REVIEWS

CRISIS, OPPORTUNITIES AND SACRALITY – MESSAGES FROM A GLOBAL SCIENTIFIC ACTIVIST AND CRITIC

Vandana Shiva: Soil not Oil. Climate Change, Peak Oil and Food Insecurity. Zed Books, London, 2008, Price 15$.

Vandana Shiva, one of the world's most well known eco-feminists, has been working and writing on issues concerning ecology, women, biodiversity, biopolitics, water wars and earth democracy over the last three decades. She is one of the true citizens of the world and has been working from her native India for many years. Vandana Shiva like Rachel Carson (1907-1964) is trained in the natural sciences and both have had a strong impact on the global understanding of environmental issues in the 20th century. Carson published her very influential book *Silent Spring* in 1962 on the effects of the indiscriminate use of chemicals, and became an important figure for the environmental movement. In 1980 Carolyn Merchant published *The Death of Nature. Women, Ecology and the Scientific Revolution,* which was important for the development of eco-feminism, environmental history and the history of science. Vandana Shiva has been both an activist and a prolific writer and has argued strongly for changes in the practice and paradigms of agriculture and food. She is the founder of Navdanya, which started as a program of the Research Foundation for science, Technology and Ecology (RFSTE), a participatory research initiative which is actively involved in the rejuvenation of indigenous knowledge and culture.

Soil not Oil. Climate Change, Peak Oil and Food Insecurity is clearly written before the change of the US administration and before the financial crisis really took off and thus relates to pre-Obama environmental politics. Vandana Shiva often speaks of 'climate chaos' rather than climate crises. The 'peak oil' in the title refers to the point at which the world reaches the highest possible level of oil production. After that oil production must necessarily decrease leading to increasing prices. Climate chaos and peak oil converge with the third crisis, the food crisis. She warns that if we continue on our current path toward a market-centred future, it will make the crisis deeper for the poor and the marginalized, whose survival will be threatened, and provide only a *temporary* escape for the privileged.

She is very critical of the Kyoto Protocol, because it allows the industrialized countries to trade their allocation of carbon emissions among themselves, and because it gives emission rights to the 38 industrialized countries that are the worst historical polluters. She critizes the *Stern Review* for focusing on carbon emissions, rather than addressing the health of the carbon cycle more broadly, and for looking at what is good for business, not what is

good for the planet and the poor. She stresses the ethical and ecological perversity of creating a market in pollution, and of carbon trading. In her view the solution to climate chaos will come from Earth Democracy. What is needed is a paradigm shift to a people- and planet-centered paradigm, which identifies laws to live by other than the laws of the market. Shiva does not believe in any technological fixes, which will allow the world to go on with business as usual. The world would have to build one reactor per week for the next 60 years for the nuclear energy to replace fossil fuels, she claims. In her view the mechanical mind can not solve the problems of the mechanical age, and it might lead to what she describes as "a new global environmental apartheid". She writes that 'no society can become a post-food society' and speaks about 'fossil fuel addiction' and 'petrol religion.'

Chapters two and three deal with priorities between mobility and survival, where mobility represented by the car has become a sacred symbol of the 'fossil fuel age'. In India it clashes with the practice of and respect for 'traditional' religion – represented by the cow. When something is sacred, it is inviolable, and today the car has become inviolable. Bicycles, bicycle rickshaws, and walking are modes of transportation associated with the poor even if they could work wonders to reduce congestion and pollution levels. "The highway and the automobile are symbols of totalitarian cultures" writes Shiva, with particular reference to the German history of the National Socialists motorization policy during the Hitler-regime. Car owners and long distance travellers are becoming privileged citizens in a society where highway projects in India are creating 'automobile apartheid'. Traffic in Delhi kills more people than the Kashmir insurgency. Vehicular pollutants lead to cancer and trigger asthma and lead poisoning. The Indian experience is that mobility has been provided by animals and rickshaws. "Donkeys, mules, camels, elephants, yaks, lamas, buffaloes, oxen, dogs, and reindeer have helped humans move across diverse terrains in diverse ecosystems" (p. 75). In the third world 2 billion people depend on animal energy, and 50 % of the world's food supply depends on animal energy. It provides 80% of the energy consumed in many countries and 95 % in South Asia and the Far East. Unsurprisingly Shiva considers biofuel a false solution to climate change as well as a threat to food security. Rising food prices had led to food riots in more than 40 countries at the time of the writing of the book. Energy can only be considered sustainable, if it does not compete with the food supply of the poor.

