantly: "Were men hurt by this organization?" (ibid.). She works to replace the masculine rejection of nature and body by myths in which mother and daughter lived attuned to a fertile, benevolent nature. Exchange takes place between women, between mother (earth) and daughter, whom no violent oedipal drama separates from her origins. For Irigaray, this immanence was torn by the advent of patriarchy, especially in its form of bourgeois capitalism dating from the Second Scientific Revolution and the Industrial Revolution.

The myth of Demeter and Kore (or Persephone), the fantasy of an accord among women, of the calm that once was, can function as empowering devices for an old-style ecofeminism. But, we can ask, in dialogue with Irigaray, do there exist less archaic myths that would equally do away with a subject/object division and rehabilitate both women and nature? The reassessment of nature shows that the latter is far from peaceful. Are there other myths that women can invent? And how does a myth of fecundity and fertility fare in view of the Malthusian population problems, the necessity for women to assure a good life for their children and to bypass patriarchal imperatives of childbirth? How can it empower those women whose status is no longer affected because of their decision to be "child-free?" Can we go back to an origin? While it is of importance to locate moments of exclusion and reconnect with other modes of thinking, the world is an open system in constant transformation. We can only appeal to the long memory of an exclusion as we turn toward the future.

Cixous and Irigaray, in their appeal to nature, exploit a concept that can be historicized as a reaction against rational control. Irigaray asserts: "There was a time when mother and daughter were a natural and social model. The destruction of this model, brought about by *patriarchy* and *private property*, destroyed life, peace and nature" (Irigaray

1987:206). Detached from its cultural context, this passage would sound as if it were written in a greenhouse isolated from the complexities of physical history.

By now the themes common to Cixous and Irigaray begin to blend: the treatment of women by men is likened to that of nature by men. Men negate and cut the link to their matrix—that is, to their biological mother and to nature. Such denial, for Irigaray, corresponds to a vaguely defined historical period, a time defined by phallocentric culture, that is now coming to an end. Yet, if women take back their rights, if they get out of the masculine ambivalence toward nature, and are able to say "yes" to the nature of things, history will change. Women's economy exceeds dialectics. Through affirmation and a different ethics, women bring about an entirely different rapport with the environment. They do not as much resist through negation than proceed by affirmation. The Freudian paradigm of *fort-da* is not valid for them. They do not reject the mother. They have another economy altogether. Theirs is that of *between subjects* and not of a subject/object dualism.[20] They can identify with their mother and relate to her as a subject. This can be extended to nature as well. Unlike men, women function—and this is what Cixous asserted too—in a general, not a limited, economy. They do not erect boundaries or frame their objects but delimit boundaries to let the energy flow and become free for all.[21] And if women, because of their position in society, are more likely to be open to a cultural mutation and a transformation of affective economies, such a transformation has to be carried over into the sphere of politics through a difficult art of practice. In ecological terms, Irigaray and Cixous argue for a relation *between* subjects with a different *ethos*, another mode of existence, that respects habitat and nature, lives in immanence and is fully aware of its materiality or nature.

The stakes of an ecological practice are set *between* "subjects" who give themselves freely to each other. And they do not live in avoid. They consider nature as "subject" too. The exchange is one of generosity and not one based on the imaginary either/or. Irigaray moves away from Hegelian dialectics, from a system espousing mastery, enslavement, and death to a processual condition in which differences are in a vital movement of relay and change. A culture where all takes place between subjects bypasses a master-slave dialectic. In such a culture, I cannot say that *I* am good because *you* are evil. Henceforth, I am good, and so are you. An economy of love, extended to fauna and flora, once again supplants one of competition. The two subjects transform the mother-daughter rapport of giving and receiving.

This masculine techno-scientific subject is interested in outdoing all human possibles, lack of gravity, natural time, cosmic rhythms and their regulation but also disintegration, fission, explosions, catastrophe:

> This cultural semi-discharge is accompanied by an acceleration of theoretical and practical contradictions, of an ever-greater distancing of our corporeal *matter* and of its *qualities*, of a quest of self in abstraction or dream, of a gap that has not been thought through between the technical environment, its influence on us, and ideological entropies that cannot be meditated, in my opinion, outside of the culture of our sexed bodies.
>
> (Irigaray 1987:221)

We witness Irigaray moving between registers and against the background of a predominantly energetic model indicated by terms such as matter, energy, and entropy. Women are better able to introduce a new culture into science. Having been kept from the scene of power, they can return it to balance by denouncing private property and the ill-effects of areas of technology and science where objectivity and universality hide the excluded terms, here primarily themselves and nature.

It follows that for Irigaray and for Cixous an ecological thinking deals at once with preconditions to culture and with culture at large. They argue for an *ethos* as a *habitus*, a practice that makes the world habitable. This imperative "make habitable" conjures up myths of fertility under the woman's control. By privileging woman as being closer to nature, they personify nature; by dehistoricizing nature itself, they tend to universalize. Thus a major problem resides at the center of their work.

WHITHER OR WITHER *ECRITURE FEMININE*?

What both Cixous and Irigaray say about nature and the world cannot be disputed, nor can the *style* that propels the latent themes, adumbrated above, of their ecofeminism. In the digest that has been presented in this chapter, a number of anachronisms are betrayed. In the case of Hélène Cixous, writing tends to flow endlessly in the direction of a celebration of itself and of its own genius. It does not pragmatize any of the strong conclusions it infers about the nature of nature, the female, or the "open system" of the environment. A voluble utopianism of May 1968 seems to go unchecked, without any qualification or any adaptation in view of the unparalleled violence enacted on the globe—despite some great advances in decelerating growth and in the creation of prophylactic ecologies—that had taken place over the passage of only thirty years. The "self-discovery" that *écriture féminine* brought to the female writer in the 1970s stays at the threshold of a productive narcissism: once the writing self is unveiled, it has to "fragment" or "disembody" itself (as Haraway demonstrates about American and anglophone ecofeminist writings) in order not to be tempted into personifying its new being as a variant of a Goddess Natura, Ceres, Athena, Demeter, or other benevolent deities that would essentialize the mother ("I'd rather be a cyborg…").[22]

In an ecofeminist politics, writing has to work tirelessly in dialogue with specific issues that are not just human-centered but that mobilize both a vision of, and an attention to, specifically interconnected elements in given environments. At the risk of reducing it to a set of contents, we discover in the French work of Cixous and, to a lesser degree, Irigaray the celebration of a discovery of ecological awareness, but rarely a *mobilization* of the heightened consciousness that would move in the direction of praxis. Paul Virilio stated, it is worth repeating, that the ecological battle is the *only one* worth fighting for: meaning that no loops, no rhetorical embroideries, no filibustering, no plea bargains, no attenuations, no damage controls, etc., can be allowed. Unlike any that we have known in history, no single battle has ever been so marvelously simple, rudimentary, indelibly clear, or so threatening. It would not be apocalyptic to say that the world is collapsing under the effects of the history of the last four centuries, but what recent history has produced can serve to change the future in a way that makes the destiny of the planet

something not only worth thinking about in a mental ecology or celebrating in *écriture féminine,* but ultimately worth fighting for.

In this light Cixous and now, to a lesser degree, Irigaray (for reason of a style of writing) seem mired in an egocentric politics seen when we glance at the history of Cixous's affiliation with women's writing. Her most effective politics emerged from *The Newly Born Woman* (1976), a work co-authored with the Lévi-Straussian critic and journalist Catherine Clément. Its arguments for a "half-born" writing put it at a point of consciousness intermediary between the fully born self and the "cyborg" that is now known to be entirely illegitimate and without any claim to birthright. The authors in fact raised consciousness so much in that opuscule that it remains the most cited and revered of all material attached to Cixous's signature.[23] But since 1976 the production of a monument or of a great pyramid of prose, the effect of the neurosis of "production" that defines the *homo faber* of modern times that we saw Michel de Certeau call into question in the preceding chapter, seems to inspire part of Cixous's work. Thirty or more plays and novels have appeared, and in such febrile frenzy, it would be impossible for any ecologist or feminist to divide attention between activism and careful assimilation of Cixous's writing.

Ironically though, the deconstructive work of Irigaray and the *critical* writings of Cixous stand among the most potent for the pragmatics of ecofeminism. When both of them disengage from classical texts their tacit relations with nature, a high degree of consciousness is awoken. In the studies of Clarice Lispector, for example, Cixous melds with her artist and becomes the very language of flowers, cockroaches, eggs, chickens, and homunculi in the Brazilian writer's universe. But when Cixous is left to the devices of her own *écriture féminine,* the consciousness gets attenuated.

It can be said that ecological insights in the work of Cixous and Irigaray are implicitly clear and have been immeasurably effective in their time. But unless they reorient their energies away from some of the modes of writing and acting that marked so much of the palaver surrounding the May Revolution, their work will be consigned either to history or to a lower rung on the ladder of ecofeminism. In a few concluding remarks I shall explain why I hope this will not be the case.

In this chapter I have argued that Cixous's writing and its conceptual ground—that is, what Irigaray explains in her deconstructive studies of language and philosophy—display what ecofeminists would discern as a "blind spot," what Val Plumwood calls "understandings which deny dependency and community" (Plumwood 1994:194). There is in the work a "colonizing perspective," which claims authority despite what it says to the contrary, which seeks the assurance of its being that of a "master culture" that, "because it has not fully come to terms with earthian existence…clings to illusions of identity outside nature" (ibid.).[24] We see in the work, at least in Cixous's fictions, a "denial of dependency" and even a "self-deception with respect to the conditions of its own life" (ibid.: 195). It may be that a gap is opened between what is said and what is done. As we have remarked, Cixous denounces the effects of advanced technology, celebrates the woman whom she places "closer" to nature, and so forth, but she makes no effort at engaging or inventing an "ecological democracy" that would enable women and ecology to make gains in the struggle against the degradation of the planet. How an ecological democracy can be envisioned in cultural theory, and how it grows out of the

environmental awareness we have been tracing in post-1968 critical theory, are questions reserved for the conclusion.

Conclusion

> Quelle curieuse torsion de la ligne fut 1968, la ligne aux mille aberrations! D'où la triple définition d'écrire: écrire, c'est lutter, résister; écrire, c'est devenir; écrire, c'est cartographier.
>
> (Deleuze 1986:51)

At the outset of *Penser la Révolution française* (1978), François Furet, a very conservative historian, noted that for every French citizen a sense of national identity and national history seems to begin with the Revolution of 1789. In a more recent and lively socioanthroplogical account (1994) of nineteenth-century literature, which uses the locale of the city of Paris, Priscilla Ferguson maps out a similar configuration: France is identified as a perpetual revolution about the axis of Paris, from 1789 up to the moment when the Eiffel Tower rivets into place a metallic eternity of Frenchness. It may be that both Furet and Ferguson reached their conclusions through the filter of the hypothetical revolution of 1968. The idea of its utopia had become a mnemotechnical figure in French intellectual and popular circles: the emblem of a march to an infinitely better, forever democratic world fancied its progress in the movement from 1 to 7 to 8 to 9. In 1968 the imagination of a Utopian cipher was not much different.[1] It was handily taken up again by the philosopher-poet of the moment, Gilles Deleuze, when he stated, in respect to the "line of flight" of the May revolution, "What a bizarre torsion of the line that was 1968, the line with a thousand aberrations! Hence the triple definition of writing: to write is to struggle, to resist; to write is to become; to write is to draw maps" (cited in the original French in the epigraph to this conclusion). In 1986, Deleuze turned the clock back to 1968, mirroring his own obsession with an *event,* in the strong sense of the word, that he and many others felt to be crucial, for an entire *renovatio* of knowledge, power, and society. In France, the moment has since remained both sacred and profane because it dredges up many of the contradictions and violences that inhered in the nation's many revolutions: the memories of the sordid years from 1940 to 1945; the sense that revolution with vision has given way to internationalizations; the uncertainty about the role that the French nation would play in a United Europe.

The starting point for the argument of this book has been that indeed May 1968 was a trope and an event in French critical thinking, and that what it stood for is now being misrepresented by revisionist groups that dismiss its Utopian thinking as a discourse that can be called "politically correct." Its "political correctness" may indeed have been its virtue long before the slogan was invented. In addition to an expression of the need to change the ethical character of political and academic institutions, May 1968 brought into the world of letters (which until then had been isolated and controlled enough so that they went by the name *belles-lettres*), from the ocean of the human sciences, a tidal wave of critical theory. Its force shook the "old parapets" of state-protected academic institutions.

The practice of literary history, stylistics, or the production of critical and historical editions of great and minor authors could never be done in the same way again. Feminisms, as was argued in the Chapter 8, gained strength with the advent of disciplines grouped under the name of *les sciences humaines*.

