OUR TOOLS OF WAR, TURNED BLINDLY AGAINST OURSELVES

By Rob Nixon


What is a war casualty? The answer appears painfully obvious. It asserts itself not through argument but, more viscerally, through photographs: a torso shredded by a roadside bomb; a bloodied peasant spread-eagled in a ditch; a soldier (cigarette dangling nonchalantly) smashing his boot into a dead woman’s head. Yet such images account only for immediate, visually arresting fatalities. What about those casualties that don’t fit the photographic stereotypes, casualties that occur long after major combat has been concluded, casualties whose belatedness and dispersal make them resistant to dramatic packaging? The news media, in thrall to speed and spectacle, lack the attention span to follow war-inflicted catastrophes that take years or generations to exact their toll.

Public debate is overdue on war’s hidden human and environmental costs, a debate that acknowledges the changes in the ways that contemporary wars kill. We also need more scholarly inquiry into the ways that military euphemisms like “precision” warfare, “surgical” strikes, “smart” wars, and now “depleted” uranium have helped legitimize recent, high-tech conflicts while concealing their long-term toxic impact. The rhetoric of precision has lulled us into regarding the fatalities of war as swift, immediate killings. But, ironically, the increasing reliance of American and British forces on “precision” warfare has coincided with the integration of depleted uranium into their missiles, bullets, and tank armor.

Ever since the Persian Gulf war of 1991, a new kind of fatal, environmental imprecision has been built into “precision” warfare. The gulf war was history’s first depleted-uranium conflict. Arguably, not since Hiroshima and Nagasaki have humans unleashed a military substance so tenaciously hostile to life itself. Depleted uranium possesses a durability beyond our comprehension -- it has a radioactive half-life of 4.51 billion years. When it enters the environment, it effectively does so for all time.

In the age of depleted-uranium warfare, we have an ethical obligation to challenge the military body counts that consistently underestimate (in advance and in retrospect) the true toll of waging high-tech wars. Who is counting the staggered deaths that civilians and soldiers suffer from depleted uranium ingested or blown across the desert? Who is counting the belated fatalities from unexploded cluster bombs that lie in wait for months or years, metastasizing into landmines? Who is counting deaths from chemical residues left behind by so-called “pinpoint” bombing, residues that turn into foreign insurgents, infiltrating native rivers and poisoning the food chain? Who is counting the victims of genetic deterioration -- the stillborn, malformed infants conceived by parents whose DNA has been scrambled by war’s toxins?

The calculus of any conflict needs to incorporate such environmental casualties. They may suffer slow, invisible deaths that don’t fit the news cycle at CNN or Fox, but they are casualties of war nonetheless.

The proponents of “smart” wars often market them as humane because they appear to promise not just greater accuracy but greater brevity. The Iraq war has complicated that assumption,
exposing the chasm between a hygienically “smart” war and the messy hazards of a drawn-out, urban-guerrilla conflict. Innumerable commentators have made this point. They typically overlook, however, the way technologies that purport to shorten a conflict may delay, disperse, and therefore obscure “precision” warfare’s full fatal impact. Such technologies, when they compromise the environment, morph into long-term killers, creating landscapes that inflict lingering, off-camera casualties.

Time itself becomes the ultimate cover-up, a dependable ally in camouflaging high-tech warfare’s true toll. Clearly, if depleted-uranium-tipped warheads are involved, there is no such thing as a surgical strike. “Surgical” suggests a precise excision in the name of healing, yet such strikes poison the environment, imperiling not just combatants and civilians but their progeny as well.

Environmentalists routinely face the quandary of how to communicate urgent issues that unfold too slowly to qualify as breaking news -- issues like climate change and species extinction that threaten in slow motion. Any environmentalist who seeks to tally the delayed-action casualties of “precision” warfare labors under a similar disadvantage. How many years, how many decades, how many generations will she be granted to come up with a final count that includes war’s after-dead? Since 1991, depleted-uranium ordnance has been deployed in Afghanistan, Bosnia, Kosovo, Kuwait, Serbia, Somalia, and now -- in unprecedented quantities -- in Iraq. Given depleted uranium’s extraordinarily long half-life, at what point do we stop counting casualties?

War deaths from environmental toxicity demand patient, elaborate proof. Spikes in renal collapse; infertility; leukemia; testicular, brain, and breast cancers; and clusters of infant malformations are harder to link to war’s technologies than is a bullet through the head. The military statistician can simply count corpses within a given place and time, subdivide those columns into combatants and civilians, and draw a line beneath his sums. Such calculations conform tidily to our preconceptions about the time frame within which a war is waged. However, to view war through the prism of ecological time demands a different ethical attention span, one that strives to give the slow, discounted dead their due.

