MULTIMEDIA REVIEWS

BOOK REVIEWS

Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies* (New York & London: W.W. Norton & Company, 1997).

Jared Diamond's Pulitzer Prize winning book, *Guns, Germs, and Steel: The Fates of Human Societies*, will continue to provoke debate for years to come. It has been reviewed incessantly since its publication in 1997 in many scholarly journals, as the subject of an AHA panel, and as recent fodder for participants on the online discussion list-serve H-World. The persistence of discussion about this book demonstrates its greatest strength: its very ability to generate academic dialogue. Again it has taken a non- historian (this time a physiologist and evolutionary biologist) to engage the historical profession conceptually. *Guns, Germs, and Steel* and other recent publications have forced historians to reconsider the role of geography, despite resistance to arguments bearing geographical causation for fear of invoking 'environmental determinism.'[1] For its conceptual emphasis on geography, and its spirit in seeking ultimate causes, it is relevant to Canadian, American, European, economic, world, and yes, military historians.

Military historians have long recognized the importance of geography. The particulars of a battle cannot be appreciated until one has 'walked the terrain.' However, this is not the type of geography that Diamond is concerned with (nor is it necessarily the only conceptualization of geography made by militarists). Diamond would consider this notion of geography an example of proximate causes. He seeks, however, to push back the chain of historical causation as far as possible in his quest for ultimate causes. Diamond does not dismiss the use of studying proximate causes, but his conceptualization of causation is far more grand.

His quest was initially fueled by a question posed to him in 1972 by a New Guinean political leader. "Why is it that you white people developed so much cargo…, but we black people had so little cargo of our own?" (14) ('Cargo' refers to western manufactured goods such as axes, matches and medicine.) Diamond reformulated this question to himself as: "Why did wealth and power become distributed as they now are, rather than in some other way?" (15) His answer to this is not found in variables such as institutions, culture, technology or religion (though he does not dismiss these outright as historical factors worthy of study), but in one ultimate cause: geography. For his reductionism Diamond has been labeled as an environmental determinist, though he himself anticipated this and attempted to distance himself from it by claiming these accusations are misplaced. He argues that culture, creativity, motives, and charismatic individuals do influence history in the realm of proximate causes, however, there must be an inexorable explanation for why the world is shaped by lopsided outcomes, beyond the immediate reasons why a battle was won. The explanation he offers is rooted in geography, in opposition to what he presents as the default position of biological racism. Indeed, Diamond's argument is far from a crude, simplistic determinist model based on the fertility and mineral content of soil. Instead he argues that food production is based on

the interaction, and opportunity for interaction, between human populations and available flora and fauna species.

His argument is basically that western Eurasian populations were more likely to 'develop more cargo' for three main reasons. First, based upon continental differences, they had available to them more domesticable plant and animal species. Peoples all over the world, according to Diamond, possessed the same abilities to manipulate nature, however they did not all have access to the same resources. Western Eurasia possessed far more wild plants and animals better disposed to domestication than anywhere else in the world. For example, he argues that domesticable animals are all domesticable in the same way, but recalcitrant animals are all different. Even if there were large numbers of wild animals available for domestication (which there were not in pre-Columbian America for example), they still had to satisfy every condition in order to be domesticated: ability to breed in captivity, safe for children, good disposition. If an animal did not meet even one of these conditions, it was not domesticated. So, while the giraffes and zebras of Africa and the kangaroo of Australia did not meet these conditions, Western Eurasia contained the wild ancestors of cows, sheep, horses, and chickens. Once plants and animals were being domesticated, food production increased, populations increased, and people were able to apply themselves to non-agricultural pursuits, such as politics and technological development. Some of these pursuits further increased productivity, which in turn continued the cycle of growth and development. Furthermore, population growth allowed for military advantages in pure numbers, even before technological gains were achieved. Later, these populations would enjoy military advantages based on advanced weaponry, superior strategy, and the use of domesticated animals in battle. "Economically complex, socially stratified, politically centralized societies … were based on food production."(406) The populations that domesticated animals were also the ones that developed immunities to the germs caused by the proximity of these animals. Germs were to play a decisive role in the 'conquering' of other peoples after 1500.

The second reason is based on rates of diffusion and migration. Most populations did not develop agricultural skills, technological advances, or political institutions on their own, but acquired them from other populations. Those that were initially lacking an advantage either acquired it, or were replaced by those who did. Diamond considers migration and diffusion within continents and between continents. He argues that diffusion was possible with greater ease in Eurasia because of its east-west major axis, and its relatively modest ecological and geographical barriers. Domestication and migration of crops depends largely on climate and hence latitude. The entirety of Eurasia is at similar latitudes allowing for a diffusion of flora and fauna, and also for the application of similar cultivation techniques. Whereas on the other continents, which are oriented north-south, this diffusion of domesticable crops and similar cultivation techniques is more difficult due to the wide range in latitudes, which affects growing seasons. Diffusion between continents was also difficult in certain instances. The Americas and Australia were isolated from Eurasia by large bodies of water until the sixteenth century. The third reason, already alluded to, is the differences in population size. A larger population means more potential inventors, more competing societies, more innovations available to adopt, and more pressure to adopt in order to compete.

Diamond has framed the book with a military example, introduced in Chapter Three, which he constantly returns to as an endpoint for comparison between a Western Eurasian population and a South American population. Diamond narrates the encounter between Spanish conquistadors under Francisco Pizarro and the armies of the Inca Emperor Atahuallpa in 1532 at Cajamarca. 80,000 Inca soldiers, a people most advanced in the new world in terms of agriculture, government, domesticated animals, and irrigation, were defeated handily by 170 Spaniards, a population that inherited centuries of technology, knowledge, domesticated animals and germs. They possessed distinct advantages that for the most part are not disputed: guns, swords, germs, horses, and strategy. These explain the victory; they are the proximate causes, but what allowed them to develop these advantages are the geographical ultimate causes that Diamond fleshes out in the remainder of the study.

He brings a myriad of evidence to the table, ranging from genetics, molecular biology, and biogeography, to behavioural ecology and epidemiology to linguistics, archaeology and studies of technology, writing and political organization. The marshalling of this type of evidence is astounding. Despite the rational simplicity of his argument the book is problematic in some ways. The default biological/racist position that Diamond sets his geographical explanation against is something of a straw man. Though it is true that this view may have persisted in the past and that no convincing explanation (until now) had been offered, this reviewer finds it difficult to believe that this remains the default position. Chapter fourteen on the emergence of the centralized state relies too heavily on the notion of cleptocracy as the sole motivating factor behind state-backed explorers, armies, and colonists engaged in the broad pattern of food producers overwhelming food collectors. Diamond ignores other motivations such as ambition, nationalism, and self-interest. These critiques, like all others of this work, attack the work at the micro level, and fail to problematize the argument at the macro level, which is where the study is most useful.

This book belongs on the shelf of every military historian for the same reason that it belongs on the shelf of every historian in general. The fluidity of the language makes it accessible to undergraduates, while the simple sophistication of the argument should engage the most skeptical academic. The evidence marshaled to support the macro level thesis is compelling, if not convincing. Its geographic reductionism, though out of date in academia, and for that reason not likely to win converts, makes logical sense. Jared Diamond has returned to the agenda large questions and hypotheses. He set out to write a book of ultimate causes, not proximate causes, and has provided just that. If he has failed to convince, the quest for a better explanation could only have taken place once the profession was engaged.

James Warren

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[1] For example see Martin W. Lewis and Karen Wigen, *The Myth of Continents: A Critique of Metageography*, (Berkeley: University of California Press, 1997).