“Shock and Awe” and the Environment

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“Shock and Awe” is the celebrated expression used to characterize the initiation of the American invasion in Iraq, a spectacular show of force and strength that lit up the sky like a fireworks extravaganza. As the incessant bombing rained down on Baghdad, media commentators repeated the mantra of “shock and awe” as if this was a natural and appropriate depiction of the destruction caused on the ground from the thousands of sorties being skillfully orchestrated with laser precision from above. Hammering the Iraqi capital with hi-tech guided missiles and sophisticated weaponry was portrayed in the media as a necessary action.

The military enterprise, exemplified by “shock and awe,” is devastating at several levels. One extremely relevant factor in this scenario is the absence of concern and attention paid to the environment in times of war. Is the environment a consideration during military conflicts? How do the media cover the environmental impact of war? Who is most affected by the militarization of the environment? What are the consequences of environmental war? It is somewhat ironic that the issue of global warming has become a priority internationally at the United Nations and in most countries around the world, yet there is little scrutiny of the environmental destruction caused by war.

One theme suggested in this article is that marginalized peoples, whether they are in developing countries, such as Iraq, Lebanon, Angola, Rwanda, Vietnam, or Nicaragua, or in developed countries, are disproportionately affected by environmental destruction. Differential power relations determine how the environment is to be treated within war situations, and this is also true when considering resource allocation within countries that are not directly affected by local military conflict. Within the United States, for example, the vast majority of toxic waste sites are located in lower-income, minority neighborhoods, leading to untold health, social, and economic problems. Another example is the Hurricane Katrina tragedy in New Orleans, which was largely foreseeable, given the debate in Congress concerning levies two years earlier; the tragedy only became formalized as a priority once international and national attention uncovered the
racialization of poverty in the light of the political commitment by the U.S. government, whose military investment in Iraq did not allow for a proactive, effective deployment of resources. This article will, therefore, discuss the far-reaching impact on marginalized groups in times of environmental destruction, who are more vulnerable, owing to the neo-liberal drive to maintain power and profits.

War is never rational, nor proportionate. It is difficult to fully comprehend the simplistic leitmotif of war having a moral fiber or that it will determine the “winners and losers.” With such death, injury, scarring, torture, hatred and ideological dementia, some might conclude that there can only be losers. Some estimates, for example, place the death-toll in Iraq (since the U.S. invasion) at 700,000; the religious conflict and civil war caused by the military intervention does not appear close to being extinguished. The official claims that the United States could not simply “cut and run” are, therefore, somewhat incomprehensible, especially to those who have directly been affected by the loss of life, property, security, livelihood, and their environment. War, it has been argued, especially in light of the Vietnam war, cannot be won on military might alone; as Victor Hugo said, “An idea is more powerful than all of the armies of the world.” The internationalization of the impact of war on the social and physical environments is ultimately considered, if at all, long after the military decisions have been implemented.

The patriotic fervor buttressing the U.S. military campaign in Iraq could be attributed to the reaction to the returning troops during the Vietnam war in the 1960s and 1970s. People are extremely careful to emphasize that it is necessary to “support the troops,” which seems to be a prominent feature on automobiles throughout the United States in the form of magnetic ribbon-shaped decals. The general reticence to debate the Iraq conflict and war in public education denotes an obvious malaise in society, and also a long-term threat to democracy and social justice. If young people are not engaged in their formative years, society will be at a deficit to understand and challenge decision making and power later on. The connection to education is key in that war, conflict, strife, famine, poverty, and problems at an international level always have a local connection, illustrating the interdependence between developed and developing countries. The average person may not consider that there is a strong link between actions of her or his government abroad and at home but the visible, tangible manifestations of these actions—immigration, migration, employment dislocation, economic fluctuation, access to resources, armed conflict, terrorism, and ecological shifts—demonstrate both the need to become engaged and the pertinence of political literacy.
The Vietnam war, which ended some thirty years ago, provides evidence of sustained damage to the environment at several levels. A significant part of the environmental destruction caused by war in Vietnam concerns the U.S. program of blanketing the local topography with millions of tons of chemical spray, known as Agent Orange, which ravaged forests and contaminated the landscape for generations to come. The loss of trees, arable land, foodstuffs, livestock, and medicinal products cannot be quantified in simple economic terms. The Peace Pledge Union provides a detailed description of the damage caused by chemical weapons:

People exposed to the spray suffered headaches, vomiting, diarrhoea, weakness and chest complaints. Meanwhile, Agent Orange’s carcinogenic dioxin was sinking into the soil, washing into the sea, and entering the food chain, where it is still at work today. Children born since the war have consumed high levels of dioxin; and many fathered by men exposed to the spray (many of whom are now dead or suffering from cancers) have spina bifida and other congenital abnormalities.

The latent social, health and psychological effects of Agent Orange linger on in the Vietnamese population as well as those American soldiers exposed to the chemical.

