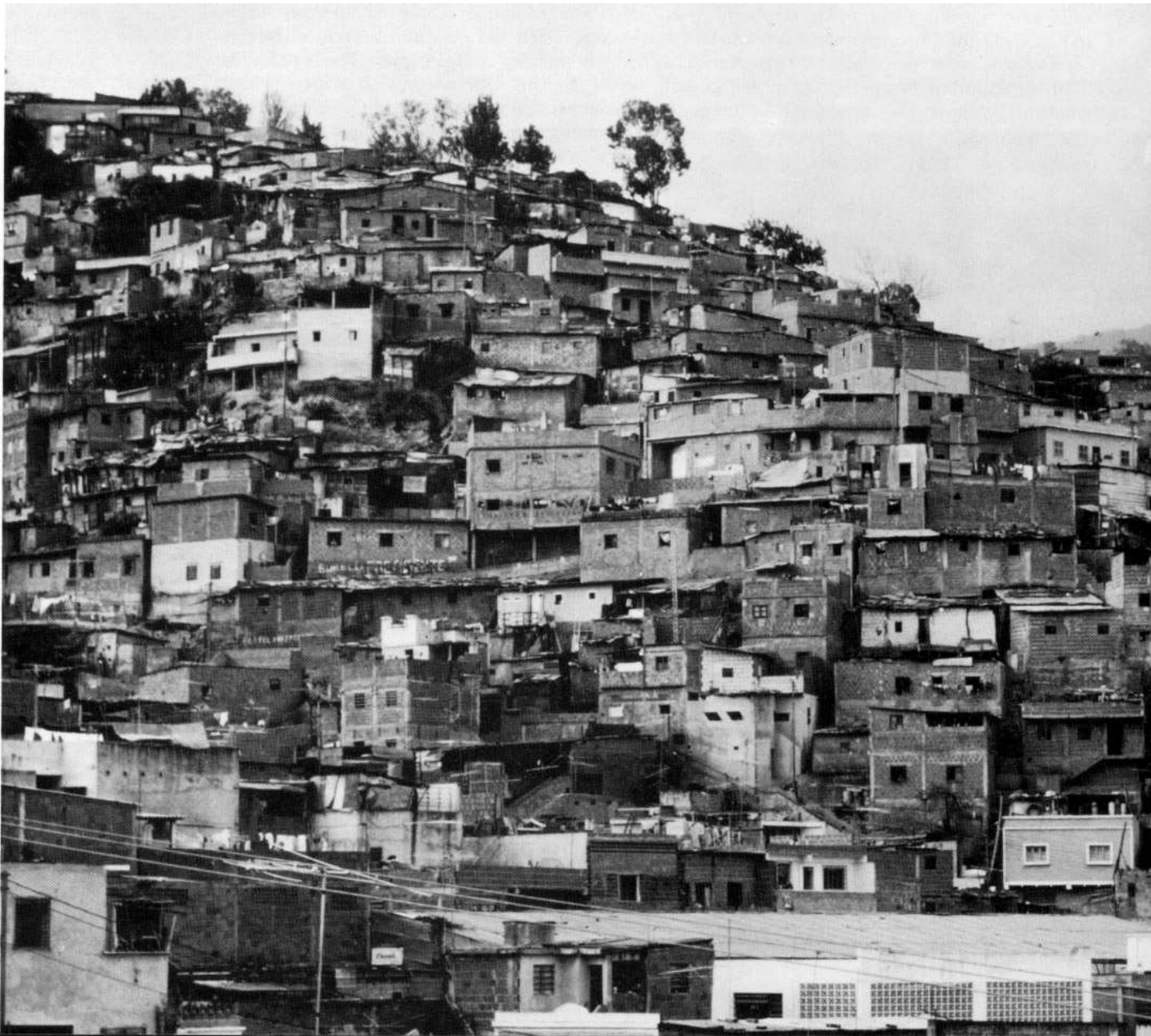