In his book, The Invention of Ecocide: Agent Orange, Vietnam, and the Scientists Who Changed the Way We Think About the Environment, author David Zierler traces the history of herbicides from their origins to their controversial use as weapons during the Vietnam War. In doing so, he elucidates the international debate regarding the military necessity, legality, and morality of using herbicides in war, during a period shaped by the Cold War and an emerging international environmental movement. He argues that the scientists and policymakers who attempted to stop the use of herbicides were successful because of the concurrent reorientation of international security and disillusionment with a uniquely American militant anti-communism.

The author begins by framing his work within the existing scholarship, as well as detailing the emergence of the term “Ecocide.” While understanding this work’s place within the larger academic scholarship may not be important to a general audience, it is notable that this is the first attempt, as the author argues, to link global environmental history with other fields of study (e.g., diplomatic, political, legal and military). What is useful, however, is his explanation of the emergence of the term “Ecocide.” Disturbed by herbicides’ use in Vietnam, a group of scientists argued that destruction of the environment on which a population depends was analogous to genocide. Military leaders and legal scholars rejected their assertions, claiming that the use of chemicals on vegetation was not a violation of the Geneva Convention. As the author illustrates, while it was a propaganda liability, the use of Agent Orange was both effective and within the legal parameters of warfare during Vietnam.

One of the more remarkable portions of the book details the history of herbicides and their use as weaponry. First discovered by Charles Darwin, herbicides emerged as a possible weapon after scientists approached the military during World War II seeking research support for their development. Understanding the tactical implications of herbicides, military planners approved development of them for use in the Pacific Theater, specifically to defoliate islands and rice fields. Although the cessation of the war and horrific memories of the use of gas in World War I prevented field tests, herbicides as weaponry remained a viable tactic in war planning, and reemerged as Operation Ranch Hand in Vietnam. As the author argues adroitly, Operation Ranch Hand fit into the Kennedy Administration’s “Flexible Response” doctrine, which sought to staunch the spread of communism using non-nuclear weapons. It represented one of many technologies used in what was until then the most technological of all wars to date.

The apex of the author’s narrative is the struggle of scientists to bring the ecological and human tragedy of herbicidal warfare to the forefront of domestic and international debates. Scientists faced significant resistance from the Pentagon until 1969, when they attempted to gain access to sprayed areas to assess the damage. After confirming their suspicions, an opportunity to influence policy emerged when the Nixon Administration sought to demonstrate leadership in the international community by resubmitting the Geneva Protocols of 1925 to the Senate for consensus. Scientists argued that the Geneva Protocols prohibited herbicides because of the broad prohibitions regarding the use chemical and biological weapons in war. Conversely, the Pentagon and the Nixon Administration denied the categorization of herbicides as a chemical weapon. In addition, supra-national organizations, concerned about the future use of herbicides and environmental altering weapons (e.g., cloud seeding), provided a venue for a global debate, which culminated in 1972 at the United Nations Environment Programme (UNEP) Conference in Stockholm, Sweden. The ensuing political drama culminated in legislators on the Senate Foreign Relation Committee (SFRC)—who were sympathetic to the scientists’ cause—including herbicides under the Geneva Protocols and disbanding Operation Ranch Hand. The author posits that the UNEP Conference and the findings of the SFRC are significant because they are examples of wider rejection of militant anti-communism. Moreover, this was the first conceptualization of environmental destruction and international security on a trans-national scale.
level. That is to say, the backlash against the Vietnam War and the use of Agent Orange embodied a shifting paradigm, wherein politics and the environment became global issues.

All in all, this is a well-written book that will appeal to a broad audience. By connecting broad themes of politics and science and the use of herbicides in war, plus the rise and fall of Agent Orange, the author illuminates a tumultuous period in American and global history. He skillfully argues that the reaction to Agent Orange was the beginning of a global environmental movement that many consider normal today. Although this book has an academic tone, it is accessible to readers of different fields. From a medical, scientific, political, and historic military perspective, his story offers illuminating conclusions compared to existing literature, while his perspective on environmental history is far-reaching and novel.

The Dust of Empire: The Race for Mastery in the Asian Heartland
Karl E. Meyer
Review by COL Warner “Rocky” Farr, MD

By all accounts, when Charles de Gaulle heard that France’s former colonies in Africa had become independent, the self-important general shrugged dismissively and said, “They are the dust of empire.” Seems like today as empires crumble, the dust lingers, and we get to live in it.

In The Dust of Empire: The Race for Mastery in the Asian Heartland, Karl E. Meyer discusses the past and present of the Central Asian heartland, also known by us as “CENTCOM’s AOR.” He gives details concerning regions and peoples now of urgent concern to us: Afghanistan, Iran, Pakistan; the five Central Asian republics (Tajikistan, Turkmenistan, Uzbekistan, Kyrgyzstan, and Kazakhstan); the Caspian and the Caucasus (Georgia, Armenia, and Azerbaijan); and looming over it all, the long-dominant Russia. This book gives context for America’s Global War on Terrorism and for America’s search for friends and allies in an Islamic world of extremism.

Drawing on his extensive knowledge, Meyer traces the histories of these countries, and introduces a poorly understood region. His treatments are somewhat uneven in depth, so one may not get an education but one gets a flavor of each. Since the late nineteenth century, imperial powers treated the Central Asian heartland that stretches from the Caucasus to the Chinese border like Africa, a continent of colonies for the taking. It was Russia’s overseas colony without being over the seas. With this frame of reference, it is easier to understand the history and the present. Mastery of this colonial landscape required control, direct or indirect, by outside powers. First the Russians as they resisted the Central Asian nomads and ultimately subdued and pacified them, and later the imperial competition began among the British, the Russians, and the Americans in Southwest and Central Asia. Subsequent chapters describe recent history in Iran, Afghanistan, the Caucasus, and the Central Asian republics that once were part of the Soviet Union and the Persians, culminating in the Islamic Revolution in Iran.

Meyer wrote the classic account of the struggle for Central Asia through the ages in his book Tournament of Shadows. This smaller volume is easier to read, but still conveys the need for the world and America to understand the region as a whole, in its historical, cultural, and geopolitical context. He devotes chapters dedicated to each of the states in Central Asia. Although he gives superficial coverage to each country, his history is not in depth enough to satisfy. His mission is to put the country into its current context of understanding in the realm of power. His view is liberal, but gives a broad view that keeps the general interests and threats of all major actors in mind. For those interested in actual analysis of world affairs and not just talking heads, this is a very intelligent, considerate, and interesting overview. Unfortunately, his thesis is that U.S. dominance is bad. Using historical examples of American, British, and Russian imperialism, he makes this point repeatedly. However, he never explains why the Central Asian republics are susceptible to this kind of imperialism.

Despite structural flaws, I recommend this book highly to anyone interested in foreign policy or in recent Middle Eastern/Central Asian history. It is a short, readable book, and it offers a twofer argument: one is on the dangers of imperialism and one is on the history and future of Central Asia. Meyer has a lot of insight. His writing is clear and well informed; events are detailed and contextualized. While the discussion of issues is not deep, this can be an eye-opening introduction for those not already knowledgeable about the region.