reminds us, are ultimately social, political, and cultural problems. The "heuristic usefulness of the Maoist case," she argues, lies in "the blatancy of Maoism's coercive aspects, the ambition of its utopian idealism, and the transparency of the link between human political repression and the effort to conquer nature by portraying and treating it as an enemy" (p.201). The 'lessons' she draws lead her to conclude that sound environmental behavior requires key elements of liberal democracy, although not necessarily that particular form of government. She notes the absence, in all these extreme examples of environmental degradation from the Maoist era, of local self-governance and flexible accommodation to local circumstances, and of government accountability and transparency. Shapiro suggests that sustainable development strategies and effective environmental management practices in China will depend on "political participation, public deliberation and oversight, intellectual freedom, respect for regional variation and local wisdom, and land tenure systems that give people an understanding of their responsibility for the land and of a shared future with it" (p.18).

Shapiro, however, does not show how the presence of these characteristics would facilitate or guarantee the sound policies and practices she seeks to encourage. Nor does she consider the myriad of environmental problems that beset societies in which such elements of 'liberal democracy' are well developed. It is one thing to observe massive environmental degradation in the absence of such socio-cultural characteristics, but the absence of comparative analysis renders her conclusions disappointingly presumptuous and suggestively polemical.

As Shapiro acknowledges, this book is not intended to be a detailed or comprehensive study of attitudes, values, or ideas regarding the environment. Nor is it an environmental history, in a strict sense of the term. Yet it does serve to highlight some environmental consequences of human action, particularly in the context of state-orchestrated mass political campaigns. Her assessment of the Maoist era is a gloomy one, and casts shadows over China's current course of development. One gets little sense of where development initiatives of the Maoist era achieved success, which contributes to a greater sense of concern about the future. In this regard, Shapiro's thesis would have been strengthened with more significant theoretical development, and by more extensive use of comparative material, suggestions of which appear almost cursorily in her concluding reflections. Rather surprisingly, she draws little on the scientific literature of environmental studies in China, a growing corpus of research that offers substantive quantitative data relevant to her (often rather vague) environmental impact assessments. Furthermore, researchers are advised to read the endnotes carefully, as not all citations appear in the bibliography.

Written in a clear style and focused around a central thesis, Shapiro's book will be of interest to general audiences, and will undoubtedly draw the attention of students and scholars in various disciplines. As her narrative offers extensive citations to Mao's speeches and writings, along with judicious reference to prominent rhetorical slogans of the Maoist era, this book may well serve as a companion text to courses on China. Structured around four core thematic issues, it may also be a suitable text for courses dealing with the environmental consequences of human actions, particularly in the context of the modernist project of revolutionary nation-states

Shady Practices: Agroforestry and Gender Politics in The Gambia, by Richard A. Schroeder. Berkeley: University of California Press (1999), 212 pp.

Reviewed by Peter Hamilton, Institute of Transportation Studies, University of California, Davis

It is one thing to concede that women as well as men can and do "play" the game of development, that they, too, act on the basis of motives that are narrow and mean at least as often as they aspire to enlightenment, and that they sometimes win the struggles over land, labor, and livelihoods initiated by development interventions. It is quite another to argue that the structural determinants operating within Gambian social systems no longer have any force, or that the development interventions designed to incorporate women into environmental management have not produced deleterious effects in many areas (p. 135).

The Gambia has witnessed a series of unique and fascinating transformations in the last three decades of exposure to the forces of international "development". Its story could not be told without discussing issues of gender, climatology, sociology, ecology, economics and international development – fertile ground for the field of

Political Ecology. Richard A. Schroeder, a student of Michael Watts at Berkeley, is well up to the task. Using a personal, hands-on methodology consisting largely of personal interviews and surveys, he gives us a nuanced and complex image of changing gender politics in The Gambia that refuses to idealize, oversimplify or otherwise dehumanize its subjects. His formidable Mandinka language skills give us access to a world inaccessible to typical statistics-heavy development reporting. In addition to relevant numbers, we are privy to an analysis of common Mandinka metaphors and puns that are simultaneously enjoyable, telling, and refreshingly humanizing. Schroeder introduces us to the field of African development work by critiquing a photograph on page 5 that could come straight from a World Bank brochure – the ubiquitous shot of a nameless, placeless brown woman carrying a heavy load of firewood on her head. By analyzing development efforts from the perspective of those affected, through their language, their metaphors and their resistance, Schroeder takes a step toward naming, contextualizing and ultimately re-humanizing the African citizen.