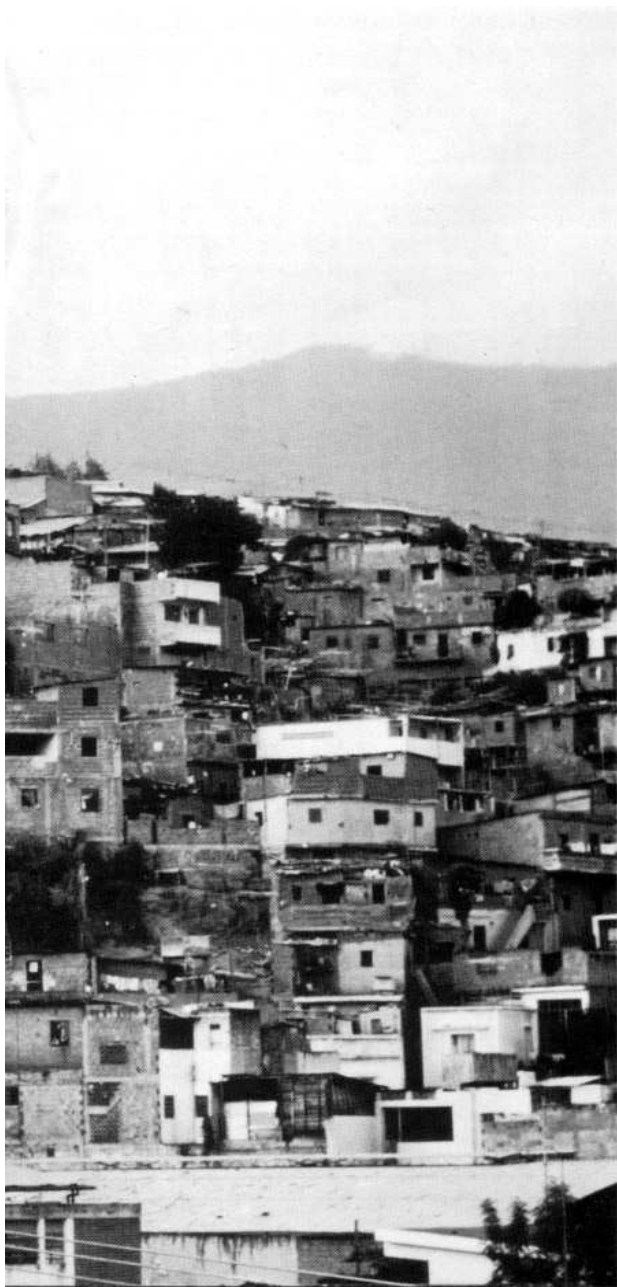# ENVIRONMENT AND SECURITY:

