This chapter explores the links between war, social unrest, natural resources, and globalization and raises contemporary issues of environmental racism and sexism. Environmental adult education provides a space to examine the negative environmental impacts experienced by people worldwide and to refocus on democracy, accountability, creativity, and action.

Environmental Adult Education: Critique and Creativity in a Globalizing World

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Contemporary capitalist globalization has a powerful impact on every aspect of human life. Economics, public policy, education, work, agriculture, and culture are all affected by the incessant drive to accumulate wealth. Globalization has also enabled Western capitalist nations to dominate and destroy natural environments like never before. The much promoted paperless and wireless knowledge economy has done nothing to diminish the current globalizing project’s need for natural resources. This need has made a lucky few very rich, endangered the lives and livelihoods of countless others, and lies at the root of wars and social breakdown worldwide.

Since globalization has an impact on every part of people’s lives, adult educators need to analyze, critique, and challenge it from a variety of standpoints. In this chapter I explore globalization through the lens of environmental adult education. I begin by examining four core ecological implications of globalization: (1) war and social instability, (2) production and consumption, (3) corporatization and marketing, and (4) environmental racism and sexism. This is followed by a brief overview of some of the concepts that frame environmental adult education and an array of global practices that respect ecological knowledge(s), encourage creativity, and stimulate debate and dialogue around contemporary environmental problems. To be most effective, environmental adult education must be linked to local, national, or global activism and be based in a discourse of democracy, accountability, equity, and hope.
Environmental Issues in the Fabric of Capitalist Globalization

The scientific and industrial revolutions enabled Western capitalist nations to dominate cultures, politics, and environments. However, contemporary globalization, through lightning speed and intense interconnectivity, has affected far greater changes to society and ecology (Stromquist and Monkman, 2000). While definitions of globalization vary significantly, there seem to be four salient features. First, globalization is “the latest form of capitalist reorganization” (Mayo, 1999, p. 1) that shapes society through an “alliance of modern science, technology and markets” (Byrne and Glover, 2002, p. 7). Second, it erodes the “barriers of time and space that constrain human activity” (p. 7) and “trivializes what is small, particular, indigenous and local” (Harris, 1996, p. 8). Third, it has an impact on all aspects of life: the economy, work force, communications, education, culture, health, language and literacy, governance, and the environment (Stromquist and Monkman, 2000). Fourth, as globalization increasingly penetrates the life-world, people become more aware of its impact on the “every-day of life” (Byrne and Glover, 2002, p. 8). While the first three features have quite negative connotations, the final one stirs hope and promise.

When First Nations educator Peter Cole (1998) questions in his poetic essay “who is benefiting from cash crop cultures; why is there no talk of shell oil and Starbucks; why should globalisation mean poor people in Kenya go without rice; because of a war in Iraq” (p. 103), he makes a poignant link between the environment and globalization. The ideological underpinnings of globalization of increased competition, production, marketing, privatization, and deregulation—all in the single-minded pursuit of wealth—have created massive ecological imbalances of unprecedented proportion. People and ecosystems that find themselves on the periphery of global capital are at best “treated as appendages to the growth requirements” (Bellamy Foster, 1994, p. 85), or what is worse, as dispensable commodities.

Death, War, and Natural Resources

Karl Marx argued in 1844 that the world depends on the “products of nature, whether they appear in the form of food, heating, clothes, a dwelling.” The environment is the “direct means of life . . . and instrument of life-activity” (cited in Tucker, 1972, p. 75). Little has changed. Capitalist globalization remains dependent upon the world’s natural resources to sustain and propel itself forward and in doing so, causes a devastating scarcity for those it displaces. The new knowledge economy of paperless and wireless technologies and communications has in no way diminished this fact, it has merely facilitated resource allocation and extraction.