At the end of the book, though satisfied with Schroeder's analysis of the Gambian garden boom, one is left wondering what to do next. The author has supplied an admirable and nuanced multi-level political-ecological analysis of his region of study. Perhaps it is too much to ask for prescriptions for future development efforts as well. However, I believe that Shady Practices would benefit from a list of concrete conclusions and recommendations that are at least intelligible to, and at best implementable by, relevant policymakers and development workers.

The phenomenon of the woman-run cash crop vegetable garden is distinctive to the region under study (The Gambia's north bank, near the town of Kerewan). Shady Practices chronicles the rise of the garden economy beginning in the early 1970s (Ch. 2), its effects on gender politics and the division of labor (Ch. 3 and 4), the threat to the gardens posed by new agroforestry initiatives (Ch. 5), and women's often-successful resistance to those threats (Ch. 6).

Schroeder attacks the question of the garden boom by cleverly describing the gauntlet women needed to run in order to create a functioning female cash-crop system. Women faced the dubious task of squeezing money from low-lying areas where water was close to the surface. These areas generally were titled to men, and used for rice and fruit cultivation as well as livestock grazing (animals which would later pose a serious threat to the gardens).

…Women first had to secure usufruct rights from male landholders and then leverage funds from developers for fencing materials and well construction. Finally, and most critically, gardeners somehow had to regain control over their own labor in the face of a wide range of competing demands… (p. 3)

Furthermore, women needed to secure the right to market their produce, a task generally reserved for men (previously, women had been responsible for the rice crop, destined solely for home consumption.) He describes how each obstacle was overcome (either directly through human agency, or via an exogenous political-ecological shift) and how new obstacles arose as "sometimes fickle policies" of development agencies began to emphasize environmental protection over garden production.

Schroeder's work can be called political ecology because he manages to tie local and global factors and levels of analysis together into a coherent political-ecological narrative. He demonstrates how shifts in global development philosophies can alter the set of options available to competing stakeholders on the ground, resulting in allocative shifts that may be difficult or impossible for well-meaning but geographically and culturally remote policymakers to predict or appreciate. Furthermore, he links the political to the environmental by showing us a pattern of historically shifting first-world based definitions of what constitutes "the environment," or at least which "environments" are worth "saving." The following is a partial but representative list of factors considered by Schroeder's analysis:

- Human agency in the form of collective action and hard work by Gambian women; and efforts by men to re-capture the women's labor force.
- Pervasive and severe mid-80s droughts; and the international focus they brought to African development
- World Bank structural adjustment policies
- Gambian river geography; micro-ecology
- International development philosophy: "Women In Development," and the later emphasis on agroforestry
- Availability of new imported varieties of vegetables, and hybridized seed
- International market forces; demand for vegetable and fruit exports

In 1975, the United Nations held a conference in Mexico City focusing on women in development. They proclaimed an "international decade for women," which helped to give rise to a number of gender-specific development programs aimed at alleviating what were perceived to be disproportionate burdens of poverty on women. The concept of "maternal altruism" was tightly interwoven into the development philosophies of emerging programs of "Women in Development" (WID). Maternal altruism is the conclusion of a bundle of empirical evidence suggesting that women across all races and cultures devote more energy toward preserving the well being

of the family than do men. Thus, the thinking goes: to improve the well being of children, it is more effective to help women than men. At ground level, this led to "the expectation that women will deny themselves and shoulder additional burdens in the interests of family well-being" (p.10). As the WID movement accelerated, the emerging Gambian garden economy was thus seen as important and worthy of support. Development agencies rushed in with subsidies for fencing materials, new non-native vegetable crops previously unseen in the region (particularly cabbage), hybrid seed, and concrete for permanent wells.