MUDDLED THINKING

By DANIEL DEUDNEY

A striking feature of the growing discussion of environmental issues in the United States is the use of language traditionally associated with violence and war to understand environmental problems and to motivate action. Lester Brown, Jessica Tuchman Mathews, Michael Renner, and others have proposed "redefining national security" to encompass resource and environmental threats. Richard Ullman and others have proposed including natural disasters in the security definition. Hal Harvey has put forth the concept of "natural security," and Sen. Albert Gore, Tennessee Democrat, recently proposed a "strate-

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People and their environment collide in these slums in Caracas, Venezuela, but are they a threat to national security?

gic environment initiative." Backed by some of the country's wealthiest foundations, numerous conferences and researchers are addressing issues of "environmental security." With Congress's recent adoption of Senate Armed Services Chairman Sam Nunn's $200 million proposal to use military facilities for environmental monitoring and research, these ideas have begun to shape spending and organizational priorities.

Conceptual ferment in language often reflects important changes in political and social norms. New phrases are coined and old terms are appropriated for new purposes. Great changes like the emergence of capitalism, the growth of democracy, and the end of slavery were accompanied by shifting and expanding political language. Such experimentation in the language used to understand and act upon environmental problems is a natural and encouraging development.

But not all neologisms and linkages are equally plausible or useful. Traditionally, the concept of national security, as opposed to national interest or well-being, has centered upon organized violence. Obviously, security from violence is a primal human need since loss of life prevents the enjoyment of all other goods. And various resource factors, such as access to fuels and ores, have contributed to state capacities to wage war and achieve security from violence. But before melding these "threats," it is worth comparing the national pursuit of security from violence to environmental problems and their solutions.

War and the preparation for war pose threats to the environment and consume resources that could be used to ameliorate environmental degradation. Defoliation in Vietnam, toxic and radioactive waste from nuclear weapons production, the oil spill in the Persian Gulf, and the possibility of "nuclear winter" are direct environmental problems caused by violence and war. Because of these environmental impacts, the war system imposes costs beyond the intentional destruction and loss of life.[1] However, most environmental degradation is not caused by war and preparation for war, and there is no guarantee that the world would spend money saved from military expenditures on environmental restoration. Nor is it clear that the world cannot afford environmental restoration without cutting military expenditures.

Different threats, solutions

Identifying environmental degradation as a threat to national security can be useful if the two phenomena—security from violence and from environmental threats—are similar. Un-

The sentiments and actions fueled by appeals to nationalism and national security may be dangerously inappropriate for environmental issues.

fortunately, they have little in common. Four major dissimilarities deserve mention:

■ Environmental degradation and violence pose very different types of threats. Both may kill people and may reduce human well-being, but not all threats to life and property are threats to security. Disease, aging, and accidents routinely destroy life and property, but we do not think of them as threats to security. And when an earthquake or hurricane causes extensive damage, it is customary to speak of natural disasters, but not to speak about such events as threatening national security. If everything that causes a decline in human well-being is labeled a security threat, the term loses any analytical usefulness.

■ The scope and source of threats to environmental well-being and national security from violence are very different. Nothing about the problem of environmental degradation is particularly national in character. Few environmental threats afflict just one nation, and many altogether ignore national borders. But it would be misleading even to call most environmental problems international, because perpetrators and victims are within the same country. There is nothing distinctively national about the causes, harms, or solutions.

■ Threats to environmental well-being and national security involve greatly differing degrees of intention. Threats of violence are highly intentional: organizations are mobilized, weapons procured, and wars waged with relatively definite aims in mind. In contrast, environmental degradation is largely unintentional, the side effect of many other activities. With the limited exception of environmental modification for military purposes, no one really sets out to harm the environment.

■ Organizations that provide protection from violence differ greatly from those engaged in environmental protection. Citizens typically delegate the goal of achieving national security to organizations far removed from the experience of civil society. Military organizations are secretive, extremely hierarchical, and centralized; they typically deploy expensive, highly specialized, and advanced technologies. The specialized professional group staffing them is trained to kill and destroy.

Responding to environmental problems requires opposite approaches and organizations. Everyone is involved, because certain aspects of virtually all mundane activities—house construction, farming techniques, waste treatment, factory design, land-use planning—must be reformed. And the professional ethos of environmental restoration is stewardship: respectful cultivation and protection of plants, animals, and the land. Because national security from violence and environmental habitability have little in common, the new fashion of linking them may create a conceptual muddle rather than a paradigm shift.

Risks of nationalist appeals

Another motive for speaking of environmental degradation as a threat to natural security is rhetorical: to make people respond to environmental threats with a sense of urgency. But before harnessing the old horse of national security to pull the heavy new environmental wagon, one must examine its temperament. The sentiments associated with national security are powerful because they relate to war. Historian Michael Howard has observed: "Self-consciousness as a Nation implies, by definition, a sense of differentiation from other communities, and the most memorable incidents in the group memory usually are of conflict with, and triumph over, other communities. It is in fact very difficult to create national self-consciousness *without* a war."[2] If the emotional appeals of national security can somehow be connected to environmen-

tal issues, then it is also possible that other, less benign associations may be transferred.