With the tidal wave also came the beginnings of a strong ecological consciousness that ran parallel to, and through, new French feminisms. The former, which belonged more strictly to the applied and social sciences, began to inflect the latter, which were moving out of the literary and academic salons in which they had been confined throughout most of the twentieth century. The dazzle of what I have loosely called *la pensée 68* owed much to a new attention extending to the physical, indeed material, state of the world. The new consciousness of the environment might have been in correlation, second, with another event that was not as noisy as the occupation of the Sorbonne and the construction of barricades on the Left Bank. The event was televised all over the planet, and it projected back to us the first images of the globe seen from the point of view of the moon. Until then the earth had only been imagined to be that way in the tradition of the theoretical geography of Ptolemy. For the first time, the blue, white, and earthen beauty of the planet could be seen as it really was, and it could now be measured over time, in view of what it would later become.[2]

Human sciences, ecology, feminism: the "founding moment" of new branches of the University of Paris inspired both speculation and empirical research that is the basis for new approaches to texts *and* their relation with the force of life. As the ferment of the May Revolution continued to bubble into the 1970s, a greater articulation of the three components was felt necessary, especially for many francophiles who lived outside Paris. For American citizens who studied French culture, the rearticulation of intellectual activity in France signaled a liberation that made the American academy appear out of synchrony in a rapidly changing world. The American university was seen as an appendage of the degraded democracy of the "New Society" that killed thousands of American soldiers and maimed countless others in a thoughtless war. The strategists and politicians organizing the conflict were out of touch with their time, but finely tuned to business interests that counted on making billions of dollars in the development and application of military technology.[3] When Americans saw films of the bombing of the jungles of Vietnam and the napalming of indigenous villages, outrage erupted. Ironically, global investors today celebrate the reopening of Vietnam and relegate to a footnote "longhaired intellectuals" and university professors who dreamed of social equality thirty years ago. Equally relegated to a footnote in this laudatory outpouring appearing in the press everywhere are the concessions that this business wonder has its reverse side: the exploitation of women in sweatshops, child labor, growing squalor in city slums and accelerated destruction of the environment. These very footnotes have been the topic of my inquiry.

The war in Vietnam was being waged against a hypothetical enemy of international democratic capitalism, but it was a war that also murdered women, children, and nature. First, it attempted to isolate American females from males so as to fuel an antiquated patriotic machine, which might have worked well in 1941–5, but Hollywood had written the script long before, about male-female relations of isolation, contact, violence, and separation.[4] A longing female would continue to wear an apron and bake muffins for neighbors in the absence of a husband or lover. At the same time, on the front lines, a

ware waged with air power would effectively kill women who might give birth to children susceptible of growing into conditions unaffected by capitalism.[5] That the war was aimed at the annihilation of women and the class of workers and unemployed citizens was a point that francophiles were especially able to discern because Louis-Ferdinand Céline had long been known to have remarked, in utterly childish simplicity, that most modern wars are *waged by the rich against the poor*.

Second, the same francophiles who thrived on the interventions of the human sciences in the arts and literature saw that the war was also a *war declared on nature* and an attempt to impose the simulation model all over the globe.[6] Whereas classical wars in the twentieth century used a mixture of propaganda and murder to valorize themselves by bombing civilian populations, it has long been known, since the successful destruction of the rural infrastructure in Vietnam, that *all* wars are waged against nature. One did not have to be a poet to recognize what William Westmoreland was saying when he delighted in declaring that he was going to turn Vietnam into a "parking lot."

The "parking lot" figure is recalled because it bridges the moment of new ecological awareness gained from the mixture of the experience of Vietnam and the intellectual revolts of 1968 with the more recent takeovers of nature that are occurring at microlevels all over the world. It would not be hysterical to say that the world is being cannibalized everywhere. Extending the figure associated with Westmoreland, we can note that the economic expansion in the last two decades that refuses to heed ecological factors can be perceived by the blight that attaches to interstate highways on the North American continent. Along these asphalt lines thrives a monoculture of convenience stores and strip malls with adjoining parking lots, They are part of a creation of peripheral communities that are built by parking lots adjacent to the same highways and cloverleaf exits. They lead to evidence of the frequent destruction of habitable inner-city space for the purpose of building offices and more parking lots. The parking lot also conjures up all of the most real and visceral fears about violation done to the female body. The parking lot is the *locus classicus* of the rape and murder of women. The same space can apply to males who shoot each other in drug and gang wars or who thrive on larceny and terror, but that menace seems ancillary to what the parking lot means to women and to nature.

We can continue to fantasize along these lines. Suffice it to say that the contiguity of critical theory over the last three decades to the outrage over the many wars against women and nature indicates that a strong current of ecological awareness has grown with feminism. I have tried to show throughout this book that in the human sciences an ecological awareness advanced as soon as structural logic replaced Cartesian residues as well as the existential dialectic that had been fostering the growth and expansion of individual consciousness. It was Sartre who had refashioned a Cartesian version of possessive individualism, otherwise associated with Hobbes, for whom the individuating subject was said to feel that he owned the space he occupied, and that free will allowed him to arrogate and to posit it in his own name.[7] Sartre's ideal humanist-existentialist is not unrelated in that, as he must go *into* and feel the world in order to act upon it, he has to change it in order to build a sense of selfhood. He must attain what in *Being and Nothingness* was called "être pour soi," a condition in which the self-enlightened subject is not living in that viscous consciousness of "être pour les autres," but who is in the crystalline state of ideological purity. This condition is predicated upon a separation of nature and culture. Structuralism, in order to raise ecological awareness, not only

decenters this masculine subject, it evacuates it altogether. When, in 1962, at the end of *La Pensée sauvage,* Lévi-Strauss held the Sartrian dialectic up to the mirror of nature, the ethno- and egocentrism of the philosophical enterprise became clear. That moment inaugurated a real intellectual awareness of the historicity of the self-centered subject, and of the need to be done with an ego that is in conflict, rivalry, or territorial competition with nature.[8]

In so far as Sartre—with Albert Camus—had been a figurehead of the French literary canon from 1955 until 1968, his novels, especially *La Nausée* (1938) and the Dos Passes-inspired trilogy, *Les Chemins de la liberté* (1945–9), showed their readers that he was concerned less with women than with men. Roquentin, Daniel, and other famous characters plotted out Sartrian dialectics in masculine terms. Thus, when Lévi-Strauss criticized the limits of existential humanism, he implicitly called into question a gender-bias that made self-realization an especially masculine business. If nature were sullied by the neo-Cartesian hero, so also would be the female.

A second grounding point that made manifest the convergence of ecological awareness and feminism in the ambiance of 1968 was the radicalization of differential thinking. Synchronous with the collapse of the Sartrian hero was that of a kind of dialectical reasoning. When philosophy in Paris had been thriving on Alexandre Kojève's readings of Hegel in the prewar years (Kojève 1947), the slow emergence of the term *différence* in the postwar era entirely revolutionized practices in the humanities and social sciences. As I have tried to show in the introduction by quoting Derrida's almost comic presentation of Kojève's belief that American capitalism in the 1950s would resemble the "end of time" in the Hegelian-Marxian scheme of history, there was, in 1968, a new awareness discerned in the gap opened between the obsolescent idea of "self-realization" taught in courses that read "Existentialism is a humanism" (Sartre 1946) or that, unbeknownst to themselves, contrasted the egomania of Sartrian postwar heroes who "dirtied their hands" in history to the lush but matte descriptions of defying a nature unaffected by man in Camus's lyrical essays (in *Noces (1937), in L'Etranger (1942) and, later, in L'Exil et le royaume (1958)*).

In the midst of all the existentialism where was—asked Elaine Marks—Simone de Beauvoir? And if Gide and Proust had been Sartre's models, why was Colette put in the margins of the upper-crust literary canon? (See Marks 1987 and Marks and de Courtivron 1981.) It was quickly discovered that when Lévi-Strauss had admonished Sartre for his indifference to difference, a much more deeply rooted affinity existed between the grounding concepts of *The Elementary Structures of Kinship* and *The Second Sex*. The woman who was born from her absence in the world of male existentialism was not, however, an earth-mother or a reassuringly maternal figure. Nor was she even a youthful beauty resembling the Revolutionary Marianne printed on the corks and bottlecaps of French wine. The woman was, rather, already an element of difference, of no greater or lesser size than any other element of difference. In fact, the entire sense of fluctuation, production, channeling, and even the constitution of all information began to be treated not along rifts of opposition but by way of differential configurations. Structural theory that appealed to psychoanalysis and to systems theory had to be rid of any essentialized "woman" or an all-embracing "nature" under which differences would operate.[9]

But the difference of differences was soon evident in the wake of 1968. If Deleuze had pioneered philosophy in the direction of this type of theory (in *Différence and répétition*

(1967), a work that argues for difference at the basis of originality), and if Derrida had coined *différance* to show how difference inhabits the very term used to name, conceptualize, or otherwise stabilize and de-differentiate it, there was clearly an abyss between what was being advanced in the theoretical empyrean and what was known in the practical world. What was preached was hardly being practiced in most realms of discourse.

I believe that the radical advance of French feminism began at that point because the *theory* of difference could be used to scaffold a pragmatic operation that would apply to women in professional sectors and to a desire not to have nature live in the yoke of an ideology of Hegelian expansion. Where feminism had been strongly pragmatized in anglophone countries by the early 1970s, it did not have at its behest the theoretical ground that figures such as Cixous and Irigaray had been establishing in their formative years in the 1960s. Now if, as I have tried to elaborate in Chapter 8 of this volume, the tendency was to associate women and nature, to deify and reify the woman as a goddess, and to reject male culture for its hierarchies that repress oceanic immanence and the flow of feeling, their conclusions may seem anachronistic. Whatever fault is found, these women's elaborations of feminine writing and speech, with their attention to exchange and approach or to a concept of nature developed outside the polluted discourse of patriarchy, *did* make clear that feminism and ecology would have to be associated. This was done implicitly and through representation in Cixous, or explicitly, by calling subjects to action, in Irigaray. Both women showed that an association of woman and nature had to be further oriented in the direction of difference and writing, of creation and resistance, against images, slogans, narcissism, and the onslaught of an economy that wipes out diversity and everything that resists assimilation into the smooth functioning of a simulation model and a return to the ego (as parody) in the form of the solitary individual. Irigaray, especially, urges First World women whose lives are caught up in cyberspace not to forget the omnipresence of a physical world around them. It is through a concept of nature reassessed by contemporary science that women, as a group, have to militate against violence done primarily to women, children, and nature.[10]

Feminine writing and women's speech put in their own terms and in their own ideolect many of the guiding principles of differential thinking. Theirs is a style of thought, a mental ecology, that continuously opens various ways of thinking about the environment, but without submitting to selling any dominating themes, without either imposing any force of denial or betraying any ruse of mastery. French feminisms therefore brought with them a manner of doing things—an art of doing—that was pitted against everything that *la pensée 68* had also challenged: that is, mainly, the equivalence between material goods, cultural goods, and natural sites. The insights they offered through their critique of oppositional constructions tended first to give value to a feeling of renewed mystery associated with nature, though, as we have seen, they did not yet express an awareness of how precarious that "mystery" really is. It is here that the connections between the aura of these French feminisms and pragmatic ecofeminism come to the fore, and where I would like to conclude this study.

In the introduction it was argued that the theories of the 1960s were a starting point for renewed attention to ecology at the very threshold of massive, global development, to the subordination of all human activities and all institutions to the laws of supply and demand, and to simulation. The ecological consciousness raised in the 1960s through

structuralism and poststructuralism that is at the heart of our inquiry argued for linguistic and cultural diversity as a corollary of biological diversity. By looking at the world as a structural configuration, Lévi-Strauss was able to show both the short duration of Western philosophies of expansion and their disproportionate impact on humans and nature. It is in such a context and with renewed attention to the sciences that feminist and critical theories of the sixties proposed the decentering of the subject necessary for a contemporary thinking of ecology. They have been at the basis of our inquiry in view of recent attempts at recentering. Efforts at recentering the subject have been made in a rather anachronistic fashion, as in Luc Ferry, who simply attempts to dismiss and bypass all the advances in human sciences and hard sciences to go back to outmoded existential paradigms. Even more disturbingly, the return of the "subject" has been analyzed as parody in Baudrillard's world of simulacra. Baudrillard confines himself to technologically advanced areas in a world dominated by profit, and considers any intervention as futile and hopeless. The point of this inquiry has been to criticize these two positions and to reread structural and poststructural writings with specific attention to the ecological consciousness of the 1950s but especially of the 1960s. It thus became possible to reassess them and open them out to some pragmatic issues combining feminism and ecology today.

Luc Ferry puts into writing much of the ideology that stands as an anathema to the ecological consciousness of 1968 and its aftermath. *Le Nouvel ordre écologique* (1992) marks a register of the recent success of 1968 and environmental trashing in the context of 1996. It pays no heed to the wars, to the new perspectives on the globe that came to us with the exploration of space, nor to the real fact of the ongoing destruction of women and the ecosphere. It wonders why the Third World does not "worry about the environment." It fails to understand why women are not wrong when they shriek and scream about the failure of democracy to obviate the forces of expansionist economies. It celebrates the victory of international capitalism over concern about real issues. Its philosophy, if it has a philosophy, *infers* approval of a war on women and the environment.