The chapter on *Soil not oil* focuses on issues like 'food sovereignty' and freedom. People have learned to recognize the lack of freedom built into the rule of the nation-state, but they have not yet learned to recognize the lack of freedom intrinsic to corporate rule. Shiva argues for a transition to a biodiverse, organic local food system, which is more resistant to diseases and pests than industrial agriculture based on monocultures. On several occasions she mentions the epidemic of farmer suicides which has taken place in India – especially in regions where chemical intensification has increased costs of production and indebtedness. She rejects the 'Monsanto way', 'food dictatorship' and 'food slavery,' pleas for a creation of 'food freedom', and writes that "(b)iodiversity is our real insurance in times of climate change" (p.115). "Short supply chains ensure better democracy in distribution, better quality food, fresher food and more cultural diversity" (p.123). The heritage of Ghandian principles and organisation forms are important in this respect.

In the conclusion she rejects a top down model for sustainability, which will lead to pseudo-sustainability and eco-imperialism. In line with Carolyn Merchant she argues that the mechanistic paradigm has robbed us our freedom and creativities. She has on several occasions written about Shakti – "the primordial power of creation, the self-organizing, self-generative, self-renewing creative force of the universe in feminine form" (p.136). Energy is Shakti, and energy is thus sacred in Shiva's perspective.

Work is also energy, and we need to address the climate crisis and the unemployment crisis together.

This book is a prime example of a 'conservationist' and critical approach to modernity – to the fossil fuel age and its addictions and totalitarian aspects in relation to humans and nature. It is an example of a plea for the safeguarding of biodiverse, local democratic traditions. Indirectly it is thus also a critical approach to emerging 'pseudo-sustainable' conservationist strategies, which aim at conserving modernity. Its aim is to achieve both sustainable change and conservation of sustainable practices. Its style is characterized by the action orientation, the strong use of rhetorical tools, and also its accessibility to a relatively lay reader when discussing matters of a more technical or specialist nature. It could perhaps be described as a pamphlet – notes are available on the web and not in the book. Her rhetoric is one of opposition, contrast and comparison. She works with and uses slogans and alliterations, and other rhetorical means with great verve. Her writing reaffirms, however, that in large parts of the world – perhaps especially in Asia, the attraction of the 'market-centered future' has not been as strong, as the global North has liked to think over the last decades. From a Western perspective, it might seem impossible to think of a world without oil and the sacred car. But the western perspective will not continue to dominate the world in this century. Her perspectives on security and freedom also differ considerably from the ones dominant in the West over the last decades. They may be messages and lessons which will have to be learned all over the world in the coming decades.

To a certain extent her work reminds this reader of the work done by Al Gore over decades – both have contributed considerably to what I would call an 'ecological enlightenment' and a change of global awareness and mentality through their persistent, pedagogic and practical approach to similar environmentalist transformative issues. Her work also underlines that 'ecological enlightenment' is postsecular. Their work again reminds of the work for social justice of the early campaigners in the labour movement in the late 19th and early 20th century in Europe and the US, who travelled the continents arguing and organizing for a more just society. Vandana Shiva works from an Indian basis, and in a global context for *Earth democracy: Justice, Sustainability and Peace* (the title of her 2005 book, South End Press). She is no doubt one of the leaders of this global and important movement, and this book is another example of her long standing contribution – well written, accessible and to be recommended.

Hanne Petersen, dr.jur.,
professor of legal cultures
Centre for Studies of Legal Culture
University of Copenhagen

TAKING TURNS WITH FEMINISM: ONE MORE TURN MATERIAL FEMINISMS

Stacy Alaimo and Susan Hekman (eds.): Material Feminisms. Indiana University Press, Bloomington, IN, 2008. 434 pages. Price 24.95$.

Feminisms, feminisms everywhere! To the list of liberal, radical, discursive and standpoint feminisms, we can now add a newcomer – material feminism – and quickly learn to distinguish it sharply from the legacies of Marxist *materialist* feminism. Further, we should be careful to speak of this new conceptual family member in the plural: as always, there are variants of material *feminisms*, and as signaled by the title of this book, the subtle differences actually matter (yes, pun intended). In many ways, this is the great thing about feminist scholarship, and the reason this field continues to foster such a welter of important theoretical developments: no one ever really seems to know what it takes to be a real feminist, and positions are never stable for long. This is, of course, a great advantage.