It is somewhat paradoxical that one of the key motivations to invading Iraq was that the Iraqi leader had used chemical weapons within his own territory. Where did he get these weapons, and why was he not stopped by the United States at that time from using them? To what degree did the fact that Iraq was considered an ally against Iran during its bloody eight-year war in the 1980s influence the level of criticism of its militarization? With over one million deaths, tens of thousands murdered by chemical weapons, a plethora of countries involved in supplies the warring countries (Iraq and Iran) with armaments, and an undeniable destruction of the environment, why was there no public, formal denunciation by the United States at that time of Saddam Hussein’s despotic dictatorship? This trend of supporting despots when they are “our despots” haunts human history, and raises questions about the fundamental reasons for armed conflict.

Information for Action estimates that there are between 60 and 110 million landmines presently in areas where conflict has taken place, and, significantly, that approximately 30,000 people die or are maimed annually from exposure to these weapons, with a far greater number of animals being affected.

Wildlife and livestock are common causalities of landmine explosions. There have been reports of antelopes and elephants killed by landmines during the civil war in Angola. Elephants have also been killed by landmines planted along the border between Burma and
Bangladesh. Brown bears were killed by landmines in Bosnia and Croatia. Native tigers are threatened by landmines in Cambodia. In Tibet, rare species of clouded leopard, barking deer, snow leopard, and Royal Bengal tiger have been reported as casualties of landmines—either maimed or killed. In the Congo Democratic Republic, rebel forces tested some fields for the presence of landmines by herding cattle across them.

The hundreds of thousands of landmines planted in Vietnam, Laos, and Kampuchea have terrorized local populations, rendering untold numbers of civilians maimed and permanently disabled, as well as decimating the arable and cultivable land, infusing it with toxicity. Clearing the landmines has proven to be an extremely costly, problematic, and challenging task, one that involves inherent risks. Campaigns to remove landmines in Angola, after years of civil war and agitation from South Africa, and in Lebanon, after the recent Israeli invasion in that country, demonstrate how this work is not fully supported by the international community, receiving sporadic injections of resources and media attention but never becoming the priority required to ensure that local populations can freely access their environment without fear. One estimate is that the removal of a landmine costs more than thirty times the cost of the weaponry. Once the conflict is over, the war continues because the environment is seething with the potential to harm local populations.

During the Iraq war in 1991, as reported by the World Resources Institute, Iraqi forces ignited some 600 oil wells, causing a long-term environmental catastrophe:

Oil spilled into the Persian Gulf, tarred beaches and killed more than 25,000 birds. Scientists predict the toxic residue will continue to affect fisheries in the Gulf for over 100 years. . . . Oil spilled on land formed huge pools in lowlands, covering fertile croplands. The deposition of oil, soot, sulfur, and acid rain on croplands up to 1,200 miles in all directions from the oil fires turned fields un tillable and led to food shortages. The fires released nearly half a billion tons of carbon dioxide, the leading cause of global warming, emissions greater than all but the eight largest polluting countries for 1991 that will remain in the atmosphere for more than a century. The oil that did not burn in the fires traveled on the wind in the form of nearly invisible droplets resulting in an oil mist or fog that poisoned trees and grazing sheep, contaminated fresh water supplies, and found refuge in the lungs of people and animals throughout the Gulf.

Perhaps the most dangerous example of the armaments industry in relation to destroying the environment concerns nuclear bombs. According to the Peace Pledge Union:
Nuclear waste is a global problem that won’t go away, threatening environmental disaster on a vast scale: its poison, and toxic chemicals which accompany all weapon production, have travelled round the globe in the atmosphere and ocean currents as well as water and air, they harm earth, plants that grow in it, and subsistent livestock and wildlife. Human exposure to nuclear and chemical tests and factories, or via the food chain, results in miscarriages, malformed foetuses, high infant mortality and congenital disorders, leukaemia and other cancers, tumours, thyroid disorders, and complex debilitating and life-shortening syndromes.

During the nuclear arms race, in which the United States and the former Soviet Union were locked into what seems like an incredulous demonstration of fatalism, each country built a nuclear arsenal that could destroy the world hundreds of times over. The manufacturing of these weapons involves a range of risks, and the handling, maintenance, and disposal of materials related to nuclear arms has considerably damaged the environment. Radioactive waste has become a substantial concern for the international community in light of the very public testimony concerning a Russian submarine that sunk in 2000 containing extremely hazardous weaponry. Less known is that there has been a serious of mishaps involving nuclear submarines since their proliferation in the 1960s, although much of the information documenting the gravity of the destruction has never been released by official bodies.

The military labeling of killing and destruction that is unintentional is often referred to as “collateral damage.” This does not necessarily include environmental concerns, and collateral damage is usually only considered when there is intense media scrutiny. The coverage of “accidental” deaths and destruction detracts from the mission of winning the war, can be considered anti-patriotic, thus raising questions about the effectiveness of war to proverbially “win the hearts and minds” of the opposition. Conquering others because they are not democratic, a common refrain in the Iraq War as well as many others since the ending of World War II, is rife with contradictions and potential for long-term stability.