In the same spirit Jean Baudrillard (1981) derides as "ecological conviviality" the solidarity of groups that seek to formulate environmental policy at local and federal levels. His dream of an entirely self-controlled, autonomous electronic social world of simulated organs, bodies, concepts, and realities seems to be a cybertopia of simulacra that relegates awareness of environment and gender to archaisms. Regressing to a sexless fantasy of seductive surfaces, he countenances a world that, like that of Ferry, would be clean, efficient, rich, without repression (in the universe of simulacra nothing remains to be repressed). I have argued that both Ferry and Baudrillard disparage the consciousness of nature and feminism in the work they have published and disseminated since 1990.[11]

In some sense the positions represented here figure in a traditionally "democratic" arena—but only to a limited degree, because the logic mobilized in their arguments and examples does not always heed the differential condition of exchange and process that run both the human body and the biosphere. Ferry and Baudrillard—each in his own way—advocate mastery of nature and wish to reject what Prigogine and Stengers call the "arrow of time." For Ferry, an imperfect but consensual, commonsensical approach to nature, which might have echoes in the American policy that begs for the "wise use" of the environment, is advanced under the cloak of democracy and French Republicanism.

For Baudrillard, nature, women, and ecofeminism are false labels since they are originary simulacra. In both authors the issue of "need" subtends a rejection of the picture of future time. Policies have to "meet the needs" of the human order. Whoever or whatever strategic agency dictates what those needs (or rights) may be is never mentioned. Nor is whatever is implied to set in motion a program that will go (stand erect and extend a hand) to *meet* the needs. At least in the case of Baudrillard, a brave new world of simulacra will keep gliding along as long as crude oil can generate the technologies sustaining simulation and before a "corrective catastrophe" will bring about a new order. In Ferry's world, at stake is a different order; a sort of Habermasian community will attend to what is "needed" to keep things going: jobs, a certain measure of equality, equal representation, and a high standard of living. In the forum of reasoned exchange, in the democracy that is envisioned, the shrieks and screams of ecofeminists, like those of mystical women in the classical age, will be muffled.

I have dwelled on *The New Ecological Order* and "Precession of simulacra" because these texts appear to be symptomatic of a tendency or a turn against the consciousness that was raised from 1968, the war in Vietnam, and the new perspectives gained on the globe, but especially for the reason that their discourse does not account for some of the ecological resonance that remains strong in poststructural theory in its resistance to unbridled economic globalism.[12]

In this book I have tried to suggest that poststructural theories inherited from *la pensée 68* opened a space vital for the continued recognition and development of ecological consciousness and even the broad lines of ecofeminisms, and that the principles of their logic and practice come from diverse places (not necessarily feminist in nature) loosely associated with the human sciences, the applied sciences, and the theory that concerns the aims and limits of literature. Many of the "total social facts" about exchange, division of labor, the creation of social space by way of delineation of gender, myth, in so far as it is a basic intellectual and prescientific praxis, and so on, gain currency when anthropology enters the salons of *belles-lettres* with theories of exchange and communication. I have argued that, as a figure of 1960s vintage, Claude Lévi-Strauss was responsible for beginning to raise consciousness about the environment through his reformulation of the "total social facts" he obtained from Durkheim and Mauss, and that the effect of his work was best felt in a style of thinking and writing in which literature and science are coextensive.

In *Tristes Tropiques* (1955), a distanced and mordantly ironical view of the existential anthropologist (himself) is given. The scientific analogue is presented in *La Pensée sauvage* (1962a), which studies the mobile systems of relations of humans and nature that make all egocentrism virtually unthinkable and even unbearable. Despite the attacks that have been leveled against Lévi-Strauss's minimal degree of empiricism or his failure to be a British, neo-colonial ethnographer who lives "in the field" for years at a stretch (and never as a *renonçant*!) before delivering his truths to a Royal Academy, the force of his ecology, science, literature, and feminism are clear.[13] Structuralism opened the mind to the environment and showed how process is differential, how it is both organic and inorganic, and how the health of the human sensorium depends on its empathy for the wealth of nature in which it lives.

Without the Lévi-Straussian ethnography, many of the poststructural works evincing a new awareness of the woman and the environment would not quite be what they are. The

ecological and feminist awareness that became resonant after 1968, as I have shown, was not owned by either the left or the right. The paradox is that a more conservatively drawn thinker like Lévi-Strauss would be one of the most outspoken ecologists, and that adepts of radical democracies—Deleuze, Guattari, and Virilio—would adhere to the same principles. That ecological awareness belongs to nothing may prove its force and necessity. For that reason, historians of science such as Michel Serres, Ilya Prigogine, and Isabelle Stengers, wherever they fall on the political map, address issues of high categories that need to be thought and debated. They say that because the world is grounded in chaos it does not follow that an economic Darwinism or chaos will be the commanding theme of interactions of commerce with nature. They conclude that nature is an open system; it resists control and will forever be of an improbable destiny, no matter how much isolating schemes of explanation (such as the second law of thermodynamics) may lead us to believe the contrary. Thus a sense of respect and tact become the ethical imperatives of the scientist who seeks to find a "new" and empathetic alliance with a nature from which many certainties have disappeared (Prigogine and Stengers 1995). Furthermore, as Michel Serres has stated, a *natural contract* needed to be forged in order to legislate respect for nature and for generous ways of intervening with it.

Paul Virilio's vision of a world that has developed without ecological consciousness shares an affinity, it can be posited, with the intuition that Lévi-Strauss reiterated about the beginnings of modern anthropology; the awareness of the *others* began, in the late nineteenth century, when civilizing and colonial missions had already made them almost extinct. If anthropology were a force of neguentropy, a force that stops the entropic process, then what Virilio imagines about a world of "terminal," "valid-invalid" subjects who live in a televisual space-time would be the effect of the inverse, of the post-capital world that colonizes the brain after it has successfully plundered Third World space and its populations. Virilio's fantasy of a brave new dystopia, a realistic inverse to that of Baudrillard's monarchy of a French cyberspace (where the model of the absolute king is concealed in the author's own design of its egalitarian community), conceives of a nation-state that has failed to engage, in Virilio's words, in *an ecological struggle, that is, the only battle worth fighting for*. And this struggle forces humans to think "transversally," as Félix Guattari would have it. It is by relating different registers, mental, social, and natural, that we can invent new existential territories that are no longer defined by Sartre's version of possessive individualism. The radical ecology that Guattari defined repeatedly, but especially in a platform for *Les Trois Ecologies*, begins in dialogue with differential process and singularization and ends with a collective existential praxis. Its basic microperception, the machinic quality of the world, its horizontal de- and re-territorializations, grow out of, and modify, structural ethnography. Through the tracing of new maps, through the invention of new existential territories that are at the same time mental and physical, organisms strive toward one another in ways that are no longer entirely controlled by consciousness. At the very limit of techno-scientific advances, the ways we perceive the world are being rapidly altered, though many inquiries in the human sciences lag behind. It is by incorporating these findings and by turning them toward humans and nature that ecological thinking and action can be oriented toward the future rather than a nostalgic past.

In the overview of poststructuralist intellectual labors "grounded" in 1968, we discovered in the concept of the "invention of everyday life," in tactical activities, in the creation of ecofeminisms, of seemingly Utopian Third World *federations* (replacing the nation-state based on ideas of a homogeneous totality) aimed at correcting what the long memory of colonialism and conquest retains for the ideologies of mastery over nature, and in a historian's glance at the shifts in meaning and orientation of writing *(écriture)*, the language of an articulation of ecology and feminism. In this instance, Michel de Certeau—though at first he may seem to be somewhat apart from the others—outlines a pragmatics that can sustain ecology under conditions such as those in which we live today. The person who in fact invests "sacred" values in the most imperceptible, innocuous, and secular areas of life is practicing ecology. To do so, she or he may bake sourdough bread instead of buying syndicated brands; call (and shriek at) representatives and senators to make views known about all bills on the floor of state and federal governments; "play" by gathering and preparing food that cannot be purchased in supermarkets or convenience stores; become a cyclist or a *flâneur*…. For de Certeau, it may be that indeed religion, what had made the pre-modern and ancient worlds cohere, a material relation with nature (and not just a routine of "relinking" as etymologists remind us), now moves into nature but in a guise that has none of its traditional trappings. In this sense, de Certeau's oft-repeated, controversial citation of Freud's invocation of "Die Mutter Erde" as a pervasively final truth in all things recognizes nature as the future, as destiny, fate, or *invention* that is needed to maintain the world.

Part of that invention would entail, as de Certeau continues to follow the intransigent and intransitive definition of writing that marked the "line of 1,000 aberrations" of 1968, cultivation of a broadened sense of writing. For him it would be exchange and proximity, in expression voiced about local and global issues, concerning the environment and, above all, a process of decentering the self, resembling what Donna Haraway observed about French and American women's literary activity. Here invention would be communal, as women can scaffold platforms that allow for the recovery of bodily rights and demographic policy, a policy aimed at a future as long as the past history of the colonization of women. The type of eco-writing intuited in de Certeau's *The Practice of Everyday Life* (1980) and in his *Political Writings* (1993, 1994) might be fancied now, twenty years after its first formulation, as a global networking that women establish for a radical democracy under the guidance of nature reassessed outside a traditional, patriarchal dichotomy and at the limits of scientific breakthroughs. That women practice writing or gain agency through speaking together does not mean, as I have tried to argue, that they are organic or inorganic, closer to the *oikos* than men, or free of the limits of Cartesian reason, but that women temporarily overcoming differences for the sake of activism need to be aware of their virtual and real power to change the world.[14]

In this light it seemed necessary to go back over the early articulations of post-1968 feminine writing in order to see where it was, how it worked, and what it did. In Hélène Cixous and Luce Irigaray we discerned a number of truisms and myths that were necessary for the invention and proliferation of its concepts and its political practice. Many have since become history, but our memory of them, like that of the Indians who thought of a past in terms of centuries instead of years and months, can give impetus to a federalizing process that obtains for women a right to be the stewards of the globe. "We must take into our own hands the power to create, restore, and explore…." Thus Val

Plumwood, echoing Teresa Brennan, ends *Feminism and the Mastery of Nature* (Plumwood 1993:96), shifting from a patient analysis of everything that has dampened or stifled feminine agency to a future praxis that will be born of a collectively radical democracy. It could in other words be called a "natural contract," as it might also be a transitivization—an activity that was formerly intransitive and self-liberating but that now has an objective before it—of feminine writing, as creation, as a tracing of maps, hence resistance to an unquestioned acceptance of globalism in its masculine terms, in the direction of the "only struggle worth fighting for" because that ecological struggle, for nature and habitat, is above all a woman's struggle.[15] In any event it will continue to decenter a full subject, the human species, and human creatures from the vanishing point of its vision, and it will look *all over* the environment in order to reassess its mentality, its process, and its politics, its *art of the eco*. We have seen how disparaging ideologies are more than ready to obliterate it. We also know that its "beginnings," its histories, belong to the principles of perpetual and life-sustaining revolution. Feminism, like ecology, has become global. And globalism does not have to be read in solely negative terms. It can also be read as a moment of intense awareness that comes with a new understanding of the planet—with its interrelations and pressure relations—and the cosmos. Ecofeminisms—singular and plural, local and global—born of a moment of critical thought have been the subject of this inquiry. Its inspiration has been to put ecofeminism to the test of struggling, resisting, becoming, and mapping out future lines of flight.

Notes

INTRODUCTION

1 See Michel de Certeau's impressive "Bibliographic raisonnée" in *La Culture au pluriel* (1980a), a study partially devoted to May 1968.

2 The word *eco*, from the Greek *oikos*, is understood in its multiple meanings of house, domestic goods, habitat, and natural milieu.

3 Thomas Kuhn's *The Structure of Scientific Revolutions* (1962) now stands as a history of the advent of structuralism much in the same way as does Gaston Bachelard's *Le Nouvel Esprit scientifique* (*c.* 1937). It might be said that Michel Foucault used their hypotheses to initiate a political view of structuralism and, therefore, to usher in a style of thinking that can be understood as poststructuralism.

4 Noam Chomsky (1981) argues that the postwar years were being planned in 1941–2, and implies that the war was being waged in view of a diagram set in place before the United States ever mobilized its forces.

5 See for example "Unbeknownst," a rich account that Lyotard makes of the occupation of the Sorbonne in terms of an unnamed community in a solidarity without a future (Lyotard 1991).