With this new anthology on *Material Feminisms*, containing 14 (mostly) original articles from leading Anglo-American feminist theorists and philosophers of science, feminist thinking looks poised to take a new 'material turn'. This bold move, elegantly laid out across the book in philosophical and practical terms, should be of interest to anyone

who cares about the intellectual future(s) of the field, not to mention critical cultural thinking more generally. It is also likely, however, to generate quite a bit of controversy. As pointed out by several contributors, materiality, particularly that of bodies and natures, has long been something of a quagmire for feminist theory of a discursive, textual and/or poststructuralist bend. Now, this anthology is based on a simple, but far-reaching thesis: current feminist thought is at an impasse, caused by the linguistic turn itself. In other words, we need to turn once more, this time towards materiality, without forgetting, however, the crucial lessons of poststructuralism.

Following the editor's introduction, outlining the historical backdrop to re-injecting materiality into feminist discourse, the book is organized into three main parts. In the first part (*Material theory*), four essays raise, all in their different ways, fundamental ontological questions about the status of materiality in feminist cultural theory, and in Western philosophies more generally. As pointed out across the contributions, taking materiality seriously entails the need to rethink fundamental categories of Western culture, including the boundaries between nature and culture, science and society, object and subject. The authors' attempt such rethinking via engagement with various theoretical legacies: Elizabeth Grosz takes on the treacherous territory of Darwinian evolution, arguing for a feminist rapprochement, whereas Susan Hekman provides a welcomed survey of the ontological alternatives to what Bruno Latour has called the 'modernist settlement'. Karen Barad, on her part – in a reprint of what is already a famous essay – sets out her theory of 'posthumanist performativity'. As these snippets indicate, there is enough food for ontological thought here to keep one satisfied for a while.

In the second part of the book (*Material world*), ontological questions recede into the background, as five essays take us into different non-human worlds of nature. Entering these territories of human-natural connectedness, the ontological bones take on considerably more flesh. Donna Haraway, for instance (in another re-printed essay), invites us to reflect on 'otherworldly conversations' with non-human companion species, particular the dogs that she cares deeply about. Next, in what is arguably one of the most brilliant contributions to the anthology, Nancy Tuana invites us to 'witness' the 2005 hurricane Katrina, as the agency of the natural causes human devastation in New Orleans along racial, class and gender inequalities, all embroiled in a history of material neglect and willful ignorance ("we could not have predicted this"). Also worth highlighting here is the ambitious contribution of Stacy Alaimo, who rethinks feminist environmental ethics along the lines of 'trans-corporeality'.

The third part of the book (*Material bodies*) in some sense reads as more 'traditional' than the others, engaging with well-known topics of the 'intersections' of sex/gender, race, disability and medical treatments. True to style, however, these contributions share a commitment to taking material embodiment seriously, against what are seen as the discursive abstractions (of categories like gender) in much contemporary feminist critique. Exploring sites of embodied identities, this is where the political implications of material feminisms come to the fore. Along thought-provoking lines, for instance, Elizabeth A. Wilson argues that close attention to pharmacokinetics can lead feminist scholars to appreciate the 'organic empathy' of pharmacological modes of treating low-level depression. Materiality, here, becomes an invitation to bodily (and sub-bodily) forms of intimacy. This implication is spelled out beautifully by Susan Bordo, autobiographically recalling how, as a white adoptee-mother, she carefully (and painfully) learns to take care of her black daughter's rebellious hair.

In a certain sense, it is impossible to respond to this book as a 'whole': as should be clear, the 14 individual contributions cover an impressive and heterogeneous thematic territory, with important variations in how 'material theory' is evoked. This also means that, depending on entrance point, my hunch is that most readers, feminist and otherwise, are likely to find much of considerable theoretical inter-

est here – and if nothing else, something to be valuably provoked by. At the same time, however, this is very much a book with an ontological mission: in various guises, the 'material turn' is set forth as a new paradigm of general import to feminist cultural criticism. To most contributors, this entails a willingness to engage positively with 'biology', as a complex material reality and as a set of non-reductive knowledges; to adopt a 'posthumanist' stand of interrogating the more-than-human world; to learn from developments in the field of science studies (STS); and to think beyond the nature-culture opposition. These themes are set out – in varying degrees of depth – across most of the contributions, to the point of coming dangerously close to bland repetitiveness. At some point, I found myself agreeing with a statement made to different effects by Tuana, as somehow appropriate for this book as a whole: "It is easier to posit an ontology than to practice it"!