Yet the national security mentality engenders an enviable sense of urgency, and a corresponding willingness to accept great personal sacrifice. Unfortunately, these emotions may be difficult to sustain. Crises call for resolution, and the patience of a mobilized populace is rarely long. A cycle of arousal and somnolence is unlikely to establish permanent patterns of environmentally sound behavior, and "crash" solutions are often bad ones. For example, the energy crisis of the 1970s spawned such white elephants as the proposed synfuels program, the "energy mobilization board," and a Byzantine system of price controls.

Finally, the "nation" is not a concept waiting to be defined, but is instead profoundly linked to war and "us against them" thinking. The stronger the nationalism, the stronger the distinction between friend and foe.

In contrast, in the environmental sphere "we"—not "they"—are the "enemy." Existing groups of opponents in world politics do not match the causal lines of environmental degradation. In fact, intense nationalism conflicts with the globalism that has been one of the most important insights of environmentalism. Thinking of the environment as a national security problem risks undercutting the sense of world community and common fate that may be necessary to solve the problem.

If pollution is seen as a threat to national security, there is also a danger that the citizens of one country will resent the pollution from other countries more than the pollution created by their fellow citizens. U.S. citizens, for example, could become much more concerned about deforestation in Brazil than about reversing centuries of North American deforestation. This could increase international tensions, make international agreements more difficult to achieve, and divert attention from solving internal problems. Taken to an absurd extreme—as national security threats sometimes are—seeing environmental degradation in a neighbor-

Japan has grown rich while remaining resource-poor.

Ecological decay is not a threat to national security, but it challenges the utility of thinking in national terms.

ing country as a national security threat could trigger various types of intervention and imperialism.

Instead of linking national security to the environment, environmentalists should emphasize that global ecological problems call into question the nation-state and its privileged status in world politics. Ecological decay is not a threat to national security, but it challenges the utility of thinking in national terms.

Integrally woven into ecological awareness is a powerful set of values and symbols, ranging from human health and property values to beauty and concern for future generations, which draw upon basic human aspirations and are powerful motivators of human action. This "green" sensibility can make strong claim to being the master metaphor for an emerging post-industrial civilization. Instead of attempting to gain leverage by appropriating "national security" thinking, environmentalists should continue developing and disseminating this rich, emergent world view.

War and the environment

Many analysts have begun calling ecological degradation a national security problem because they think environmental stress will cause or exacerbate wars. If states become much more concerned with resources and ecological decay, particularly if they think such decay is a threat to their security, they may well fight resource and pollution wars. For example, Arthur Westing has observed: "Global deficiencies and degradation of natural resources, both renewable and non-renewable, coupled with the uneven distribution of these raw materials, can lead to unlikely—and thus unstable—alliances, to national rivalries, and, of course, to war."[3]

Few ideas seem more intuitively sound, and many ideas about resource war are derived from the cataclysmic world wars of the first half of the twentieth century. Influenced by geopolitical theories that emphasized the importance of land resources for Great Power status, Hitler in significant measure fashioned Nazi war aims to achieve resource autonomy.[4] Lacking indigenous fuel and minerals, and faced with a tightening embargo by the Western colonial powers in Asia, the Japanese invaded Southeast Asia for oil, tin, and rubber.[5] Although the United States had a richer resource base than the Axis powers, fears of shortages and industrial strangulation played a central role in U.S. strategic thinking. During the Cold War, the presence of natural resources in the Third World helped stimulate East-West conflict in this vast area.[6]

But scenarios of resource war may be diminishing in plausibility. The robust character of the world trade system means that resource dependency is no longer a major threat to a nation's military security and political autonomy. During the 1930s the world trading system had collapsed, driving states to pursue autarkic economies. In contrast, contemporary states routinely meet their resource needs without controlling the territory containing the resources.[7]

Moreover, it is becoming more difficult for states to exploit foreign resources through territorial conquest. It is very costly for any invader, even one equipped with advanced technology, to subdue a resisting population—as France discovered in Indochina and Algeria, the United States in Vietnam, and the Soviet Union in Afghanistan. Iraq's invasion of Kuwait fits the older pattern but was based upon a truly exceptional imbalance between power (Iraq had the fourth-largest military force in the world) and wealth (Kuwait had the third-largest oil reserves and a tiny military).