In parallel, various strands of development literature have tended to naturalize women as somehow "closer" to the earth – somehow genetically predisposed towards stewardship of the earth. The growing environment-development movement thus extended maternal altruism to include environmental altruism. As the environment took center stage in development theory, women were seen by development agencies as the "key" to improving third world environments. This shift in thinking from women as saviors of the family to women as saviors of the planet had profound and damaging implications for the Mandinka gardeners.

At the same time that developers focused on funding for Mandinka women's gardens, severe drought conditions were emerging throughout the continent in the 1980s, creating a crisis situation in most of Africa, including Senegal. Though the Gambia was not among the worst effected regions, food production "declined significantly between 1970 and 1990" due to a shorter rainy season (p.31). Climatic change resulted in an earlier rice harvest, which freed women's labor for more vegetable gardening, and allowed them to plant during an earlier season when conditions were more favorable to vegetable cultivation, and ripe vegetables fetched a higher market price. In contrast, male income-earning activity was hampered significantly, as male agricultural production of coarse grains and groundnuts was entirely rain-fed. As rains failed, hand-irrigated woman's garden plots became the locus of economic activity as production increased and marketization became more widespread. The fact that men "rarely draw water from wells for any reason" (p. 34) is stated and dropped, with an unfulfilled promise of a discussion in a later chapter. At the same time, severe World Bank structural adjustment policies increased the price of agricultural inputs, effectively reducing the value of male labor even as production decreased due to climatic shifts. Thus, the burden of economic support fell increasingly on women's gardens – one of the few agricultural sectors to become more productive during the years of drought and fiscal "reform."

The increased economic independence and power won by women through the garden boom generated a fascinating set of social disruptions in The Gambia. It is here that Schroeder truly shines. He gives us a complex account of the lived realities of Gambian men and women, changing household finances, and an analysis of the language and metaphors used to describe their shifting relations. Chapter 3 is titled "Gone to Their Second Husbands," from the typical response of gardeners' husbands to a query on the whereabouts of his absentee wife. The metaphor of garden as second husband is a fascinating one, and Schroeder illustrates a number of interpretations. Most obviously, gardening represented a severe and increasing time demand on women. More time with the garden meant less time attending to the traditional responsibilities of a Mandinka wife. This lead to jealousy, projected on the garden as a second husband on which the wife lavishes her time. Gambian husbands frequently take a (typically younger) second wife, sometimes to the dismay of their first wife, who might feel jealous and neglected. "Gone to her second husband" turns this gendered complaint on its ear. Second is the metaphor of financial support – as male productive capacity declined, women relied upon their "second husbands" instead of their first for their financial needs, a source of shame and frustration for their husbands.

While husbands frequently voiced frustration about the gardens (which were openly mocked in the 70's, before they became so profitable), their own reduced purchasing power forced many husbands to borrow money (often at usurious interest rates) from their comparatively wealthy wives to fulfill household obligations. Interestingly, many times this money was used to buy grain that was cooked by the woman and eaten by the entire family. This money (and its interest) frequently went uncollected by the wives, possibly in a sort of unwritten exchange for greater freedom from traditional duties. Husbands also complained that women were spending time in gardens where profits would go to them personally, rather than on their rice plots, which would go to the family as a whole.

Chapter 5 deals with the complex systems of land tenure in the Gambia, and the arrival of a new set of development priorities emphasizing environmental conservation and agroforestry. Traditionally, Mandinka landholdings are divided into two categories: upland areas (boraa banko, "land of the beard") owned and cultivated by men with groundnuts and coarse grains, and low-lying swampland (kono banko, "land of the [pregnant] belly") controlled by women, used to cultivate rice. These latter lands are passed down directly from mother to daughter or daughter-in-law. To facilitate vegetable production, women needed to acquire more arable land. They requested and were given usufruct land grants from senior men who owned land lying in between women's swampland and the men's groundnut fields, which was unsuitable for rice or groundnut production but ideal for vegetable production once fenced, fertilized and irrigated.