6 This and other translations from the French, unless indicated otherwise, are my own.

7 There is an autobiographical investment in this topic. My "ecological awareness" is an immediate result of the sight of forests that are clear-felled for the sake of better management on the part of "forest product industries." Between 1992 and 1994 in Northern Minnesota, on lands adjacent to the Boundary Waters Wilderness Area on the southern reaches of the Canadian shield, available spruce and aspen trees were recently harvested. The argument for clear-cutting is based on the immediate regeneration of buds exposed to total sunshine, meaning that any shade cast by trees left standing in selective procedures would inhibit growth in general. The counterargument is that, given enough time—say, 300 years—and if left alone, the forest would retrieve variety and not be an aspen—or popple—farm of trees picked, like tomatoes in August, on a cycle of a duration of seventy years (despite the fact that associates of the "forest product industries" seek a cycle of forty years). The autobiographical investment is developed elsewhere.

8 In the fall of 1995, the industrialized nations have done nothing other than shake a menacing finger at the military regime in Nigeria that has brutally murdered the Ogoni population and its eco-leader and poet, Ken Saro-Wiwa. None of the First World nations would go so far as to boycott the purchase of Nigerian oil.

1
A FIRST TYPE OF DISPARAGEMENT

1 See also *La Pensée 68: essai sur l'antihumanisme contemporain* (Ferry and Renaut 1985), which debunks poststructuralist theories.

2 The popularization of such a hypothesis was circulated in an article entitled "Evolution's Big Bang," in *Time Magazine*, December 4, 1995, pp. 66–75.

3 This position was already criticized by Heidegger (1947) and even more cogently by Lévi-Strauss (1962). See Chapter 3 of this volume.
4 Freedom and democracy are concepts that are being bandied about by political parties of different stripe to persuade voters. See also John Comaroff's historic account of how British colonizers in South Africa offered "freedom" and "rights" to the natives in order to enslave them better (Comaroff 1991).
5 This clearly offers a clue to the fact that *Le Nouvel Ordre écologique* is less about ecology than it is a politics against the French Green Party.
6 This strikes a funny chord in view of the recent hubbub surrounding the construction of a Disneyland near Paris that was denounced as a threat to French culture.
7 Human rights abuses, child labor and sweatshops are easily condoned by Western democracies when economic interests are at stake. See, for example, Shiva (1991).
8 The praising of a local place is often related more to its urbanization. This is the case with the recent popularization of Montana and other Rocky Mountain States. The land is sold to an affluent clientele from the city that colonizes it with its electronic equipment and often pushes out local people who can no longer afford the taxes. This was already explained by Michel de Certeau (1980a) in relation to local French cultures, such as that of Brittany.
9 It is important for animal rightists to consider the effect of development not only on animals that may go extinct but also on those that may proliferate unchecked and become "nuisance" animals (beavers, deer, squirrels, coypu, crows, pigeons, seagulls, to name a few).
10 This causes Ferry to wonder elsewhere in the volume why it is only in the First World that people worry about the environment:

> In the Third World or in the countries of the East, the necessities of economic development relegate environmental questions to secondary status. Herein lies an enigma…. It is in the West that the ecologist denunciation of Western wrongdoings gains the most acceptance, that the most sophisticated arguments are developed and the most sympathizers engaged.
>
> (Ferry 1992 [1995]:xxv)

Implied is that in the Third World "people" (no one is indicated) do not think and that, further, perhaps we should not either! The fact remains that First and Third World nations are involved in a dilemma in which guilt and originary violence are no longer the issues in the balance. Affirmative action of protection is needed to help people who have no alternative.

11 See also Tzvetan Todorov's praise of Monetsquieu's universalism opposed to Montaigne's ethnocentric relativism (Todorov 1987).
12 Simon Schama (1995) argues for rationalism aligned with southern Europe, mainly France, against the irrationalism and the obsession with myth of Northern Europe, especially Germany. Like Ferry, but with a different aim, Shama praises the rational, anti-nature position of the South and is critical of the nature myths of Germany that led to Nazi philosophies and the persecution of the Jews.
13 This is developed throughout Guattari's work but specifically in *Les Trois Ecologiques* (1989). See also Chapter 6 of this volume.
14 Ironically, in *Tristes Tropiques* (1955), Lévi-Strauss takes existentialism to task for the same reason when he accuses it of being a philosophy for secretaries *(midinettes)* because it

focuses too much on the self. For a provocative reading that shows how the return of the self is part of the contemporary period, see Marc Augé's *Non-lieux (Non-places)* (1992 [1995]).

15 Authenticity is more an existential term that makes no sense in poststructuralism.

16 During a recent lecture at Harvard University (November, 1995) Badinter also performed a trashing of 1968. She spoke in quasi-universal terms of *the* French woman and *the* American woman. She too declared flatly that the only valid feminism was that of Simone de Beauvoir who dealt with women's rights. French feminisms derived from 1968 were, in her opinion, utterly insignificant and purely academic.

17 The French term, *arrachement,* is a more violent tearing away, lost in the English term "separation." Ferry's book cribs Janine Chasset-Smergel, "The Green Theater," in *Sexuality and Mind* (1986:109–27).

2
A SECOND TYPE OF DISPARAGEMENT

1 Baudrillard argues that in politics "alternatives" have given way to simple "alternation." His remarks seem most pertinent to current politics in Western democracies.

2 Something goes wrong in Baudrillard's understanding of cartography. Borges simply plays on a map that is executed on a scale of 1:1, and whose size is forcibly that of what it represents. To say that it leads to replacing the world, of doing without the world, has nothing to do with the irony of a zero-degree of difference of scale. Christian Jacob alertly demonstrates that no magical trick is being performed in the fiction, but that it is a projection of total control. "The simulacrum imposes cartographical rationality upon a topographical disorder, and it subjugates real space and its inhabitants to geometry, a reflection of imperial schemes and of political reason" (Jacob 1992:409). Through Jacob we discern a will to power on Baudrillard's part that is on a scale of 1:1 with Borges's figure of the imaginary emperor.

3 See also William Mitchell (1992), who works through the digital technology informing Baudrillard's remark.

4 Gilles Deleuze exploits Benjamin's *Der Ursprung des deutschen Trauerspiel* (1963) to make the point coincide with atomic qualities of Leibniz's philosophy of atomism. Benjamin showed that allegory is not a failed symbol or an abstract personification but a power of figuration entirely different from the symbol: the latter combines the eternal and the momentary, nearby center of the world. But allegory recovers nature and history according to an order of time. It produces a history from nature and transforms history into a nature in a world that no longer has its center (Deleuze 1988 [1994]:125).

5 Baudrillard uses "simulation" to describe the operational model of a market economy based solely on laws of supply and demand. Of course, simulation in a more restricted way refers to cyberspace.

6 For a more nuanced view that focuses on the coexistence of many different times, see Marc Augé's essay, "The near and the elsewhere" (in Augé 1992 [1995]:7–41).

7 Animals' reproductive capacities are being impaired from eating polluted food. The source of food pollution can be far away and can be brought in by prevailing winds (*New York Times,* August 23, 1994). On the breakdown of animal immune systems and their effect on humans who consume them, see "Defenses down: pollution's toll on immunity against disease," *Los Angeles Times,* May 12 and 13, 1996. The article focuses on the massive death of certain marine animals as well as on the health problems of those humans who depend on their consumption, such as the Inuits from Arctic Canada.

8 The work reaches back to *Le Système des objets* (1968) and *Pour une critique de l'économic politique des signes* (1972).

9 In *The Geopolitical Aesthetic* (1992), Fredric Jameson shows how "conspiracy" films verify the power of decentralized and flexible international capitalism. Alan J.Pakula becomes for Jameson the symptom and solution of corporate totalitarianism. Jameson's work is precious to the degree that the book was published before Pakula completed the "eco-conspiracy" epic, *The Pelican Brief* (1993).

10 Baudrillard seems close to some fundamental principles of cybernetic theory. As we shall see in Lévi-Strauss and especially in Gregory Bateson in the chapters to come, a term cannot exist in isolation. For "power" to exist, a respondent part is needed.

11 Gregory Bateson (1972) argues that "power" is an outmoded physical concept. It still functions in many American discourses that uphold the notion of "objective power" and thereby, inadvertently, perpetuate an outworn distinction between subject and object.

12 Baudrillard had already pointed out the nostalgia that subtends any theatrical revival of the "body." We can add that it is perhaps a similar nostalgia that accounts for the popularity of certain cultural films, such as Jane Campion's *The Piano* or Wim Wender's *Wings of Desire* and *Faraway, So Close*. Siding with Baudrillard on this point, we can say that where simulation is "master," nostalgia and the phantasmal parodic rehabilitation of all lost referentials alone remains.

13 Here I recoup some remarks on Baudrillard in *Rethinking Technologies* (Conley 1993:89).

14 A nagging sense of the world's disequilibrium, exposed in Baudrillard's "out of balance," has echoes in Jacques Derrida's quotation of Shakespeare, "the world is out of joint," a leitmotif of *Spectres de Marx* (1993). For Baudrillard, imbalance seems to be something to gloss over, but for Derrida it reaches back to a disquiet that Marx felt under the effects of the Industrial Revolution and the yoke of capitalism.

15 The World Health Organization (WHO) estimates that in mid-1995 around 18.5 million adults and more than 1.5 million children were infected with HIV world-wide. Worst affected is sub-Saharan Africa with about 11.2 million people believed to be HIV-positive. It is estimated that over 4.5 million AIDS cases in adults and children have occurred worldwide since the pandemic began. The WHO estimates that of these cases more than 70 per cent were in Africa, with about 9 per cent in the USA, 9 per cent in the rest of the Americas, 6 per cent in Asia, and 4 per cent in Europe.

16 Kevin Kelly puts it thus:

> The rising flow uses its short moment of order to snatch whatever dissipating power it can to build a platform upon which to extract the next round of order. It saves nothing and spends all. It invests all the order it has to amplify the next round of complexity, growth, and order. In this way, it taps chaos to breed antichaos. We call it life.
>
> The rising flow is a wave: a slight rise amid a degrading sea of entropy; a sustainable crest always falling upon itself, forever in the state of almost-toppled.
>
> (Kelly 1994:405)

17 Augé (1992) distinguishes between "anthropological space" that consists of kinship structures, geometric space (with a town center, a church, and a monument) and non-places, defined by electronic media, digital maps and solitary egos.

3
EMERGENCE OF ECOLOGY

1 The unremitting criticism of current governemental policies levelled against the arts in America explains in sober terms how a group of virtually illiterate public leaders have flocked to “political correctness” in order to make a brash display of vindictive action. Hughes suggests that the same lunacy is operating against causes that include women, minorities, and the environment.

2 Throughout this study, I shall use the term “nature” in its common meaning of flora and fauna. At times, I shall also use it to mean all natural—that is chemical and physical—processes. I shall also use the term “world” as a natural site while knowing that the term has been discredited. “World”, with its existential residue, has been largely replaced by “cosmos”. I shall make only sparing use of that term, which remains a bit too grandiose for the more modest design of this study.

3 In the previous chapter we have seen how, at the beginning of *L’Écriture et la différence* (1967), Derrida argues that even if, one day, structuralism were to recede, we would not be able to go back to prestructuralist thinking. We would hope to think so but, in one of his many aphorisms, John Kenneth Galbraith remarks that human memory covers not much more than a span of thirty years. Prestructuralist thinking can indeed return, like one of Derrida’s ghosts, to solve improperly the dilemmas of the present. We have seen that Fukuyama represents a recidivism—prevalent in economics—in respect to structuralist thinking.

4 One interpretive yardstick can be found in Jean Piaget’s “Que sais-je” manual, *Le Structuralisme* (1968), and the reaction it elicits in Lévi-Strauss’s *finale* to *L’Homme nu*, vol. 4 of the *Mythologiques* (1971:570ff). Piaget took a view of differences in the psychosomatic regime, while Lévi-Strauss begged from a broadening of horizons that would free “man” from occupying a central position in any world-picture.

5 The sentence paraphrases that of Gregory Bateson, a British anthropologist highly esteemed by French poststructuralists.

6 Hélène Cixous, we shall have occasion to observe, also evacuates the subject in the early seventies, a gesture she perceives as a critique of leftism.

7 Teresa Brennan (1993:26ff.) calls the “era of the ego” that which centers the subject in a delusion of mastery. It comes with artificial perspective and a need, often unexpressed, to dominate nature.

8 The term “Occidental Project” is coined by Edouard Glissant in his *Discours antillais* (1988). It refers to a project of mastery linked to the present use of technologies and that, though it originated in the Occident now is ubiquitous. For the birth defects that are related to Chernobyl, see *National Geographic*, July, 1994.

9 See also Martin Heidegger’s critical reading of Sartrean, existential humanism through focus on language and the House of Being (Heidegger 1947 [1977]:232).

10 Lévi-Strauss at first would seem to be at odds with animal rightists who militate for an end to the exploitation of animals, from fur business to the consumption of meat. However, in a sense, Lévi-Strauss goes further than most rightists, who focus on a static rather than dynamic rapport. Most extinctions occur through development and population increase, but rightists are more concerned with shutting down an animal farm than with rethinking a system that kills many species by depriving them of habitat

11 “Ethical” refers to ways of being in the world. As we shall see with the feminists below, in agreement with Lévi-Strauss, ethical human beings let others be. “Moral” belongs to a system of morality that often reinforces dominant values.