In addition, the world is entering what H.E. Goeller and Alvin M. Weinberg have called the "age of substitutability," in which industrial technology makes it possible to fashion virtually everything needed from substances such as iron, aluminum, silicon, and hydrocarbons which are ubiquitous and plentiful. Evidence for this trend is that prices for virtually every raw material have been stagnant or falling for the last several decades despite the continued growth in world output, and despite expectations many voiced during the 1970s that resource scarcity would drive up commodity prices to the benefit of Third World raw material suppliers.

Four war scenarios

Environmental analysts have outlined a number of ways resource scarcity and environmental stress may lead to violent conflict:

■ **Water wars.** The most frequently mentioned scenario is that disputes over water supplies will become acute as rainfall and runoff patterns are altered by atmospheric warming. Many rivers cross international boundaries, and water is already becoming scarce in several arid regions. But it seems less likely that conflicts over water will lead to interstate war than that the development of jointly owned water resources will reinforce peace. Exploitation of water resources typically requires expensive—and vulnerable—civil engineering systems such as dams and pipelines. Large dams, like nuclear power plants, are potential weapons in the hands of an enemy.[8] This creates a mutual hostage situation which greatly reduces the incentives for states to employ violence to resolve conflicts. Furthermore, there is evidence that the development of water resources by antagonistic neighbors creates a network of common interests.

■ **Poverty wars.** In a second scenario, declining

living standards first cause internal turmoil, then war. If groups at all levels of affluence protect their standard of living by pushing deprivation on other groups, class war and revolutionary upheavals could result. Faced with these pressures, liberal democracy and free market systems could increasingly be replaced by authoritarian systems capable of maintaining minimum order.[9] If authoritarian regimes are more war-prone because they lack democratic control, and if revolutionary regimes are war-prone because of their ideological fervor and isolation, then the world is likely to become more violent. The record of previous depressions supports the proposition that widespread economic stagnation and unmet economic expectations contribute to international conflict.

Although initially compelling, this scenario has major flaws. One is that it is arguably based on unsound economic theory. Wealth is formed not so much by the availability of cheap natural resources as by capital formation through savings and more efficient production. Many resource-poor countries, like Japan, are very wealthy, while many countries with more extensive resources are poor. Environmental constraints require an end to economic growth based on growing use of raw materials, but not necessarily an end to growth in the production of goods and services.

In addition, economic decline does not necessarily produce conflict. How societies respond to economic decline may largely depend upon the rate at which such declines occur. And as people get poorer, they may become less willing to spend scarce resources for military forces. As Bernard Brodie observed about the modern era, "The predisposing factors to military aggression are full bellies, not empty ones."[10] The experience of economic depressions over the last two centuries may be irrelevant, because such depressions were characterized by under-utilized production capacity and falling resource prices. In the 1930s, increased military spending stimulated economies, but if economic growth is retarded by environmental constraints, military spending will exacerbate the problem.

■ **Power wars.** A third scenario is that environmental degradation might cause war by altering the relative power of states; that is, newly stronger states may be tempted to prey upon the newly weaker ones, or weakened states may attack and lock in their positions before their power ebbs further. But such alterations might not lead to war as readily as the lessons of history suggest, because economic power and military power are not as tightly coupled as in the past. The economic power positions of Germany and Japan have changed greatly since World War II, but these changes have not been accompanied by war or threat of war. In the contemporary world, whole industries rise, fall, and

relocate, causing substantial fluctuations in the economic well-being of regions and peoples, without producing wars. There is no reason to believe that changes in relative wealth and power caused by the uneven impact of environmental degradation would inevitably lead to war.