In the spirit of Haraway's 'situated knowledges', let me just mention one line of more substantial criticism, together with saying where this is all coming from. As someone taking great interest in science studies – without emphasizing its 'feminist' aspects – some of the invocations of 'materiality' and 'feminism' in this volume puzzle me. Not only are there important terminological and ontological slippages – between, for instance, the 'hard' *intra*-actionism of Barad and the 'soft' *anti*-vitalism of Claire Colebrook – covered up in catch-all 'materiality'. More importantly, I believe, this slippage stems from a collective unwillingness to reflect in more depth on the stance(s) taken towards science(s). Whereas some contributors, principally Barad and Haraway, clearly want to appropriate the inner core of science for feminist purposes, others stay at a more superficial level, swinging between ideological critiques and rhetorical appropriations of scientific truth-claims.

If the 'material turn' in feminism is to, well, materialize, I believe this 'question of science' to be the key. In the process, more could fruitfully be done to clarify the sense(s) in which critiquing scientific 'God tricks' is necessarily a feminist project? While it is hence not clear to me what Barad believes the practical feminist consequences of invoking the physics of Niels Bohr to be, I find it equally puzzling why anyone would fundamentally insist on the 'feminist' nature of materially situated knowledges, rather than simply their obvious ethical desirability. Overall, it seems to me that in self-conscious attempts to engage an imagined 'feminist' audience, contributors to this volume may be unnecessarily circumscribing the more generally stimulating impact of their ideas.

These quibbles aside (no doubt 'masculine' in part), let me reiterate that this is a highly interesting, theoretically sophisticated, and elegantly written anthology, clearly at the forefront of feminist critical theorizing and cultural thinking more generally. While certainly a philosophical challenge at times, *Material Feminisms* is likely to appeal to, and/or provide much-needed provocations for, a wide range of feminist and not-so-feminist scholarship. The 'material turn' is on to a promising start – only time will tell if others pick up the challenge and prolong the journey into new material worlds.

Anders Blok, PhD Fellow
Department of Sociology
Copenhagen University

GENDER, ECOLOGY AND JUSTICE – A MIXED EXPERIENCE

Ariel Salleh (Ed.): Eco-Sufficiency and Global Justice. Women write political ecology. Pluto Press and Pinifex Press, 2009. 324 pp. Price: Hardcover 95 $; Paperback 32.5 $.

This book is a collection of papers that all share a gender perspective and in varying degrees deal with economic, political and environmental issues. The collection came into being following two international gatherings of female scholars and activists, the first was the conference of the International Society for Ecological Economics in 2006 and the second the conference of the United States Society for Ecological Economics. These occasions were meeting places

for scholars from various transdisciplinary fields such as political ecology, political economy, feminist economics, ecofeminism, and ecological economics. Consequently, the collection spans a broad array of issues.

Political ecology, ecological economics and eco-feminism share the basic concerns regarding both the serious state of the environment and the extreme injustice of the global socio-economic system. With emphasis on gender concerns, this book provides a particular perspective on these problems, and some core ideas – intersecting several of the papers – may be identified:

There is a connection between the exploitation and degradation of the natural world and the subordination and oppression of women – a linkage stemming from women's position in society (Mellor p. 251, Moraes and Perkins p. 145). As Mellor puts it (p. 255): "the marginalisation of women's work is ecologically dangerous because women's lives as reflected in domestic and caring work represent the embodiedness of humanity, the link of humanity with its natural being".

Economic theory is criticized for neglecting both nature and women's work, and it is considered a core task to make hidden ecosystem and social functions visible (O'Hara p. 184) and to challenge the devaluation of women's work. Federici provides an account of the historical background for the devaluation of women's labour, whereas Waring, following up on her own pioneering work, discusses the recent development of measures that take women's economic contribution into account.