Earlier environmental historians have addressed this problem of the relationship between changing military technologies and belated casualties. Harvey Wasserman and Norman Solomon’s 1982 book, Killing Our Own: The Disaster of America’s Experience With Atomic Radiation, detailed the catastrophic, long-term impact of atmospheric nuclear testing on America’s “atomic soldiers.” Thomas Whiteside’s The Withering Rain: America’s Herbicidal Folly and John Lewallen’s Ecology of Devastation: Indochina, both published in 1971, began the by now extensive literature on the protracted lethality of Agent Orange. The turn to depleted-uranium warfare demands that we revisit the question of who counts as a casualty. This new development demands that we start counting returning veterans slain or disabled by environmentally transmitted “friendly fire,” and that we count, too, the deferred casualties among returning refugees. Both groups harbor the illusion that the war is safely over.

Forty years ago, Rachel Carson -- that indefatigable enemy of lethal euphemism -- coined a phrase that best articulates the threat that “precision” warfare poses. Carson spoke of “death by indirection.” She was referring not to war casualties but to the scattershot victims of “herbicides” and “pesticides,” products she insisted ought to carry the label “biocides” instead. Carson’s astute
phrasing is as relevant as ever to our depleted-uranium age. From behind a linguistic cloak of bogus precision, today’s “smart” warfare operates biocidally, dispensing widespread “death by indirection.”

It is easy to forget how advocates of the Vietnam War pitched it as the smart war of its day, with boasts of imminent victory via the “electronic battlefield” and of the insurmountable advantages that cluster bombs and chemical weaponry would deliver. Carson died shortly after the United States began to deploy as instruments of war the dioxins she’d condemned as “biocides.” Yet her Silent Spring foreshadowed the enduring consequences of those spraying runs: Thirty years after Vietnam received its last “dusting” of Agent Orange, that war’s slow chemical slaughter continues, claiming 21st-century victims. A 2002 study recorded dioxin levels in the bloodstreams of Bien Hoa residents 135 times the normal level. The dioxins build up in the fatty tissues of pivotal human foods like duck and fish, gathering concentration as they move up the chain. So an old war’s poisons pass from nature and from livestock into the cooking pot and from there into the next generation. Children born long after the war’s end are still dying Agent Orange deaths of painful prematurity.

The conventional view is that, as an April 2003 New York Times editorial put it, “during our dozen years [in Vietnam], the U.S. killed and helped kill at least 1.5 million people.” Yet that “during” shrinks the toll: How many thousands survived the war years only to have their lives (or their children’s and grandchildren’s lives) foreshortened by Agent Orange?

Because depleted uranium carries both a chemical and a radiological threat, its long-term implications are even more severe. Depleted uranium, despite that reassuring adjective in its name, possesses 60 percent of natural uranium’s radioactivity. Malcolm Hooper, a professor of medicinal chemistry at the University of Sunderland, in England, has characterized depleted uranium as “a new weapon for indiscriminate, mutually assured destruction.” During the gulf war alone, U.S. troops discharged munitions containing 340 tons of depleted uranium. That contributed significantly, in Hooper’s view, to making the gulf war “the most toxic war in Western military history.”

On the eve of the gulf war, the American nuclear scientist Leonard A. Dietz warned of catastrophic consequences if the United States and its allies introduced depleted-uranium weaponry to the battlefield. His prescient appeal was ignored. And the gulf war has left in its wake radioactive landscapes that will continue, for untold years, to wage widespread, random warfare.

When Dietz cautioned against integrating depleted uranium into conventional warfare, his alarm was grounded in experience. During the late 1970s, he was employed to monitor depleted-uranium levels outside an Albany, N.Y., factory that produced cannon shells for the Air Force. New York State authorities, on learning that radiation levels near the factory had reached 10 times permissible state standards, shut down the plant. The subsequent cleanup cost more than $100-million.

Dietz underscored the hypocrisy of such stringent domestic regulation when the United States was creating, in the Persian Gulf, an infinitely more toxic environment for its troops and for the region’s inhabitants.