Globalization has created fundamental problems of livelihood, equity, sustainability, and justice (Appadurai, 2001). Struggles to obtain and main-
tain control of natural resources are escalating worldwide. The majority of wars are fought not over ideology, but territory, land that is rich in natural resources. One example is the multi-year civil war in Sierra Leone over control of the country’s diamond mines. While thousands of innocent people are killed or forced to flee their homeland, foreign-owned corporations make tidy profits. A second example is the contestations around Iraq. Regardless of the hyperbole of “ridding the world of tyranny,” making things “safe,” and “caring” for the “oppressed,” the instability is about the fundamental need for an indispensable natural resource—oil. This fact is recognized by progressive leaders such as Nelson Mandela and the thousands of antiwar protesters who chant slogans of “Hell no, we won’t die for Texaco” and “No blood for oil.”

Globalization in general, and the excessive exploration of natural resources in particular, has forced many people around the world to live in degradation and poverty. As rural peasants and farmers are moved and pushed off fertile lands onto marginal ones, social infrastructures break down. Moreover, people who have attempted to protect their land or resources against the ravishes of globalization often pay a high price. One example comes from the Greenbelt Movement in Africa. Founder Wangari Maathai has been tireless in her critiques of development practices that rob citizens of parkland and natural resources. For this work, she has been the target of government repression, often undergoing physical beating and imprisonment (Clover, 1995). Two other and more extreme examples come from Niger and Brazil. In Nigeria, Ken Saro-Wiwa and his colleagues were executed “as a result of their campaign against the environmental destruction of their homeland by Shell” (Horseman, quoted in Clover, 2002, p. 321). In Brazil, nineteen landless peasants from the Landless Rural Workers Movement were massacred. In spite of this, “organizing, consciousness-raising and mobilization for the rights of the poorest of the poor” continues (Lowy, 2001, p. 32).

Production, Consumption, and Marketing
One of the major debates within the environmental movement is the very cornerstone of capitalist globalization: production and consumption. While environmentalists most often focus on the downstream activity of consumption, the upstream activity is very much in need of closer examination. Production is the creation of saleable goods, most of which come directly from natural resources. Even synthetic products draw on something from the environment, since little is conjured from thin air. The process of production reflects the ways in which humans interact with each other and the rest of nature. In precapitalist economies—a few of which still exist today—people engaged in production activities as direct, reciprocal, personal relations of exchange. While not perfect, these economies were based on the philosophy that “those who need, receive, and those who can, give.... There
were no poor and needy in comparison with other members and likewise, no wealthy and privileged” (Rowe, 2002, p. 56). The great change today is that the majority of interactions, particularly in the mainstream market, are based upon producing items for exchange and profit.

Von Moltke (1997) argues that “it is not happenstance that the most important environmental threats today (global warming, biodiversity loss, wholesale ecosystem modification, and toxic pollution) can be traced directly to production of commodities and commodity manufactures” (p. 38). Capitalist production is about changing raw materials or natural resources into saleable commodities. Living is reduced to a competition, and all relations among humans and between humans and the rest of nature are seen as economic relationships. Both human value and the value of the rest of nature are subordinate to the values of a world market that treats everything as a commodity.

The contemporary metamorphosis of consumption from an act of pillage and destruction, as it was once labeled, to an act of virtue and prestige “is one of the most important yet least examined phenomena of the twentieth century” (Rifkin, 1996, p. 19). Beginning particularly in the 1950s, the Western world began to see an “unprecedented growth of a consumer society; a term which signifies not just affluence and the expansion of production and markets, but also the increasing penetration of the meaning and images associated with consumption into the culture of everyday life” (Clover, 2002, p. 80).

The more people consumed, the higher their standard of living, and by association, their quality of life. In fact “forced consumerism was extolled: things had to be consumed, burned, used, replaced and discarded at a constantly accelerating pace” (Lahaye, 1995, p. 60).

Consumerism taunts society with the idea of scarcity, appeals to competitiveness, and mimics the tensions of seasonal rarity (Griffiths, 1997). It represents a crisis of values and meaning. Consumerism is gendered practice and a discourse through which power is both exercised and contested.

For some, consumerism is, seen as a “behavioral” problem calling for education to be targeted toward the individual. However, for others, consumerism is viewed as a deeply ingrained ideological, political, and structural problem given strength through advertising. The media-marketing machine today is the single most pervasive form of informal learning, focusing on creating need and orchestrating ignorance. As advertising executive Jacques Duval (1995) argues, advertising “boils down to boosting sales of a product in a particular market, and thus to encouraging consumption . . . to claim otherwise would be a lie” (p. 59). Focusing solely on the individual—although many agree that consumers have a certain degree of power— depoliticizes and privatizes a very political and public issue.