With the help of development monies, these lands were developed into productive gardens, somewhat surreptitiously, and often in violation of implicit or explicit contracts with male landholders. Fences protected them from grazing livestock, fertilizers improved the soil, and hand irrigation made them viable even in the dry season. As the gardens became more profitable, and development support for women more powerful, male landowners began to lose control over the plots. Schroeder gives us a detailed history of struggle for control of one such plot between the male landowner and the women gardeners, initially over control of development aid supplies and tree ownership rights. In 1984, this struggle rose to the level of the state, as the landholder called in the police to prevent women from fencing his land. A few women were arrested, and large women's demonstrations ensued. The state's courts upheld the rights of women to fence the land, but declared that trees could not be planted on the land without the male landowner's permission. This legal backdrop sets the stage for the beginning of a new threat to the garden economy: that of agroforestry. According to the state law, only the landowner could plant trees on his property. Thus, the landowner could benefit from the irrigation and improved soils provided by the women, and take the harvest from the trees all to himself even as they began to shade out the vegetable production below. Interestingly, women had traditionally used trees as an alternate source of food and income, and even as a means of ("somewhat surreptitiously") extending property rights. However, as gardens became more profitable and extensive, less profitable trees competed with gardens for light. During the 1980s garden boom, trees were cut down to allow more light for gardens.

With the 1984 court case giving male landowners rights to fruit harvests on their lands, and free labor from women to provide irrigation and protection from livestock, tree planting became a mechanism for men to regain control over their land. Even though per-hectare profits were much higher for gardens than for orchards, new development initiatives embraced agroforestry as a way of reversing trends of deforestation and promoting biodiversity. Landholding men found that they could leverage these development initiatives in their favor just as women had leveraged prior initiatives towards gardening. NGOs made new, higher-profit mango trees available, which were used by developers to encourage male landholders into agroforestry. A gendered battle ensued between gardens and orchards. Clearly, agroforestry development initiatives greatly favored male landholders over women gardeners.

The gendered effects of agroforestry escaped the development institutions entirely. Using their conception of women as natural environmental stewards willing to take on labor for the common good, they foisted the task of caring for and irrigating newly planted trees on women, without worrying about mechanisms to ensure payment for services rendered. Ironically, women were expected to aid and abet the downfall of their own gardens via unpaid orchard labor that would benefit the very landlords they had been struggling with for years. Of course, Mandinka women did not passively accept these damaging agroforestry initiatives. Whenever possible, trees were "trimmed" to extinction, burned, chopped down, girdled or otherwise sabotaged or neglected to ensure enough light for productive gardening. The success of these tactics of resistance varied from site to site, depending on the landowner's vigilance and the tenacity of the women gardeners. Results varied from total enclosure of the garden plots by orchards, forcing women to relocate and essentially begin their gardens anew; to binding agreements formally granting women rights to do as they pleased with the land.

Schroeder concludes by criticizing the tendency for development institutions to become advocates for specific development itineraries under all circumstances. In the Gambia, this was clearly illustrated by the shift from "gardens are good" to "orchards are good" that occurred in the 1990's. Furthermore, he notes the "conceptual slippage" that occurs in the transition from academic theory of gender and development and the policies implemented by NGOs and their effects on women at ground level. In the Gambia, calls to improve the environment were taken up by NGOs and manipulated by landowners, resulting in a threat to hard-won gardening rights, and an attempt to capture women's labor to further economic goals of male landowners. However, it is also false to portray Mandinka women as "hapless victims" of circumstance. Clearly, they are capable of "playing the development game" as well as men are, and the force of their agency and resistance is substantial and effective. This suggests to Schroeder that development agencies must "come to grips with the prospect that the uncritical application of their ideas may have serious, if unintended, negative consequences" (p. 134).