“To protect the health of Americans, we shut down a factory for discharging the equivalent of about two 30-mm. shells into the atmosphere per month,” Dietz says. “How can we justify using a million such shells in Iraq and Kuwait, most of it in only four days of war?”
What accounts for depleted uranium’s sudden surge in military popularity? As a byproduct of nuclear testing and nuclear power, depleted uranium is extremely cheap indeed, better than free. Half a century of nuclear-weapons and nuclear-power production has left the Department of Defense with over a billion pounds of nuclear waste in storage. The department is delighted to offload some of that waste onto arms manufacturers, gratis, in the form of depleted uranium. The result is a seductive kind of alchemy: Weapons manufacturers magically cut their production costs while the Defense Department magically rids itself of a five-alarm waste product that no American wants buried in his backyard. The result is a kind of anti-environmental recycling that converts highly toxic waste into even more deadly explosive forms.

By expanding its depleted-uranium arsenal, America is effectively exporting nuclear waste to foreign soil -- nuclear waste that contains plutonium, for which there are no safe levels. This nuclear waste also contains the uranium isotope 236, which does not exist in nature and has caused concern among epidemiologists.

Foreign war zones may appear far off; and, yes, foreign civilians bear the brunt of the noxious load. However, they do not bear that load alone: American troops also become victims of depleted uranium’s slow-motion slaughter. In 2001 Asaf Durakovic, former chief of nuclear medicine at the Veterans Administration Hospital in Wilmington, Del., published (in the peer-reviewed journal Military Medicine) the results of his research that found depleted uranium and the more radioactive isotope, uranium 236, in the urine and bone tissue of 62 percent of sick gulf-war veterans. Durakovic had taken his samples nine years after the war had ended.

Depleted uranium’s current military popularity threatens children most directly: Children are 10 to 20 times more sensitive than adults to radiation’s cancerous effects. Once depleted uranium passes into the water system, it quickly travels from there into mothers’ milk, gathering concentration as it goes, producing the cancer clusters among children that we have witnessed in the gulf war’s aftermath, particularly around the heavily bombarded Basra region. The result: sharp increases in stillbirths and congenitally malformed infants -- in some areas by more than 250 percent from 1989 to 1999 -- born in and around Basra. A report on gulf-war veterans from Mississippi noted that an abnormally high proportion who have attempted to start families have produced stillborn or malformed infants. Those veterans, disproportionately minority and disproportionately poor, were never asked whether they were ready to make that other ultimate sacrifice -- sacrificing in perpetuity the integrity of their DNA.

The Pentagon loves depleted uranium not just because it’s free, but because the metal’s density gives it a high penetrative capacity. That means that depleted-uranium munitions can be fired from greater distances, ensuring improved “kill range” and thereby purportedly helping keep U.S. troops out of harm’s way. But such reasoning depends on a myopic notion of both “harm’s way” and “kill range”: Both phrases demand an environmental gloss. We need to measure a weapon’s “kill range” not just across battlefield space but across time as well.

When a depleted-uranium warhead strikes a metal target, the depleted uranium spontaneously combests, releasing, in aerosol form, minute glass particles. Ceramic aerosols give off no scent, so troops and civilians alike inhale them unknowingly. Because ceramic aerosols emit radiation in lethal doses, if they enter your lungs, or if you ingest them, or if they seep into a cut, you
are at grave risk of developing life-threatening renal carcinoma, leukemia, lymphomas, or any one of multiple cancers.

Most cancers take 5 to 30 years to incubate. In a classified acknowledgment of depleted uranium’s perils, Britain’s Atomic Energy Authority warned that in the gulf war’s wake, depleted uranium could enter the food chain and cause half a million premature deaths in Iraq and Kuwait. If the gulf war is any measure, we can anticipate an even more disastrous epidemic of belated deaths following the war in Iraq, given the considerably greater volume of depleted-uranium munitions that American and British troops have deployed this time around.

It is timely, in this context, to revisit Elaine Showalter’s notoriously controversial reading of gulf-war syndrome in her 1997 book Hystories: Hysterical Epidemics and Modern Media. Showalter, a literary critic and professor emerita of English at Princeton University, lumped the syndrome in with such phenomena as alien abduction, Satanic ritual abuse, multiple-personality syndrome, and the recovered-memory movement. She classified all of them as hysterias virally transmitted through the media in a climate of premillennial panic. “Hysteria not only survives in the 1990s, it is more contagious than in the past,” she wrote. “Infectious epidemics of hysteria spread by stories circulated through self-help books, articles in newspapers and magazines, TV talk shows and series, films, the Internet, even literary criticism.”