**Corporatization**

Another aspect of globalization is corporatization. The speed of foreign takeover of small business enterprises by large corporations is staggering.
Hectares of fertile farmland and small, local shops give way to predominantly American-owned megastores and fast-food outlets. The health risks of increased obesity associated with contemporary fast-food diets are becoming apparent. The packaging and waste from the literally millions of items sold creates more and more rubbish sites. Moreover, the forming of unions in these locations is deeply discouraged, if not totally forbidden.

Educator/activist Tony Clarke (1997) argues that “it is probably fair to say that there was a higher degree of political literacy . . . about corporations and the power they wield 25 years ago than there is today. Back then, the press and airwaves were filled with lively debates about foreign ownership. ... In more recent years, however, there has been surprisingly little analysis of the political influence of modern corporations over governments today and about what to do about it” (p. 5).

Corporations are lobbying gurus, and newspapers and other mainstream media that are monopoly-owned and dependent on advertising help them to “maintain a certain amount of public control” and cover up “pollution and human rights abuses” (Clover, 2001, p. 82). Transnational corporations also have the ability to control costs, prices, labor, and materials (Harris, 1996).

The global economy survives on its ability to make and sell more and more goods that are derived from natural resources, either directly or indirectly. To increase profit, corporate advertising has become more and more aggressive and sophisticated.

**Environmental Sexism and Racism**

Globalization has “eroded not only the nation state’s ability to control their own monetary and fiscal policies, but also their economic and political sovereignty” (Harris, 1996, p. 7). One manifestation of this is a major decrease in expenditures on health care, education, social welfare and antipoverty programs, and environmental protection.

For many women, degradation of the environment is a matter of life and death for themselves, their children, and their communities. The loss of forests in India due to excessive logging means women walk miles each day to gather fuel supplies and water. Dry riverbeds or bacteria-infested water systems mean illness and often death for children and the elderly, both of whom are cared for primarily by women (see Cuomo, 1998; Mies and Shiva, 1993).

Women are also caught up in the consumption and marketing game. In most societies, women make the primary purchases for the home—which include everything from food to cleaning supplies, sheets to lunch boxes. The advertising industry knows this. It aggressively targets them to “buy specific products such as those that keep their families ‘free from germs,’” and as primary purchasers and targets of advertising women are constantly blamed for “poor” consumer choices “which harm not only their families, but [also] the entire planet!” (Clover, Follen, and Hall, 2000,
Feminist educators have also discovered that even so-called “green consumerism” does nothing to challenge economic growth and brings “women’s lives under scrutiny in a new private ecological morality” (Sandi-lands, 1993, p. 46).

The politics and practice of environmental racism are also deeply embedded in capitalism and globalization. As adult educator Mikkes David Lengwati (1995) articulates so well, “when minerals like gold, diamonds, platinum and coal are extracted but the surrounding communities are among the poorest in the country; when black townships experience the leakage of water pipes and sewers without any hope of the local government attending to repairs; when black township streets lack sheltering trees for shade and ornamental flowers for beautification; and when blacks-only areas are targeted as industrial sites . . . racism is clear” (p. 103). Aboriginal peoples around the world do not have “control over their Traditional Territories” and often “face devastating environmental degradation” that has a major impact on “their ways of life, knowledge systems, traditional governance systems, food, and cultures” (Simpson, 2002, pp. 13-14).

Environmental Adult Education

Like globalization and adult education, there is no single definition of environmental adult education. Rather, as I discovered through an international comparative study, there seem to be a number of commonly shared conceptual frameworks and strategies (Clover, 1999).

Environmental adult education makes concrete links between the environment and social, economic, political, and cultural aspects of people’s lives. For example, when fisheries collapse due to overfishing in places where the folklore is based upon a life of the sea, people’s economic worlds and cultural identities are destabilized.