Even if environmental degradation were to destroy the basic social and economic fabric of a country or region, the impact on international order may not be very great. Among the first casualties in such a country would be the capacity to wage war. The poor and wretched of the earth may be able to deny an outside aggressor an easy conquest, but they are themselves a minimal threat to other states. Contemporary offensive military operations require complex organizational skills, specialized industrial products, and surplus wealth.

In today's world everything is connected, but not everything is tightly coupled. Severe regional disasters may produce scarcely a ripple in the rest of the world. For example, Idi Amin drew Uganda back into savage darkness, the Khmer Rouge murdered an estimated two million Cambodians, and the Sahara has advanced across the Sahel without much perturbing the economies

Environmental threats like acid rain ignore national boundaries.

War is a poor way to resolve many of the conflicts that might arise from environmental degradation.

and political systems of the rest of the world.

■ **Pollution wars.** A fourth possible route from environmental degradation to interstate conflict and violence is pollution across interstate borders. It is easy to imagine a situation in which one country dumps an intolerable amount of pollution on a neighbor, and coercive efforts to stop the offense eventually lead to armed conflict. But in real life such cases are rare. More typically, activities produce harm both internally and outside a country's border. This creates complex sets of winners and losers, as well as potential internal and interstate coalitions.

Another type of conflict could emerge in the effort to preserve the global commons. Solutions to global phenomena like atmospheric warming and ozone depletion require collective action, but one significant polluter might resist joining an agreement, and the others might attempt to force the "free rider" to cooperate. It is difficult to judge this scenario because we lack historical examples. It seems doubtful, however, that states would find military instruments useful for coercion and compliance. Any state sufficiently industrialized to be a major contributor to these problems is a poor target for military coercion.

The wrong paradigm

The case for asserting that environmental degradation will cause institutional violence is weak, largely because of factors having little to do with environmental matters. Of course, today there are some 169 independent states and environmental problems are diverse; therefore any generalization will surely have important exceptions. Although many analogies for such conflict can be drawn from historical experience, they fail to take into account the ways in which the current international system differs from earlier ones. Because military aggression is prohibitively costly, even large shifts in the relative power of states are less likely to cause war. War is a poor way to resolve many of the conflicts that might arise from environmental degradation. The vitality of the international

trading system and complex interdependency in general also militate against violence. The result is a world system with considerable resilience and "rattle room" to weather significant environmental disruption without significant violent conflict.

The degradation of the natural environment upon which human well-being depends is a challenge of far-reaching significance for societies everywhere. But this emerging problem has little to do with national security from violence. Not only do the causes and solutions to these two problems have little in common, but the nationalist and militarist mindsets closely associated with national security thinking directly conflict with the core of the environmentalist world view. Harnessing their sentiments for a "war on pollution" is unnecessary, dangerous, and probably self-defeating. The prospects for resource and pollution wars are not great but, ironically, could be increased if the national security mindset becomes as pervasive as some environmentalists hope.

The fashionable recourse to national security paradigms to conceptualize the environmental problem represents a profound and disturbing failure of imagination and political awareness. If the nation-state enjoys a more prominent status in world politics than its competence and accomplishments warrant, then it makes little sense to emphasize the links between it and the emerging problem of global habitability.[11] Nationalist sentiment and the war system have a long-established character that are likely to defy any rhetorically conjured redirection toward benign ends. The movement to preserve the habitability of the planet for future generations must directly challenge the tribal power of nationalism and the chronic militarization of public discourse. Ecological degradation is not a threat to national security; rather, environmentalism is a threat to national security attitudes and institutions. When environmentalists dress their programs in the blood-soaked garments of the war system, they betray their core values and create confusion about the real tasks at hand. ■

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