12 Lévi-Strauss shows how indigenous people are far from "natural." They have extremely complex cultural organizations and, at times, behave like dandies in the middle of the forest.
13 The original lecture, in English, was retranslated by the author into French. I am taking the liberty of consulting his version, to my mind more subtle and firm in its derived expression than in the original. The English translation is mine, taken from *Le Regard éloigné* (1980:141–66).
14 For example, Susan Hayward (1993) argues that structuralism reflects a moment in French history in which permanent father-figures are sought. She parallels its emergence with the return to power of the patriarch Charles de Gaulle. Our hypothesis is that structuralism is much more of a transition from control to a loss of control in which fathers might serve as transitory figures.
15 Lévi-Strauss's views are devoid of some of the reasoning that inaugurates Ferry's work. Contrary to Ferry, the anthropologist opens the question of rights to include broader anthropological and epistemological questions so painfully absent from *The New Ecological Order*.
16 Simone de Beauvoir acknowledges her debt to the anthropologist in *The Second Sex* (1946) when she uses the proofs of *Elementary Kinship Structures* (Lévi-Strauss 1949), before the publication of the manuscript, to scaffold her arguments. Catherine Clément (1972) wrote an early but decisive essay on Lévi-Strauss. She alludes to the anthropologist throughout her work and again in her recent *La syncope, philosophie du ravissement* (1990).
17 Lévi-Strauss's foundational myths can be distinguished from foundational fantasies such as the reification of women or minorities because the latter are never codified.
18 Indeed, next to the question of natural ecology those of social ecology and habitat are converging. It is in this light that we can read, for example, Gilles Deleuze and Félix Guattari's essay on "La géophilosophie" (1990) or Fredric Jameson's *The Geopolitical Aesthetics* (1992). The latter complements the former. Jameson studies "conspiracy" films that attest to capitalistic enterprise that has gone out of control. What is said about *The Parallax View* and *All the President's Men* applies also to *JFK* and *The Pelican Brief*. In all these films *habitus* is under control of the technocratic order Baudrillard has imagined. Gilles Deleuze and Félix Guattari state that philosophy needs to become practical by orienting its ethics in a direction of *habitus*. See note 9, p. 156.
19 See Brzezinski (1993); Kaplan (1994); Raspail (1973). For an opposing "technoliberal" point of view, see, for example, Kelly (1994).
20 The point is expressed tersely in "En relisant Montaigne" (Lévi-Strauss 1991a: 201–18).
21 This can be read in all of Lévi-Strauss' work. It is explicitly stated in an interview in *Paris Passion* (1991b). This, in my view, disqualifies Jacques Derrida's otherwise careful and sustained critique of Lévi-Strauss in "Lévi-Strauss in the 18th century" (Derrida 1966).
22 See his reading of "The Apology of Raimond Sebond" (Lévi-Strauss 1991a: 202–21).
23 See Anthony Wilden's developments on "hot" and "cold" societies (Wilden 1972).
24 This is the argument developed by Catherine Clément in *Syncope: The Philosophy of Rapture* (1990). See note 16, p. 158.
25 Lévi-Strauss, in "History and dialectic," gives the example of the Frondes (1648–53) to show how certain factions, through intrigue and manipulation but under the guise of good will, were able to make political breakthrough and to accede to power (Lévi-Strauss 1962a [1966]:338). He tries to show the reader that what appears as black and white contains many shadings and nuances. Any binary division is a reduction and a simplification.
26 Lévi-Strauss's brand of structuralism has become a whipping block for allegedly being a "closed system," hence politically conservative. We need to qualify such views by reminding ourselves that Lévi-Strauss reacts against Descartes and a certain brand of Hegelianism. He is also critical of formalists. His notion of a symbolic, adapted from phonological linguistics that inspired some of Lacan's work, has also been decried by feminists as paternalistic. Without going into the question of some obvious paternalism, we can say that symbolic

practices helped also—and this has been pointed out by Catherine Clément (1990) who quotes Lacan in *Syncope*—to organize cultures and prevent them from wrecking their environment.

27 The progressive Western view is one with the domination of nature—and, perhaps, of women. It has been shown by feminist historians (Joan de Jean, Renate Baders, and others) that the bourgeois ascendancy in the seventeenth century in France caused the demise of a budding feminist movement among the aristocracy. The gridding of the world is to a degree one with the ascent of the bourgeoisie. Yet women's rights are a distant outcome of the bourgeois myth.

28 Specialized magazines have been rehabilitating indigenous ways of hunting and gathering, and various other types of knowledge. Recently, a popular magazine, *Time*, had a special issue entitled, "Lost tribes, lost knowledge: When native cultures disappear, so does a drove of scientific and medical wisdom" (September 23, 1991). The recent death of a medicine man in the Amazon was mourned as a huge loss to knowledge.

29 Lévi-Strauss alludes to the Cartesian "ego" that reigned over the last three hundred years until it was challenged by the loss of center in the hard sciences as well as in the social sciences. This is different from the parodic or artificial "ego" in Western society in an era of simulation or non-places.

30 Though overshadowed in the media by massive problems of social ecology (wars, famines, refugees, migration, etc.), the problem of extinction grows in importance. The Coho salmon is threatened with extinction because of overfishing and the construction of dams; *Life Magazine* of September 1994 announced that it would devote future pages to 100 species "that we may never see again." In the West, the public, in general, is in favor of saving species (when it does not pit human "jobs" against the saving of a species as in the case of the spotted owl versus loggers, an outworn opposition since logging jobs are threatened more by automation than by ecological measures: a "buncher" can cut in minutes what it took several men hours to do). Yet such inquiries never relate extinction with notions of "growth." Even Sierra Club activism does not stress that current economic models cannot not lead to extinction. Extinction of plant and animal species are pitted against "jobs" and "development." Limits on fishing (as, for example, off the coast of Maine) lead to protest by idled fishermen; restrictions on tree harvesting lead to protest by loggers. Few protest the extinction of many local plant varieties due to development, as can be seen on Staten Island and that linked to the construction of the Verrazano Bridge. A front page article in the local paper celebrated the growth of a northern suburb of the city where—since it is built on wetlands—City Hall gives free cellar pumps to homeowners after rains and where people have to drive through knee-deep water to the golf course after each rain. But the "victory" over wetlands is hailed as a heroic deed. It is against residues of such lineal mentalities that feminists interested in problems of ecology and public policy can militate.

31 One of the keenest expressions of the concept of history can be found in Lévi-Strauss' affiliation with Lucien Febvre's "anthropological" view of the unconscious (Febvre 1943), an almost timless phenomenon, which is studied through the filter of belief (Lévi-Strauss 1958: ch. 1).

32 It has been pointed out that a recent wave of suicides among Bororo Indians may be related to a sense of hopelessness felt as a result of the confiscation of their ways of life.

33 A similar argument is made more cynically by Baudrillard (1981:15).

4
CHAOS AND ETHICS

1 Today, by contrast, it is often a question of keeping a gene pool or archaic types of knowledge for reasons of exploitation and profit.

2 From the beginning, Bateson distinguishes between pure information—transmission of differences—and communication, which includes percept and affect and an existential dimension.

3 Jacques Derrida's notion of "double bind" (e.g. Derrida 1968, 1976) is loosely adapted from Bateson. Gilles Deleuze and Félix Guattari refer to him constantly throughout their work (see, in particular, Deleuze and Guattari 1990 and Guattari 1989). Michel Serres deals with information theory throughout his writings, though without specifically recognizing a debt to Bateson. More generally, it can be said that the critique of logocentrism and the shift to the notion of writing is simultaneous with a general epistemological transformation in the Occident that opts for the written word over the spoken word. The advent of *homo scribens* marks a radical part in human evolution, notes Pierre Chaunu in his foreword to Henri-Jean Martin's *History and Power of Writing* (1994:viii). This parallels the evolution from thermodynamics to cybernetics and information theory in the twentieth century. For an interesting reading in connection with philosophy, see Johnson (1993).

4 Mind is an ensemble of circuits and written programs located throughout the body and not simply in the back of one's head. These written programs are part of a scriptural metaphor that becomes insistent in the West, from genetic scripts (DNA) to cultural imprinting discussed by Freud in his "Mystic Writing Pad" (Freud 1984) and developed by Jacques Derrida. Some discussion of this can already be found in Wilden's *System and Structure* (1972).

5 Bateson makes the distinction between *pleroma* and *creatura*, between what consists of forces and impacts and what consist of differences. The world of *creatura* is that world of explanation in which effects are brought about by ideas, essentially by differences. There is an infinite number of differences, but only a few that make a difference. Information theory focuses on those that make a difference. The whole energy structure of *pleroma* applies only in so far as humans—and the machines they make—can store energy.

6 Jean Baudrillard's hypotheses on circulation of power and laws of supply and demand are based on such a theory.

7 *The Logic of the Living* is the title of an important book by François Jacob (1973). Lévi-Strauss's use of the "living" dealt more with questions of ethics and aesthetics.

8 The notion of distributed space, rather than central control, is more and more accepted. See, for example, Varela (1988). These notions also underlie much of Deleuze and Guattari's work. For a popularized version, see Kelly (1994).

9 These "lines" can be set side to side with Deleuze and Guattari's notions of "diagram" (see Deleuze 1986:40–9).

10 For cybernetics, see, of course, Wiener (1948), and also Crick (1993). Crick shows how the physical brain supports mental life. Joys, sorrows, memories, ambitions, and a sense of personal identity are the behavior of a vast assembly of nerve cells and their associated molecules.

11 The relation of exchange is being studied more and more by scientists, politicians, and cultural theorists alike. Recent findings point to the fact that major changes can occur very quickly, in as little as a decade. In addition to *Climate—Our Future* (Schotterer and Andermatt 1991), see, for example Al Gore's *Earth in the Balance* (1992:56–80), and Bill McKibben's *The End of Nature* (1989:3–46).

12 Deleuze and Guattari's notion of "machinism," and automata in the wake of Varela and others, makes of humans self-regulating machines.
13 Heidegger anticipated some of these changes with new inventions in techno-sciences in *Sein und Zeit* (1927).
14 In *Culture and Imperialism*, Edward Said (1993) is critical of choosing "ecology," or "feminism," the way one chooses an item on the menu. Ecological—or feminist—commitment engages the entire person and is predicated on existential mutations.
15 This sentence serves as epigraph to Félix Guattari's *Les Trois Ecologies* (1989).
16 For a similar idea, see Michel Serres's *Le Parasite* (1980). Indeed, the parasite who destroys its host, destroys himself eventually.
17 We can review a recent story by Mark Jerome Walters, "Victoria's not-so-secret ruin" (1994), which was about Lake Victoria in East Africa. Lake Victoria, the author relates, has fed millions of Africans for centuries on its diverse group of fish known as cichlids. Millions of Africans depended on the fish for their major source of protein. The fish were too small to be filleted and sold on the export market. In the 1960s, the colonial administration of Uganda introduced the fast-growing Nile perch. Released into the lake, the perch ate all the cichlids and grew rapidly into marketable fish. One scientist likened the experiment to that of clear-cutting the rain forest and replacing it with fast-growing timbers. The cichlids fell from 80 per cent to 2 per cent of the fish in Lake Victoria within a decade. While countries around the lake now export 200,000 tons of Nile perch, its demand has driven prices beyond the means of tens of thousands of local people. Unlike cichlids, perch must be smoked, which further diminishes the short supply of trees around the lake. Once again, the benefits of industrialization—that is, of export—have bypassed the poor. While a few Africans have grown wealthy, pressure put on the government by the European Community and the United States to repay the debt have further impoverished the poor. In addition, the perch fishery is declining. The perch have eaten the cichlids and now have only each other to feed on. Cannibalism has become another link in the food chain, as adults feed on young fish. Millions of people are affected. Snails (schisotosoma) that transmit disease used to be eaten by cichlids. They are now developing undisturbed and threaten to spread disease. The loss of herbivorous cichlids has contributed to the spread of algae that suck oxygen from the water and create hypoxic zones. Walters quotes Edward O.Wilson, author of *The Diversity of Life* (1992), as saying that never before has man in a single ill-advised step placed so many vertebrate species simultaneously at risk of extinction and also, in doing so, threatened a food resource and traditional way of life of riparian dwellers.

Recently, Lake Victoria is in the news again, this time in connection with the civil war in Rwanda, which is also an indirect result of colonial intervention and blind theories of mastery. The war between the Tutsis and the Hutus is related to an ecology of ideas, particularly to their implementation during Belgian colonial rule. Belgians favored Tutsis and now, after colonial rule, Hutus take their revenge.

For another disastrous effect of greedy development without attention to ecosystems, we can point to the recent development in New Guinea, where the natives were lured into quick timber sales that ruined the ecosystem. A *slower* and more carefully executed plan could have benefited most and not just a few exporters.