Environmental adult education is an engaged and participatory process of political and social learning and not solely a matter of individual behavior change and information transmission. While individuals can and should make changes in their lifestyles, the most toxic environmental problems result from the practice of capitalist globalization. While awareness-raising frameworks of public education focus on keeping people informed on matters of pollution, science, and technology, environmental adult education uses engaged, participatory methods based on the understanding that learning is a far more complex, extensive, and important process than information transmission. Environmental adult education begins from a platform of recognizing people’s ecological knowledge (s) and bringing these together through dialogue and debate to create new ecological understandings of our world. This also includes respecting and weaving into the learning process spiritualities and ways of knowing and being that are linked to the land.

Environmental adult education is about root causes and is therefore deeply critical of market- and consumer-driven capitalism/globalization, but
not of citizens. It is also a process that is community-oriented and contextually shaped. This does not mean that communities are simply accepted as is, but rather working toward the democratization of power by challenging underlying racial, class, and gender biases and other inequities.

Humans make their world by learning and participating in its being. Their ideas and theories are grounded in the life-world, emerging from experience and ritual. Environmental adult education uses a variety of critical and creative practices, strategies, and tools in the praxis of learning.

**Practices of Environmental Adult Education**

While globalization generates acute global problems, there is also a “positive force that encourages an emancipatory politics of globalization”—the imagination (Appadurai, 2001, p. 6). The imagination allows people to resist state and corporate violence, seek social and environmental redress, critique and challenge and design new forms of civic engagement, collaboration and learning (Appadurai, 2001), and gives “credence to alternative realities” (Greene, 1995, p. 3). Through their practice in social movements, universities, colleges, communities, and nongovernmental organizations, environmental adult educators demonstrate and unlock the powers of critical engagement and the imagination.

**Social Movement Learning.** A central component to antiglobalization actions around the world are “teach-ins.” Teach-ins bring together students, the elderly, artists, educators, activists, and union members to discuss strategies and explore troubling issues such as genetically modified foods, trade and the environment, militarism and corporatization, poverty, and democracy. The Polaris Institute in Ottawa, Canada, supplies learning materials to teach-ins in order to “develop leadership capacities for economic justice” (Clarke and Dopp, 2001, p. 4).

**Universities and Colleges.** Footprints International at the University of Calgary created a program based on popular theater. This critical and entertaining educational tool helped people to examine issues of consumerism, sustainability and the exploitation of natural resources (Keough, Carmona, and Grandinetti, 1995). An adult education course at Loyalist College in Belleville, Ontario, uses trips to megastores and large grocery chains to discuss connections between waste, packaging, and advertising; gender socialization through toys; and the genetic modification of our foods (Clover, 2001). At the University of Waikato in New Zealand, adult education students wove together theoretical debates on environmental issues, aboriginal rights, and adult education with hands-on research and experiential community learning (Stalker, 1995).

**Communities and Nongovernmental Organizations.** On Vancouver Island, Canada, a group of women artists organized a creative learning process using “needle and thread” to protest a Canada-America partnership to build a gas-fired power plant. Bringing together over sixty people, a series
of quilts were collectively created to provoke dialogue around the environment, U.S. corporate takeover in particular, and governmental responsibility (Miller, 2002). In Uganda, the Multi-Purpose Training and Employment Association runs an ecological literacy program for women that focuses on problematic gender relations, and teaches reading and writing by rooting it in the landscape and using local materials. This learning process weaves a tapestry of women’s knowledge and food, inequity, and change and uses both song and theater (Young People of the World, 1999). The Toronto Chinese Health Education Committee challenges environmental racism by ascribing to a “philosophy that ecological healing comes through the revitalization of the vision, strength and moral values” of all communities (Tan, 2003).

Based on a belief that adult learning is about working with people to challenge and create, environmental adult educators use the arts and dialogue, debate and experience, resistance and the land to tackle complex, contemporary issues.

Activism and the Environmental Adult Educator

Citizens young and old are becoming increasingly more politically active and speaking out, weaving the pedagogical with the political. First Nations educators in Canada include the idea of “resistance” in their work, thereby injecting “the learning process with power and hope, with the recognition that peoples have worked hard to protect our traditional lands” (Simpson, 2002, p. 19). Actors in the antiglobalization movement form global alliances to challenge corporate takeover and stimulate dialogue around basic notions of governance and democracy. In Escravos, Nigeria, in 2002, a group of women “took over a giant oil terminal and trapped hundreds of workers inside . . . . They did not budge in their demands for jobs for their sons and electricity for their homes. Tempers flared during the talks held in a sweltering village of rusty tin shacks only 100 yards from the looming concrete terminal, where 700 employees . . . [were] trapped for six days” (D. Doran, Associated Press, e-mail to the author, July 2002).