So what are we left with? Schroeder quotes his mentor Michael Watts, "rights over resources such as land or crops are inseparable from, indeed are isomorphic with, rights over people" (p. 129), and later states, "critical questions of power and justice remain unresolved" (p. 135). Shady Practices is an effective critique of top-down development planning, a cautionary tale about the vast complexity of people's lived experiences, and the difficulty or impossibility of predicting the effects of development policy at ground level. Yet it seems quite clear that the advent of the garden economy was greatly aided by development policy, and that the gains in the garden economy have greatly improved the lived experiences of Mandinka women. If, then, some good can and has been done in the

field of "development," the question is how to maximize the (currently rather slight) chances of this happening. And how do we resolve these "critical questions of power and justice?" While Schroeder effectively critiques elements of existing development orthodoxy, he does not illuminate for us ways with which we might begin to answer these difficult questions. While this book's goal is not to formulate a coherent development framework, it would be more helpful to development workers and policymakers if it suggested some concrete changes that might, at least in the Gambian case, move us closer to resolution for some of these critical issues.

Environmentalism Unbound: Exploring New Pathways for Change. by Robert Gottlieb. Cambridge, MA: MIT Press (2001), xvii + 396 pp.

Reviewed by Christopher McGrory Klyza, Director, Program in Environmental Studies, Middlebury College, Middlebury, VT

Robert Gottlieb's new book, Environmentalism Unbound, takes us further down the path on which he started us in Forcing the Spring (1993). Like that book, Environmentalism Unbound is a combination of theory, cases, and appeal, and like that book it succeeds admirably in achieving certain goals yet falls short in achieving its most ambitious goal—creating a new progressive politics centered on a new kind of environmentalism. At the root of his project is demonstrating how "the mainstream environmentalism that had emerged by the 1970s functioned on the basis of the division between work, product, and environment, whether in terms of policy or the advocacy of consumer, occupational health, and environmental movements" (p. 43), and how to go about re-creating a whole environmental movement.

Gottlieb provides an excellent summary of environmental justice policy and politics in the 1980s and 1990s (e.g., People of Color Environmental Leadership Summit, Executive Order 12898, Title VI actions, brownfields) and pollution prevention policy (e.g., Massachusetts Toxic Use Reduction Act, Pollution Prevention Act, voluntary greening of industry). In addition, he explores efforts to find a new, third way to control pollution, such as industrial ecology, extended producer responsibility, and design for the environment.

The three cases he selects to illustrate new pathways for an unbounded environmentalism are dry cleaning, janitors and commercial cleaning, and food systems. These case studies are uniformly excellent. He opens his discussion of the dry cleaning industry with a wise caveat during a time when many commentators and policy analysts are advocating more use of consensus based and voluntary approaches. "Voluntarism," he writes, "as a substitution for public intervention, may in fact mask how industry, sectoral, institutional, and cultural influences can erect barriers against such change" (p. 101). These barriers are often most problematic for small businesses, a difficulty that "may be more reflective of their dependence upon manufacturers and suppliers in providing their products and shaping their processes or as subcontractors to larger businesses" (p. 103). Gottlieb proceeds to sketch the history of the development of the dry cleaning industry as a decentralized business that came to depend on the chlorine-based solvent perchloroethylene, or "perc".

By the 1990s, however, perc was coming under increased scrutiny as a significant source of environmental risk for those who worked in the dry cleaning business, and for those who lived near such businesses. The perc issue was pushed to the top of the policy agenda by two old fashioned regulatory laws: the Clean Air Act and Superfund. It was provisions of these laws that provided the leverage to force the dry cleaners and chemical industry to consider a move away from perc. The 1990 Clean Air Act Amendments required that regulatory standards be established for 189 hazardous air pollutants. Perc was the first of these pollutants to be reviewed. Furthermore, it was discovered that perc was leaking into soil and groundwater—leading to major Superfund liability concerns for dry cleaners, landlords, and chemical companies. The rise of perc on the regulatory agenda presented an opportunity to shift to new, less toxic alternatives for cleaning. Gottlieb reports that a number of alternatives to solvent based dry cleaning were available (such as eco-clean and machine wet cleaning), and despite skepticism about these new approaches within industry, the EPA concluded that the dry cleaning industry needed to move away from perc and that financially viable alternatives for this shift existed. In the end, though, Gottlieb concludes that "the absence of any systematic government or industry programs to facilitate a transition represented a significant pollution prevention barrier" (p. 141).

Gottlieb's connection between race, class, and ethnicity and environmental issues is strikingly clear in his second case: commercial cleaning services. Overall, nearly 1 million people are employed in this field, and these