How globalism bypasses and ruins many local populations is still not publicized enough. Even tourism often does not benefit the local economy as much as international business chains. In the context of our study of ecology that evolves from the sixties, the reopening of the Vietnams to tourism brings in major airlines, hotel chains, along with, probably, prostitution and drugs for a good part of the local population.

18 In *System and Structure,* Anthony Wilden writes in a footnote:

> In an article whose title is a quotation from Locke,—"But There is Nothing I Have is Essential to Me", Colin Cherry (1967) points out, as others have done, that the word *individuum* in the Middle Ages seems to have meant "indivisible from the community or unit," whereas the Ciceronian use is closer to present-day usage. The Trinity, for example, is "holy and individual." Cherry goes on to quote the 1888 edition of the *New English Dictionary:* "…*Self-,* as a living formative word first [appeared] about the middle of the 16th century, probably to a great extent by imitation or reminiscence of Greek compounds in *auto*…[whilst] the number of *self*-compound words was greatly augmented by the middle of the 17th century when many new words appeared in theological and philosophical writing, some of which had a restricted currency of about 50 years (e.g., 1645–90), whilst a large proportion…have a continued history down to the present time." The noun "self" dates from 1595, according to the *OED,* with the philosophical sense of "ego" appearing in 1674. Similarly, the noun *moi* in French dates from the time of Montaigne, c. 1588 (Robert, 223). We should not, however, confuse a concept of self with ego.
>
> (Wilden 1972:152)

19 Narcissism did not exist in Western civilization until the invention of mirrors and representation. In the Middle Ages, for example, identification was linked to traditions and the performance of rituals. Narcissism culminates today—but also becomes parody—in the all-pervasive and carefully marketed imaging. French feminists, as we see in Chapter 8, page 125, have been heavily critical of an aggressive narcissism linked to death, which they have countered with conditions of immanence. Yet the condition does not have to be condemned entirely. As Teresa de Lauretis (1994) and others have argued, narcissism can also prompt progressive and selfless investigation about the surrounding world. Freud was on the mark when he distinguished a "primary" from a "secondary" narcissism. The former, which is born of an entire illusion of endless immanence in the world, is countered by the latter, which continues an illusion of self-centeredness based on the realization that it is only an illusion, thus promoting the "self" to be constituted between inverted commas.

20 *La Nouvelle Alliance* (1979) was translated under the title *Order Out of Chaos,* in 1984. The English title inflects Prigogine and Stengers's hypotheses in a different direction.

21 Serres defines three kinds of systems: logico-mathematic (no time); mechanical (reversible time); and thermodynamic (irreversible time).

22 This movement is part of a general cultural shift from language and "full" speech to writing and scriptural metaphors. As we shall see in the next chapter, technology is relocated in the

process ensuing from exteriority to something that already inhabits a space of "interiority." Christopher Johnson (1993) suggests a proximity between Derrida and Serres. This proximity could be extended to other cultural theorists. For our purposes, it is worth noting that information, just as writing, is associated with the feminine. It would be historically productive to see how manuals of iconography in the early modern age feminized the different sciences.

23 Serres uses some of the hypotheses developed by François Jacob (1973). See also the writings of Henri Atlan (1972, 1991) for an update on Jacob's more structuralist theories.

24 The aleatory nature of temporary organization is at the basis of many contemporary readings. We can find it in Cixous's and Derrida's readings of chance and necessity as well as in Deleuze and Guattari's notions of assemblages.

25 The term is used in a slightly different form by Wilden (1972).

26 Jeffrey Mehlman (1979) explains and historicizes the figure in relation to structural thinking.

27 Serres shows that Leibniz developed a vision of a multicentered, infinite, and complex universe. Going back to *De Rerum Natura*, Serres (1977b) argues that the clinamen, described by Lucretius in the first century BC, can be considered as the starting point of a reflection on history that eschews the domination of nature by "man." He suggests what he will later develop in *Le Contrat naturel* (1990), that is, the search of a peaceful pact with nature.

28 Serres opens onto a more general level what had been discussed in respect to sexual difference and of cultural differences between the sexes. Cixous had noted already in "Sorties" (Cixous and Clément 1975) that because of cultural configurations, women's affective economies are more open to spending while men's are more open to retention (Cixous and Clément 1975). Irigaray arrives at similar conclusions by contrasting male and female sexual models, as we show in Chapter 8 of this volume. Irigaray likens the present cultural model of acceleration to the male sexual model. To this she opposes the mechanics of fluidity in women's bodies. In both cases, women are more open to spending and a free exchange. See also Whitford (1992) and Brennan (1992).

29 The figure is taken from François Jacob (1973). N.Katherine Hayles (1988:204) gives a critical assessment of a scientific grounding of Serres's assumptions. For her, Serres speculates on science as philosopher when he equates or "interlocks" systems that cannot all be read as "languages." The use of Serres' theories for emancipatory purposes is discussed by Eric Charles White (1991). See also Henri Atlan's criticism of Jacob and indirectly of Series's hypotheses (Atlan 1991).

30 The phallocentric metaphor, which served to impose power and operated along the axes of light/shadow and visible/invisible, loses currency.

31 The importance of Ficino's impact on intellectual history cannot be underestimated. His correspondences are metaphor itself and, as Erwin Panofsky long ago argued about idealism in dialogue with nominalistic philosophies of "inner experience" and sensation," it shows how "'the truth of a created thing consists primarily in the fact that it corresponds entirely to its idea" (Panofsky 1953 [1971]:8).

32 Serres (1990) declares that, at last, the Occident has become more interested in the victims than the victors. Emancipatory thought now focuses on the former. Moreover, its anthropocentric dream world is suddenly shattered by the irruption of nature.

33 Increasingly, it can be seen how humans and natural habitat are coextensive. Droughts in California are made worse by population pressures. In places like Africa, population increases are making natural resources top national priorities. There is an obvious correlation between population increase, scarcity of resources, and increased migration.

34 Similarly, Teresa Brennan (especially 1993: ch. 5) underlines the importance of physis, of the interaction between microcosm and macrocosm and the relation of time to exploitation.

35 Georges Bataille and his followers criticized the mind/body division by launching the notion of the acephalous leader as that which characterizes fascism, in *Oeuvres complètes* (1971). Discoveries in the techno-science arrive at similar results, as argues Brennan (1993:96).
36 See Joni Seager's *Earth Follies* (1992), on the importance of women and grassroot politics. The notion of an *adventitious* praxis that emerges from the idea of weeds and grasses reaches back to Lévi-Strauss's praise of the ethnographic imagination that spreads contagiously over the earth (1955:35ff).
37 Serres distinguishes well between the parasitic and symbiotic rapport.
38 It might be of interest for a feminist reading that the theories of dissipative structures, though co-authored by Prigogine *and* Stengers, are usually only attributed to Prigogine.
39 See David Gelernter (1994). The techno-sciences need the humanities for questions of value. See also Henri Atlan's theories, especially in *Tout, non, peutêtre* (1991), which distinguishes between science, politics, and humanities—or what he calls poetry. Science deals with objectivity as much as possible, politics with prophecy, but "poetry" deals with imagination and with what can be. So to project toward the future, through imagination, is a way of making it possible. Let us not forget that time is also a mental construction.
40 Scientists, especially in the United States, often dismiss their data as inaccurate. Humanists who hold over them the "truth" of science criticize them for lack of accuracy. See N.Katherine Hayles, "From epilogue to prologue: chaos and the arrow of time," in *Chaos Bound* (1988:91–114). See also Teresa Brennan in *The Interpretation of the Flesh* (1992). For a more positive following, see Paul Virilio, Gilles Deleuze and Félix Guattari in much of their work.
41 See N.Katherine Hayles, "Chaos and poststructuralism" (1988:143–74). David Harvey, in *The Condition of Postmodernity*, Part IV (1988:327–59), discusses especially our responses to changes in the experience of time and space under present compression.
42 Deleuze and Guattari (1990) allude to Prigogine and Stengers as scientists who are not obsessed with objectivity.
43 Here *La Nouvelle Alliance* (Prigogine and Stengers 1979) recoups Plumwood (1993:104–19).
44 Forests "move" across prairies and deserts. See Kelly (1994).
45 As Mallarmé would have it: "Un coup de dé jamais n'abolira le hasard" (Mallarmé 1985).
46 See the celebration by "techno-liberals" such as Kevin Kelly, Howard Rheingold and even Jean Baudrillard, who disregard any social implications that their remarks about sustained development on the planet may have.
46 To identify with women as a category presupposes a certain common "identity" but not the "identical." Differences remain at all levels. For a development of this argument, see Antoinette Fouque (1995).
47 This is not regressive in relation to a notion of gender as performance. But we must realize that this type of simulation has currency mainly in First World countries. It is important for First World women to become aware of, and tolerate, different cultural speeds.

5
MOTOR ECOLOGY

1 Kenneth J.Knoespel (1987) argues how scientific language in the early modern age strives to silence the spirit of dialogue and exchange that give birth to it.
2 It should be noted that in his best-selling work, *The Postmodern Condition* (1979), Jean-François Lyotard also deals with the impact of technology on nature and culture. In a publication based on an exhibit at the Centre Pompidou, *Les Immatériaux*, Lyotard and Dolorès Rogozinski (1985) celebrate technological breakthroughs as enabling humans to

leave the body and matter behind. Technologies, they claim, become a prosthesis to get to know the environment. In keeping with his method of analysis, Lyotard suspends judgment. Implicitly, his criticism bears on Hegelian dialectics and, closer to us, on phenomenology. By reducing matter to a state of energy, technology "dematerializes" and especially "denarcissizes" the human body that lives on solely in media culture.

3 See Stephen Gould and other complexity thinkers who assert that life, and humans, appear by chance. There is natural selection, but there is also chance. Time was just right for life to appear. It could not happen this way again. As we have seen, it's being without purpose does not mean that it is not goal-seeking but it seeks goals in a more random way.

4 Much like the forest in which Heidegger set out on his meditative journeys, which is now biologically inert, bereft of many of the organisms that sustained it.

5 We can read a similar concern about loss of mystery and enchantment in the work of Jacques Derrida. In *The Postcard* (1980) the writer tells his correspondent that theirs will be one of the last correspondences. Henceforth, electronic technology will replace detour and delay with simultaneity. The hand with its symbolic resonance will be replaced by the machine. Derrida is often critical of a science linked to rationality and a will to dominate. Technology does away with mystery and poetry. Similar criticisms are found in the work of Jean-Luc Nancy. See, for example, his reading of a "becoming technological of the world" (Nancy 1993).

6 Francisco Varela (1988) develops theories of knowledge, based on information theory, where sight and consciousness are separate in such a way that seeing and knowing are separate activities.

7 Virilio is close to Baudrillard. But where the latter celebrates speed and simulation, the former uncovers how the politics of speed deprive many people of habitat.

8 These theses underlie much of Virilio's work (see especially Virilio 1978).

9 Saskia Sassen (1992), expands this aspect of Virilio's observations. She argues that cities like New York, London, and Tokyo have taken over economic control of the world, primarily by means of telecommunications. Most other areas of the world that are not part of this global city become increasingly impoverished.

Robert D.Kaplan (1994) shows that much of humanity appears to be going the other way from telecommunications. The Occident is oblivious to such a move. Yet that move, involving large numbers of people and causing disruptions everywhere, has to be reckoned with.

10 Non-place is used in order to evoke Marc Augé's (1992) study of proto-teletopical sites such as transit areas in airports ("duty-free"), but it can extend to McDonald's restaurants (anywhere in or out of this world), convenience stores (and the like).

11 This distance was necessary for the gaze of the central authority throughout the work of Michel Foucault.

12 Loss of lived space and temporal disconnection, by taking people out of a familiar space they have created and out of the streets, prevent them from acceding to power. Virilio (1977), quoting politicians and theoreticians from Clausewitz to Engels, shows how the power of the people is the control of the streets. The bourgeois quickly became aware of this and exploited this situation to their advantage.

13 The myriad new books about this include Rushkoff (1994) and Kelly (1994).

14 Virilio asks the question:

> How can we account for this situation? It is necessary to introduce the specter of a new kind of interval, the interval of light (or zero-degree sign). In fact, in relativity the revolution of this third "interval" is in

> itself a sort of imperceptible cultural revolution. If the interval of time (a positive sign) and the interval of space (a negative sign) have given impetus to the geography and the history of the world through geometrical measurement of agrarian space (allotment into parcels of land) and urban areas (cadastral surveys), the organization of the calendar and measurement of time (clocks and watches) have also presided over a vast political and chronological regulation of humans societies. The sudden emergence of an interval of the third type thus signals that we are undergoing an abrupt qualitative shift, a profound mutation of the relations that as humans we are keeping with our living environment.
>
> (Virilio 1993:5)

15 The "groupuscule," explains Michel de Certeau (1994:99), is the "melting pot" in which appear the logical oppositions that are shared by or that distinguish different revolutionary movements. It belongs to the ideolect of 1968 and has a currency associated with creative conflict.