The militarization of the environment also means that people in conflict-zones are vulnerable to the long-term effects of being isolated. It is not uncommon, for example, for people to deplete the indispensable foliage of forests to be used for cooking oil, heat, and building materials. With the elimination of the forest comes a host of problems affecting the bio-diversity of local and global contexts, serious erosion of the earth (as exemplified by Haiti), which further compounds problems related to housing and potable water as well as the quality of air in the local environment. Similarly, the displacement and mass migration of people fleeing conflicts hampers the local environment by endangering wildlife and
changing living patterns in often previously under-populated areas. According to *Ecology News*, environmental war can be defined as:

1. the intentional modification of a system of the natural ecology, such as climate and weather, earth systems such as the ionosphere, magnetosphere, tectonic plate system, and/or the triggering of seismic events (earthquakes),
2. to cause intentional physical, economic, and psycho-social, and physical destruction to an intended target geophysical or population location, (and)
3. part of strategic or tactical war.

The Rio Declaration on Environment and Development in 1992 formally condemned the environmental destruction caused by military conflict: “warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary.” Some fifteen years earlier, the United Nations Treaty against Modification of the Environment prohibited environmental war, yet weapons have continually been developed that threaten the world’s ecology. Interestingly, despite the organized efforts of nongovernmental organizations, weapons developed to destroy the environment, either directly or indirectly, are often conceived and used in covert ways. Although international law prohibits harm to the environment, legal protocols, instruments, conventions, and processes have been extremely difficult to enforce.

Tara Weinstein points out that no state has ever been prosecuted for environmental war crimes. “The reasons range from the political problem of holding victors and their vanquished opponents responsible for the same actions to the prosecutorial barriers embedded in environmental war crime statutes, and from the values of the international community to the potential for environmental crimes to be overshadowed by other atrocities.” Weinstein further elaborates an intricate argument on how international law works, and how it might be used to prosecute those guilty of “eco-terrorism” and environmental crimes against humanity.

The question of accountability and responsibility is paramount when considering the pursuit of environmental war crimes offenders. Would only the losing countries be prosecuted? How is destruction measured, and by whom? Could global warming, at the very least partially, be considered an environmental war crime? Can developing countries, without the same level of resources as developed countries, be held to the same standard, especially when considering the types of weapons and strategies available to the latter? With the advent of increasingly sophisticated war technology, it is quite conceivable the future military conflicts will involve more insidious
mechanisms for destroying the environment, including contaminating water sources, infecting agricultural stocks, and poisoning the environment. It is telling that many countries, including the United States, maintain substantial reserves of chemical weapons, which are problematic to control and dispose of, as is the case for nuclear weapons and the uranium they contain.

An important consideration, therefore, in the discussion on environmental war is the disproportionate impact toward marginalized groups, principally minorities, and the poor. The elite class in most conflicts is able to flee before significant damage is inflicted, or is able to buy their way out of intolerable conditions. Moreover, they often have contacts, linkages, and networks established in developed countries that are able to facilitate their non-implication in hostilities. In many cases, the economic and political elites may already have vast sums of money placed outside of their countries once conflicts commence. It is important to caution, however, that there is no reason to believe that these elites desire or promote the destruction of their countries and environments. In effect, being able to identify the perpetrators of environmental war is a complex undertaking.

To conclude with the “shock and awe” metaphor, what do we know of the environment in Iraq following the military invasion some four years later? What do we know of the wildlife, the arable land, the potable water, the bacteria, infections, diseases and health problems, the re-shaped and permanently scarred landscapes, the radiation sifting through the air, and all other factors that might define the environment? Similarly, outside of the meticulously presented data and quantification of scoring the war, what do we know of the people who are affected by the “shock and awe” of war in Iraq, not the American soldiers or those they are fighting but the multitudes of innocent civilians caught in the cross-fire? Do official presidential press-conferences and military briefings accurately capture the essence of what is happening to the environment? What voices are heard in the cacophony of clatter about fighting “against terror”? Are minority and marginalized groups fully considered in how the war is affecting their rights, culture(s), and livelihoods?

The current debate internationally over global warming and fluctuation in the world’s environment seems to have omitted the direct and insidious impact of war and military conflict. It is difficult to link the two phenomena given the pressure to pursue neo-liberal political and economic objectives, which Peter McLaren argues is closely linked to the “permanent war on terror.” The human, cultural, and economic cost of war to the environment is substantial. What is most destabilizing is that the environment is generally not included in calculations of costs and benefits. The unmitigated, uncalculated long-term costs to local peoples
are generally inconsequential to war-planners. The media, in lock-step with hegemonic forces, refuse to focus, or are prevented, from focusing on the environment. The massive resources spent on recycling, energy conservation, finding alternative environmental options, and researching climate change pales in comparison to the destruction caused by war. The disconnect between the public willingness to acknowledge the importance of the environment and the patriotic backlash against critiquing the war in Iraq, according to Joel Westheimer, illustrates the problem of having a tightly controlled political agenda that avoids considering local as well as global environmental concerns.

**RECOMMENDED READINGS**


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