For Showalter, gulf-war syndrome was a hysterical “plot line” contracted from the media, a plot line that gave shape and meaning to the war neuroses of returning veterans. “Patients learn about diseases from the media, unconsciously develop the symptoms, and then attract media attention in an endless cycle,” she wrote. “The human imagination is not infinite, and we are all bombarded by these plot lines every day. Inevitably, we all live out the social stories of our time.”

Gulf-war syndrome, in this view, becomes little more than a feedback loop in which “psychogenic symptoms” generate stories, which in turn generate further self-identifying victims. Gulf-war syndrome is a fin de siecle hysterical script -- like alien abduction and Satanic-ritual-abuse stories, part of, in Showalter’s phrase, a media-transmitted “psychological plague.”

Well, the millennium has come and gone, but the numbers of veterans reporting a spectrum of ailments associated with gulf-war syndrome continues to rise: from Showalter’s 1997 figure of 60,000 (out of 697,000 gulf-war veterans) to some 182,000 today. Is gulf-war syndrome really best treated, as Showalter recommends, with psychotherapy and an education in the history of combat neurosis? She sees the syndrome as a variant of Civil War battle fatigue and World War I shell shock.

In reaching for psychological and historical generalizations, Showalter ignores the fact that each war has a unique chemical and radiological character. As the technologies of war change, so, too, does war’s epidemiological and environmental aftermath. The inhabitants of the Basra region, where depleted-uranium weaponry was used most extensively during the gulf war, share disturbingly similar symptoms to America’s ailing veterans. Are we to believe that the Basrans, too, contracted these symptoms from America’s millennial media?

After NATO planes deployed depleted-uranium-tipped missiles in the Balkan war, returning European troops reported a high incidence of what has come to be known as “peacekeepers’
syndrome” or “Balkan syndrome.” They show strong epidemiological similarities with America’s
gulf-war veterans and the Basrans. All three groups have experienced spikes in leukemia,
lymphomas, and other cancers, kidney disease, and premature mortality.

Showalter’s inner literary critic (perhaps overly in love with the power of textuality and plot
lines) does not treat with sufficient seriousness the role of radiation poisoning in contemporary
depleted-uranium warfare. The United Nations Commission on Human Rights views the matter
differently: It has condemned depleted-uraniummunitions, classifying them -- along with nuclear,
biological, and chemical weapons -- as “weapons of indiscriminate effect.” Thus we face a grim
irony: American and British forces, seeking to cleanse Iraq of elusive weapons of mass destruction,
have blasted Iraqi society with their own fatal, long-lasting WMD’s.

One man’s precision-guided missile is another man’s weapon of indiscriminate destruction. But with depleted uranium, we’re not talking about rogue missiles that accidentally shred a
marketplace or a wedding party. We’re talking about the triumphant, pinpoint strike that doubles as
a chaotic weapon, a weapon that, in time, strikes down innocents who -- whether under some future
tyrranony democracy -- just happen to live downwind.

At least 17 nations have bought depleted-uranium weapons from the United States since
they were first showcased during the gulf war. As these previously unacceptable weapons become
embraced into contemporary warfare, we have an ethical responsibility to redraw the boundary
between the war survivor and the war casualty. People may outlast a given conflict, but if thousands
then die deferred war deaths, what kind of justice is it to call them survivors?

“Smart wars” become wars of ecological folly when we turn soil, air, and water into slow
weapons of mass destruction, wielded unremittingly against ourselves. Armies move on, as do our
memories, but a deeper memory remains lodged in the earth. Despots may be deposed, but
environmental mayhem outlives regime change.

Perhaps the greatest challenge we now face is to reinstate a more expansive vision of what it
means to be secure. What span of time will we allow to define our national security and our security
as a species? At home and across the planet, in wartime and in peace, environmental safeguards
must be reasserted, safeguards on which our health, freedoms, and international standing depend.

The current fixation on meeting terror with high-tech military terror has shrunk our vision
of what constitutes sustainable security. If we improved the fuel efficiency of America’s cars and
light trucks by a mere 2.7 miles per gallon, we would be liberated from the need to import any oil
from Saudi Arabia. Such a bold but feasible move to conserve energy would also help reintegrate a
viable environment into our vision of how to protect America in the long term.

We cannot afford to shrink the threats to our future to the real but reductive threat of
terrorism. If we continue to glorify poisonous weapons of fake precision, belated war deaths will
become increasingly widespread, as will the political consequences of the accompanying blow-back
rage. We will face an unbounded war, as the planet itself metastasizes into a combatant: the ultimate,
toxic hyperpower, a force of random, abiding retribution.