16 Teresa Brennan argues the point in stating that "a galloping construction of causality in the physical world" is used by controlling ideologies to paper over the fact that "as things get faster and faster at the level of constructed space-time, they get slower and slower in relation to the natural logic they attempt to rival (Brennan 1993:177–8). In another context, Vandana Shiva (1991) shows how the sums of money extracted from the Indian subcontinent are much higher in the twentieth century than they were during the colonial era. It is also being noticed that farmers who were subsistent until recently are no longer able to be so.

17 Small entrepreneurs are now "in." They put pressure on corporate America that is more and more said to be "out." (*Fortune Magazine*, January 1995).

18 An article on the "Loss of the French bistro culture" describes how fast food and television replace the leisurely lunch and street culture. Alcohol consumption has been reduced in an urban society that stresses production and where the countryside is emptying even further (*New York Times*, December 22,1994). The French tend to perceive technologization as dehumanization and loss, rather than simple change (see Conley 1996.)

19 Much has been made of the current change from atom (singular) to network (plural). Where the network simply points to interconnectedness, as "swarm" it takes on the dynamics of the mob and can be read positively (Kelly 1994) or negatively (Brzezinski 1993).

20 Jean Baudrillard, we have seen, inserts his work there.

21 For an elaboration of the overabundance of events, see Marc Augé, "The near and the elsewhere" (Augé 1992 [1995]).

22 On the notion of space and marketing, see Augé (1992) and Baudrillard (1981).

23 *Fido* who used to protect our house, our faithful shepherd, is being increasingly replaced by electronic alarm systems. These systems, first hooked up to the telephone line, are now hooked up to radio transmitters that send signals to radio receiving towers that may be several thousands of miles away.

24 "Symbolic analysts," as they have been called—that is, people who work with sign systems in the information sector—move out of cities and into protected settings from where they control the world but are also impervious to socioeconomic problems that have become invisible to them. This segregation at the upper end had—and has—its counterpart at the lower end where people are relegated to areas where they cannot be seen. In Paris, a minor variation on May 1968, led by high-school students in the spring of 1994, brought into the cities youths from the poor suburbs who performed in an affluent postmodern city what is an everyday occurrence in the suburbs. Trashing signs of middle-class wealth (cars and

vitrines), they made visible to affluent city dwellers and tourists what otherwise remains hidden from the center of the city.

25 This is the inverse of Félix Guattari, who quotes Virilio throughout his work. Virilio develops a critique of a dominant system that exploits people through technologies. Guattari, by contrast, inserts his work at the point where—once abuses have been uncovered—technologies can be turned toward people rather than away from them.

26 By contrast, in "Les immatériaux," Lyotard and his group celebrate the transformation of subjectivity under the guise of "dematerialization" (Lyotard and Rogozinski 1985).

27 As Teresa Brennan argues about much of cultural theory, there is no mention of economics (e.g. Brennan 1993). Virilio's fascination with the valid invalid does not broach a crucial economic issue and therefore, like Baudrillard, is more concerned with aesthetics.

28 The loss of memory means the loss of inscription. Knowledge becomes exterior, consigned to databanks. The person using the computer is but a technician, no longer a "savant."

29 Witness the CEO who declared a few years ago that he was going to eradicate Russian people's memory of vodka and impose Pepsi Cola within a single decade. Now, a few years later, his remark bears out theories of complex systems and proves the non-viability of linear predictions.

30 See also Brennan (1993:154), who argues that states use spatial dynamics to obtain control of their subjects. Crucial now is the acceleration of the sacrifice of lived time. Instant gratification of subjects at the hand of the electronic technologies promotes the effect of time replacing space where, still, spatial control and spatial expansion are the condition and the being of the state.

31 Along with a sense of loss of humanness, Virilio, speaking in a European tradition that liquidated nature several centuries ago, does not pay attention to the interrelation of nature and technology. For some of the results of such a European import of attitudes in America at the time of early settlement in connection with long-term impact, see the article by novelist Jane Smiley (1993).

32 In *System and Structure* (1972), Anthony Wilden remarked that a certain use of information tends to exteriorize and objectify knowledge away from the human body. He also shows convincingly that information does not simply have to be mechanical.

33 Virilio confuses information as reduction of poetry to transmission of meaning with information as developed by Bateson, that is, as an inscription. See Johnson (1993) on system and writing in Derrida.

34 Again, this is developed at length by Brennan in *History after Lacan* (1993).

6
NEW ECOLOGICAL TERRITORIES

1 Michael Foucault (1967) "Sur les façons d'écrire l'histoire," in François Ewald, ed; *Michel Focault, dits et écrits*, vol. 1, Paris: Gallimard, 1994, pp 596–7.

2 See also Guattari's article "Pour une refondation des pratiques sociales," in *Le Monde diplomatique* (October 26, 1992). Published posthumously, the article is called a "testament" by *Le Monde*. Guattari addresses the disontents of most civilizations and proposes ecological practices that would reorient our societies.

3 Guattari insists especially on economic loop problems. Cheap labor—Marx's standing reserve army—has brought wealth to certain parts of the world, in particular to South-east Asia, and has impoverished ever-growing pockets in the First World and much of the Third World. In addition, people are idled through automation. An example is taken from the automobile industry. In a decade, Fiat, the Italian car-maker, has reduced its work force from 1,500,000 to 60,000. During the same time, production has increased by 75 per cent.

4 Guattari—and Deleuze—recognize their debt to the work of Paul Virilio whom they like to quote. The same theme is encountered in Augé (1992).

5 In "La géophilosophie," Deleuze and Guattari (1990) show how philosophy always develops in relation to a territory. This territory is never homogeneous, but rather it is created and recreated by moving assemblages. In his readings of Spinoza, Deleuze also develops the notion of "conatus," of an attraction or a striving toward the other—human, animal, or plant—that goes beyond consciousness or a will.

6 For an elaboration see Chapter 4. Mental ecology deals with passages and circulation of affect before translation into rigid codes, social ecology extends the former into selective practices, and natural ecology extends those practices into nature and intersects with organizations of fauna and flora.

7 Drucker (1994) argues that most changes occur not through violent revolutions but quietly. So, for example, the peasants and servants became laborers. The proletarians withered away as a class when new technologies became central and, with them, a new social class. Michel de Certeau (1980a [1993]:116) has accounted for the ways in which French intellectuals and teachers were seduced into membership with the Communist Party in 1968, in part because its ideology replaced what had formerly been "patriotism," "positivism," "scientism," "laicity," etc.

8 There is a marked difference between activism and struggle, organized citizenship and mental ecology. Where activism takes place often in dialectical form, to go against the enemy, it can be only temporary. Ecological thinking has to do with fluid boundaries, primary processes and ways of thinking that are not purely black and white but various shades of gray as well. Ecosystems do not have abrupt changes. Changes are gradual.

9 Eco-logic, contrary to Marxian and Hegelian dialectics, no longer focuses on the "resolution" of opposites. In the domain of social ecology especially, there are times when men and women have to determine common objectives and behave like "little soldiers." But emphasis in Guattari is on times of resingularization, when individual and collective subjectivities will dedicate themselves to creative expression without attention to collective finalities (1990:46–7).

10 This further invalidates Ferry's criticism of Guattari (Ferry 1992:209–37).

11 See an account of these terms in Hardt (1993).

12 It has been said that the singular atom is the figure of the twentieth century while the network will be that of the twenty-first. The figure of network (also the ubiquitous beehive) can easily be appropriated for conservative economics. In a more critical sense, network insists on interconnectedness and pressure relations.

13 In 1995, the US media reported that, in the Pacific Northwest, sea lions who are preying on salmon that are swimming up river for the purpose of spawning would be killed to give the fish a chance to survive. Such an organic rather than dialectical or looped structure isolates a fact without making the connections: that is, the salmon are in depredation because of dams, overfishing, etc.

14 See the recent article in *Public Interest* (Spring 1994) that argues along the lines that global warming is of little importance since technology will have devised ways of using clean and alternate resources. Technology will take care of it all. Even if this were so, still it can be contended that present-day expansion is at odds with conservation. It is, ironically but unsurprisingly, the insurance companies that have lately started to take into account climate following the recent disasters (hurricanes, floods, earthquakes) that cost them unprecedented sums of money. We can go back to Lévi-Strauss for whom human greed is basic. Perhaps nothing will stop humans except necessity and the law. Yet, in a sense, the law does away with ethics.

15 The reader is reminded by Guattari that Freudian psychoanalysis is but a temporary way of reading subjectivities. Others will take its place: there was a time when Greek theater or the courtly romance were the standard models, or modules, for subjectivity. Today, it is

Freudianism whose ghostly presence is visible in the form in which we maintain the existence of sexuality, of childhood, of neurosis. And although he does not envisage transcending Freudianism *(le fait freudien)*, nor argue that it should be written off altogether, he proposes that its concepts and practices be reoriented, uprooted from their prestructuralist attachments to a subjectivity wholly anchored in the individual and collective past.

16 Guattari's processual lines of flight update Bateson's notions of gene in organism, organism+organism and organism(s) in environment.

17 Guattari criticizes the psychoanalytical establishment, which is too focused on complexes and concepts that prevent it from dealing with the singularity of its patients and recognizing the transferential non-neutrality of the analyst. He reminds all those who are in a position to intervene in individual and collective psychic agencies (through education, health, culture, sport, art, the media, fashion, etc.) that it is ethically unacceptable for anyone operating in the field of subjectivity to shelter behind a transferential neutrality whose professed basis is the corpus of scientific work that has achieved mastery over the unconscious.

18 In the original French: "il y a une écologie de mauvaises idées, comme il y a une écologie de mauvaises herbes."

19 It suffices to recall the picture used on the cover of *Yale French Studies* 36–37 (1966), which displayed a frayed robe that was in motion, connecting and disconnecting with environing space. A symptomatic distortion of the past is summed up in a provocative remark by Susan Hayward (1993). She asserts that the desire for political stability with the return of Charles de Gaulle was analogous to the rigidifying effect of structuralism. In both political and intellectual spheres, it is argued, controlling "father-figures" were sought. Structuralism, by contrast, was really theorizing how paternity worked in myth, genealogy, and ideology.

20 See Michael Hardt's readings of Deleuze for similar problematics (Hardt 1993). Of importance is not a universal law that would guide to ecological praxes but a highlighting of the basic antinomies that exist between the ecological levels. Specific to mental ecology is the principle that an approach to existential territories derives from a pre-objectal and pre-personal logic, evocative of what Freud had described as "primary process." This is the logic of the included middle, where white and black are indistinct. Mental ecology can emerge at any moment, beyond the boundaries of a formed ensemble or within the bounds of individual or collective orders. Freud invented the rituals of the analytical session—free association, interpretation—as a means of apprehending fragments that act as catalysts in existential disjunction in terms of the reference myths of psychoanalysis. Today, some post-systemist tendencies in family therapy have set about creating a different milieu and a different set of references within which to understand these fragments. These structures are none the less incapable of accounting for the productions of "primary" subjectivity, as these unfold on a positively industrial scale at the instigation of the media and public institutions.

21 "Teenage women in industrialized areas of the third world increasingly find themselves the sole or major source of a cash wage for their families, while access is ever more problematic" (Haraway 1985:87).

22 Teresa Brennan puts it this way: in respect to Deleuze and Guattari of *L'Anti-Oedipe* (1972), but to a lesser degree, it can be inferred, *Mille plateaux* (1980), an ecological world-view associated with Spinozan philosophy, is put on the post-structuralist agenda, but the authors "make it impossible to think historically whilst using the framework they advocate" (Brennan 1983:87).

23 We can, once again, recall how Simone de Beauvoir was indebted to Lévi-Strauss's notion of kinship structure and exchange.

24 On the affinities of Lévi-Strauss and Baudelaire, see James Boon's remarkable *From Symbolism to Structuralism* (1972).

25 Cited and studied at length in Lévi-Strauss (1991a:260ff).

7
EVERYDAY LIFE

1 The temporality of a utopian logic that is aware of its finality is mapped out by Jean-François Lyotard (1991:42–8).

2 Denis Hollier presents a realistic inventory of May 1968 in "Actions, No! Words, Yes!" (1989).

3 For one, because of the force of translation. Most of his books and articles will soon be available in English. To date the anglophone public can read *The Practice of Everyday Life* (1984); *Heterologies* (1986); *The Writing of History* (1988); and *The Mystic Fable* (1993). Forthcoming are the *Political Writings* (1997), *The Possession of Loudun*, and volume two of *The Practice of Everyday Life*. Lacking still is the multi-authored *Une politique de la langue* (1976) and at least two other studies of heterology.

4 In "Des espaces et des pratiques," the conclusion to *La Culture au pluriel* (1993:205ff.), he characterizes culture as "soft" and neocolonialism as what is "hard."