While not all their demands were met, corporate officials did agree to hire at least five people and to build a town hall, schools, and electrical and water systems. On February 1, 2003, a number of seniors—all in their eighties and nineties—from the Redwood Retirement Center in California came out to protest George Bush leading the country into war. “Using canes, walkers, and wheelchairs,” they created a counternarrative of resistance that questioned the dominant agenda of violence (Whitaker, 2003, p. 1).

Feminist environmental adult educator Moema Viezzer (1992) once suggested that in order to best facilitate the emergence of ecological perspectives and knowledges, adult educators should create learning cultures and build stronger networks and partnerships with social movements. Since the actions of social movements have been crucial in challenging capitalism’s negative impact on equity, justice, and the environment, environmental adult educators, particularly within institutions, need to become activists.
Linking education and activism creates a symbiotic educational opportunity for both practitioners and learners. The benefits flow in both directions and are mutually dependent for their existence. Forging stronger links between environmental adult educators and community groups and movements can help create more workable strategies and achieve mutual goals. In particular, the environmental movement has not understood well either how people learn or the full importance of education to their work (Whelan, 2000). And while environmental adult educators should not “supplant existing educational efforts of environmental groups” they can help broaden and democratize them (Jansen, 1995, p. 95). In reaching out to environmental groups, adult educators can introduce inclusive, participatory educational practices that emerge from the principles of environmental adult education.

Democracy and State Responsibility

Antiglobalization actions around the world demonstrate that citizens have developed a capacity to challenge corporate power and relate to global institutions such as the United Nations. However, activism and protests are no substitute for democratic governance. And the political arena remains the space in which most of the power lies.

Democracy is in the process of being reduced to casting a ballot once every four or five years, or participating in a series of endless political referendums or market polls. Even in societies with longstanding democratic traditions, such as Canada, democracy is under threat and there are high levels of citizen disillusionment. Contemporary forces of globalization have found ways to blind the public through prescriptive marketing and monopoly-owned media, and, as mentioned before, limit the effectiveness and power of national governments. For example, nations no longer have the power to regulate exchange or interest rates and are therefore less able to insist on social accountability from corporations (Harris, 1996). Having said this, it is also important to recognize the culpability of governments. Many Western nations push free trade, nurture business through tax reduction, encourage foreign takeover, and allow corporations to sidestep labor laws (Clarke, 1997). Therefore, it is extremely important that we inject a message of state accountability and responsibility to its citizens into our learning processes. Corporations are simply not in the business of protecting or enhancing public health (Harris, 1996). It is the role of the state, the elected officials, to ensure a “quality provision of services, guided by the principles of equity and entitlement” (Mayo, 1999, p. 3). Let’s make sure they do so.

Conclusion

Globalization has had an unprecedented negative impact on the planet. This means that neither politics, economics, public policy, education, nor work, food, health care, nor immigration have been unaffected by genetic modification, deforestation, soil erosion, water and air pollution, toxic waste, cli-
mate change, fisheries collapse, oil spills, militarization, deregulation, trade, marketing, and/or urban decay.

Race, poverty, and gender are important lenses through which we shape adult education theory and practice. Environmental adult education adds another critical lens, an ecological lens through which we can address environmental problems and give voice to the needs of those who are most affected. Environmental deterioration is a cultural issue, a political issue, a feminist issue, an economic issue, a race issue, a workplace issue, a youth issue, a global issue. By keeping democracy at the forefront, making stronger links to social movements, and working at local, national, and global levels, and through persistence and imagination, dialogue, and debate, we can reassert a vision of the world we want.

References

Clarke, T., and Dopp, S. *Beyond McWorld: A Workbook for Young Activists*. Ottawa: Canadian Centre for Policy Alternatives, 2001.

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