Together with other oppressed groups, such as subsistence farmers and indigenous people, women in the slums constitute what Ariel Salleh has termed a 'meta-industrial class', which is outside of, yet indispensible to, the functioning of the capitalist economy (Podlashuc p. 283). This class, sometimes described by Marxists as the Lumpenproletariat, is often considered unable to act collectively to change their own life conditions. This perspective is criticized, and the critique is substantiated by examples, such as the savings groups of the Slum Dwellers International (see Podlashuc). Salleh suggests that these marginal groups are skilled ecological economic managers who may model social justice and sustainability for the twenty-first century (p. 297-299).

The dominant model of development through industrialization and global trade is strongly criticized. For instance, traditional development moves provisioning from the informal to the formal sector, which tends to erode social and ecological support systems (O'Hara p. 185). It is argued that social justice and sustainability is better achieved by localized economies and by giving back the land taken away from people in the name of 'development' (Salleh p. 305, Hawthorne p. 96).

Only 6 out of 16 papers contain substantial empirical case material. These cover fisheries in Kerala, water management in a poor neighbourhood in Brazil, nuclear experiments on the Marshall Islands, selling oxygen and sex in Costa Rica. Due to the Kyoto Protocol, women protests against Big Oil in Nigeria, and the organization of savings groups in various developing countries. Other papers refer briefly to empirical material, and several papers are purely theoretical.

My basis for discussing the book is a background in ecological economics (and studies on consumption and environment), and I was curious to know more about the neighbouring fields of eco-feminism and political ecology. On the positive side, I find that the collection demonstrates that the application of a gender perspective adds important insights: the gender perspective makes you see aspects of development that would otherwise be in darkness.

My favourite paper is Nayak's paper on fisheries in Kerala. The title is *Development for some is violence for others*, and this point is strongly substantiated by telling the story about how the modernization of fishing led to decline of fish stocks, deterioration of livelihoods for the poor, social disorganization, alcoholism and violence against women. It is also shown how the state policies dispossessed women, and how modern development may worsen women's position. Isla's paper on the impacts of the Kyoto Protocol in Costa Rica is also very illustrative and

thought-provoking, although she gives too little concrete information and spends too much space giving vent to her understandable indignation. Such case studies illustrate the importance of making gender issues much more visible than they are in the Millenium Development Goals, as argued by Francisco and Antrobus in their paper.

While the gender perspective is eye opening in some respects, the focus on women sometimes leads to undue glorification of women's activities and roles and to a lack of awareness regarding women's responsibility for problematic trends. For instance, Spitzner is occupied by the fact that women in EU-countries contribute less than men to global warming due to their different mobility patterns, while she does not deal with all the consumption related to the management of family life where women play a core role. In my view, most women in the global North are just as responsible as most men for the serious predicament of the environment and the exploitation of the global South.

Another blind spot in the book is the population issue. Federici deals with fertility in a historical perspective, but no paper discusses the implications of the present large world population in an ecological perspective, although this issue is extremely important and calls for the application of a gender perspective.

Although I learned something from the book, in particular from the empirical chapters, much of the reading was a frustrating experience. The book has much in common with a CD of conference proceedings with no reviewing, and several contributions would have benefitted from tough editorial advice. The editor's own two chapters appear unstructured, and the theoretical material on 'embodied materialism' is presented in a way that is incomprehensible to outsiders. Furthermore, Salleh discusses ecological economics on the basis of several misunderstandings. Some of the theoretical contributions are very abstract and difficult to make sense of (e.g. Charkiewicz), some papers need structuring and shortening (e.g. Podlashuc) or clarification of the arguments (e.g. Mellor's ideas of a 'provisioning economy' and 'social money'), and some papers tend to drown analysis and documentation in populist rhetoric (e.g. Brownhill and Turner). In my view, part of the book is characterized by anachronistic 'revolution romanticism', for instance, related to the idea of the 'meta-industrial class' as some kind of revolutionary avantgarde. The readers of this book can be expected to belong to the global North, but they are left with little advice concerning how to contribute to changing the present global predicament. In spite of a couple of really good chapters and some interesting material here and there, I can not recommend buying this book. The topics deserve a better prepared treatment.

Inge Røpke
MSc in economics
PhD in social sciences
Assoc. Prof.
Technical University of Denmark