5 These are the very same words that Guattari used when thinking about the place of technology in culture. See Chapter 6. See also Augé's reworking of them in *Non-places* (1992 [1995]:78–87).

6 "Popular" has changed its function. It is no longer opposed to high or elite culture but more and more synonymous with mass-produced culture. Everyone has the same imaginary, but not everyone has the same money. Popular culture such as film and sport invest millions on audience testing and are dependent on profit alone. We have strayed from the basis of de Certeau's definition of popular things.

7 Kelly (1994) notes the shift from atomism to networking in our century. The singular atom is replaced by the swarm that has no center and no control (Kelly has recourse to the metaphor of the beehive). Brilliant insights are here obfuscated with techno-liberal views of non-intervention or of just "going with the flow." See note 19, p. 167 and note 12, p. 169.

8 Gilles Deleuze makes a similar argument in *Time-Image* (1985). For him, speech acts in Third World cinema, contrary to exotic representations, are subversive and politically effective.

9 In other words, de Certeau argues for the importance of resisting a dominant order. Baudrillard does not believe that such a resistance is possible or even desirable. In his view, the system must run its course until a "corrective" catastrophe brings about a new order.

10 Priscilla Parkhurst Ferguson's *Paris as Revolution* (1994: ch. 1) owes its style of interpretation to de Certeau's concept of a practice of spatial history.

11 See also Christian Jacob (1992: ch. 4) on the controlling order of toponymy in the cartographical tradition.

12 We can use the distinction made by Deleuze and Guattari (1990) between *pouvoir* (paradigmatic, hierarchical, vertical power) and *puissance* (syntagmatic, horizontal, spatialized, enabling power).

13 Similarly, Guattari appealed to a quotation from Walter Benjamin in order to make a case for story-telling. The latter, he argues, keeps traces of the speaker's body in his words (Guattari 1989:69–70).

14 The remarks are proof of the logic of movement—the ecology—of a good deal of protofeminist literature, including the writings of Marguerite Duras that evoke walking beggar women.

15 Current insistence on government reduction in the United States and an increasingly anti-corporate sentiment may be a case in point. The notion of federation that has come up in our inquiry has been replaced by that of network. Network does not have to be used solely in the sense of contacts that will increase profits. It can also be read in the sense of interconnections and interrelations.

16 Recently, a wave of suicides among the Bororo Indians who were described by Lévi-Strauss in the 1950s makes observers conclude that it it may be caused by daily deprivations and by the violent super-imposition of one ecological speed upon another.

17 The twists and turns in the Chiapas uprisings mark a temporal distance between the publication of de Certeau's study in the early 1970s and 1995. The Chiapas' form of resistance was not peaceful but the response of the government was exceedingly violent. The violence escalated with the intervention of a Mexican expert in Washington who pushed for Mexican intervention to protect the economy! As elsewhere with notions of diversity and habitat, pure calculations of cost-effectiveness dictated the politics. The leader of the Chiapas was "unmasked" as a former college professor, thus further undermining education as fomenting "subversion" rather than as teaching people to think. Indians still request their land and are still caught between hostile government troops under the sway of international economic pressures and more ideologically oriented guerillas (the Chiapas themselves or the Indians in Peru who interact with guerillas of Shining Path).

18 De Certeau's multiculturalism is not gender-specific and does not address the role of women. However, we can already see that feminism is not universal either. If the improvement of the condition of women has global resonances and requires solidarity, women's movements are also place-bound and local, as is well known but not often enough remembered,

19 The connection can be made as long as they live in a predominantly rural environment. The Chiapas' claims are for the land. In the United States, surrounded by high technologies, Indians still establish in their own newspapers and media the link to the earth, but they also follow the line of financial gain through the construction of lumber businesses and casinos.

20 See John Comaroff's readings of the relation between developments in Great Britain and methods of colonization in South Africa, which amplify these hypotheses (Comaroff 1991).

21 This strategy is adopted by many other Indians in North America. They claim their right to land at a time when, elsewhere, the end of nature is advocated. Several ecological speeds coexist.

22 De Certeau has written on Marguerite Duras in *La Fable mystique* (1982). In a conversation, in Berkeley, California in 1979, he also mentioned how much he admired Luce Irigaray and her powerful "discourse of woman."

23 Similar claims had been made about Africa and in certain places continue to be made. The writings of Georges Balandier, Pierre Clastres and John Comaroff (1991) point in different ways to some of the innovations taking place in African nations.

24 For a popular version, see Ridley Scott's *1492*, a film instructive in its reproduction of this view. It consitutes a treasure of ideology concerning the encounter of old and new worlds.

25 The current struggle of the Chiapas Indians marks the temporal distance between the decades. The Indians, led by "Marcos," allegedly a disgruntled college professor, are now engaged in an armed conflict with the government forces. Because of American interests, pressure was exerted—albeit not by decree but by individual action—to crush the uprising of the Indians whose demands (land and socialization) were not dissimilar to those mentioned by de Certeau. The armed conflict made civilians—women and children—flee, and destroyed habitat. The escalation of economic competition has led to increased poverty in many areas.

26 These writings will be published in English in a single volume (Minnesota, 1996) that conflates the essays of both *La Culture au pluriel* and *La Prise de parole*. See notes 3–6 above.

27 De Certeau joins most theoreticians discussed so far in our inquiry—Bateson, Guattari, Serres, Virilio—in reassessing writing in a strong sense of inscription and with reference to cybernetics,

28 I am using "hidden" here in concert with Lucien Goldman's study, *Le Dieu caché* (1955), which posits how the presence of "God" becomes increasingly remote in the years of Jansenism in late seventeenth-century France, a moment when the stirrings of capitalism

become evident. As "God" disappears in the centralized perspective of the *ancien régime*, so also does nature. If it does not, nature is sculpted in the designs of Le Brun and Le Nôtre at Versailles, to fit the geometrical ideal of artificial forms.

8
BACK TO WRITING

1 Jean-Joseph Goux (1978) maps stages of economic development over those of psychogenesis or of subjectivity. He argues that the internal parallel becomes the ground for an argument that places "man" at the endpoint of evolutionary process.

2 Teresa Brennan (1993) argues that in Western patriarchy, through repetition and imprinting, men and women develop their respective identities along such an oppositional logic.

3 The myth of the Medusa deals with entrance into the symbolic and a defensive position of the male against woman-as-nature.

4 The notion of the "gift" is much debated in the 1968 context. It serves to denounce an economy of appropriation and accumulation by pointing to other cultures that maintain different, less lethal, forms of exchange. Marcel Mauss's essay *The Gift*, first published in 1925, is reread by way of Georges Bataille's *La Part maudite* (1949). Emphasis on the gift opens Western societies to self-criticism via archaic and non-Western cultures. This gesture comes at the same time as a renewed interest in ecology via anthropology.

5 It is this kind of rewriting of the Freudian paradigm with emphasis on a mother-daughter rapport that is criticized by Elisabeth Badinter (1986), who was praised by Ferry (1992) for wanting to return to a division between nature and culture.

6 The "Jardin d'Essai," is a park situated near the Municipal Museum, in Oran, Hélène Cixous's birthplace.

7 In the current debate about identity, various theories have been developed. Among the most compelling, we can name that developed by Teresa Brennan around the notion of imprinting in the relation between child and parent in early childhood (see especially Brennan 1992). I follow here the hypothesis of Cixous, for whom all identity is imposed from the outside by society in connection with one's position or "role" in society.

8 This is close to the "Gaia hypothesis," which is explained well by Theodore Rosak (1993).

9 To enter into the symbolic, it is said that the (silent) maternal body has to be left behind. This is particularly difficult for women—or daughters—who can no longer identify with their mother when they enter into a male world that devalorizes nature and the body. A refusal of symbolic language and of its repressive grammar serves to subvert the division between nature and culture at the same time as it harmonizes relations between women, body, and nature.

10 Each culture has its myths, and each age has its preferred dramatic personae drawn from Olympus and Parnassus. A non-qualified return to Greek Goddesses in an advanced age of electronics and technology perhaps justifies Donna Haraway's exclamation, "I'd rather be a cyborg than a goddess!," in her Cyborg Manifesto (1985:70ff).

11 In her theatrical epics, she continues to condemn the havoc wreaked by technology on Third World countries and the world in general.

12 The importance of the education of girls and women all over the world to remedy and prevent ecological deterioration is being pointed out more and more frequently by feminist theoreticians of various stripes and by politicians.

13 Irigaray's article, "Une chance de vivre: limites au concept de neutre et d'universel dans les sciences et les savoirs," was first presented as a talk around the theme "Living after Chernobyl" organized by the Italian Communist Party. Irigaray is not content with simply asking for representation and equality without addressing the question of a different culture.

For American feminists working in a similar direction, see Joni Seager's, *Earth Follies* (1992).

14 In French, *chance* always has the double meaning of luck and chance.

15 Nature has to be rethought in the context of a matriarchal genealogy.

16 Irigaray appears to follow here an accepted line that associates physics and thermodynamics with the masculine, biology and information theory with the feminine.

17 Cixous's poetic fiction imagines a similar coexistence.

18 See also Chapter 4 of this volume. Paul Virilio, in *Bunker Archeology* (1975) argues that technology after World War II alters perceptions of space. With the development of air strikes, the defense of civilians (i.e. the family) is a thing of the past.

19 This argument has been convincingly developed by, among others, Nobel-prize biologist Henri Atlan, in *Tout, non, peut-être* (1991).

20 Simone de Beauvoir, albeit in a different context, criticized Emmanuel Levinas in her opening to *The Second Sex* for making woman into the "Other" and thereby depriving her of her status as subject.

21 It can be pointed out that ecological economics equally insist on a generalized exchange rather than a boxing in and controlling of isolated parts. Their argument is that ecological boundaries are gradual, not abrupt. See Costanza (1988).

22 Cixous's writing is less disembodied than denarcissized when she takes the theater as intercessor.

23 "The Laugh of the Medusa" (Cixous 1973), a marvelously liberating text that displaces the moribund views of death and the male ego, might also rival on this score with *The Newly Born Woman*.

24 The point elaborated by Plumwood has already been extensively developed by Brennan (1993).

CONCLUSION

1 On the revolution of 1968, see Peter Starr's *Logic of a Failed Revolt (1995)*.

2 The point is made because satellite images of the globe have been recording a progressive browning of the planet, a sign of general pollution.

3 This is developed in Cixous's play about Cambodia, *The Unfinished but Terrible Story of Norodom Sihanouk, King of Cambodia* (1985).

4 The relations are mapped out with concision in all of John Ford's westerns and war movies.

5 This is also the view held by Baudrillard (1981:68–75).

6 In *The Future of Capitalism*, Lester Thurow (1995) makes a convincing argument that globalism is not the inevitable outcome of technological development but has much to do with the cold war and the superpowers' attempt at gaining allies all over the world.

7 See Mcpherson (1962), Sahlins (1972), Brennan and Pateman (1979) and Merchant (1980).

8 Despite findings in science, philosophy, and the arts, economics most often continue in their Cartesian heritage and are adamant about turning the world into a space of control. By contrast, most theoreticians who were the subject of our inquiry have argued in cultural terms for an ecological economics that respects nature and insists on culture's intrinsic time of development.

9 Hence Lacan's forceful expression of feminist inspiration: *la femme n'existe pas.* Woman, "mascucule", does not exist, but women do.

10 Irigaray is most sensitive to how findings in contemporary sciences change notions of subjectivity. However, she does not examine how these notions are affected by specific research, such as recent studies of the brain. Though more attention is being given to findings in techno-sciences, critical and feminist theories are still slow in accepting them.

11 This criticism of Baudrillard is not meant as a return to prestructural attachments. To the contrary. We saw in Chapter 3 how important the notion of structure was as a transition toward new readings in feminism and ecology. At stake here is Baudrillard's non-critical praise of simulation in conjunction with an economy based solely on laws of supply and demand.

12 The impact of economic globalism on the university—that is, the very locus from whence came many of the theories developed in this volume—had already been discussed by Jean-François Lyotard (1979). It has recently been analyzed brilliantly by Bill Readings in his posthumously published *The University in Ruins* (1996).

13 A new monograph is needed. Boon (1972) and Clément (1972) were important readings, as has been, recently, Geertz (1989). I believe that Derrida (1966) did disservice to Lévi-Strauss's work by calling it a form of inverted ethnocentrism and an opus that fails to "think the lure" of its own status as simulacrum. The Lévi-Straussian text already accounts for these points.

14 See Antoinette Fouque (1995) for a useful distinction between identity and identical. Women identifying with one another and acting together on a common cause are *not* identical. Fouque stresses the necessity of a world-wide women's network for activist purposes (see Fouque 1996).

15 Here we can go back, once more, to French feminists who continue to argue that women cannot simply ask for rights without militation for radical changes in present democracies that function according to masculine paradigms.

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