Guns, Germs, and Steel
Jared Diamond

Diamond attempts to answer the question: Why did people in certain regions advance at a more rapid pace than those in other regions, to arrive at the distribution of power and wealth that we have today? (Europe, East Asia, and North America have far more wealth and power than Africa, South America, and parts of southern Asia). The title Guns, Germs, and Steel is derived from three of the factors that allow more developed societies to conquer less developed societies.

His basic thesis is that history was shaped predominantly by environmental factors. Successful societies were born from regions where the environment was well-suited for agriculture (fertile crescent, and parts of southeast Asia). Agriculture led to more sedentary societies and animal domestication for food, tools, and transportation. Surpluses of food promoted larger, denser, and more diverse populations that brought about the outbreak of diseases. With their basic needs accounted for, individuals had the time and energy to specialize and develop various technologies (ships, steel, guns, etc.) and political organization.

The success of certain societies appears to be driven by luck. Societies fortunate enough to start in the right environment inherently prospered and advanced at a more rapid rate than those in other regions of the world. Some societies started out in regions where agriculture could flourish, but never developed beyond basic farming due to other factors (New Guinea)

Chapter 2: A Natural Experiment of History
Polynesian societies provide a small-scale example of how people from a similar background can develop at vastly different rates and in vastly different ways given different environments. Almost all Polynesian societies can trace their roots back to early settlers of the Bismarck Archipelago who then spread to various Pacific islands over the course of several millennia.

Chapter 3: Collision at Cajamarca
Example: Lopsided outcomes in human history, where one society dominates another, demonstrate a disparity in human development across cultures from different areas of the globe (Pizarro/Spanish conquest of Atahuallpa/Incas at the battle of Cajamarca--168 Spanish defeated a native army 500x larger)

Biological and intellectual differences across people from these different regions don't provide a valid explanation (p. 18)

Chapter 4: Farmer Power
Environments suitable for food production allowed certain societies to create surpluses of food through farming and herding, thus giving them a head-start for developing technologies that they could use to conquer other societies. Farming and herding led to: denser populations which

supports increased specialization of jobs/occupations (since everyone doesn't have to be hunting or gathering), increased animal domestication (which could be eaten directly or used as tools for farming and transportation), ability to feed large armies

Chapter 5: History's Haves and Have-Nots
Not all societies with an environment suitable for farming acquired the ability (native americans in California and other Pacific states, the Argentine pampas, the cape region of South Africa, and southwestern and southeastern Australia). And people from only a few areas of the world developed food production independently (without importing the species or methods from other regions).

Chapter 6: To Farm or Not To Farm
Diamond argues that food production evolved as a byproduct of decisions made without consideration for their consequences. Competing interests caused the domestication of plant and animals to evolve over time, it didn't just appear on a given date. One consideration is the amount of time people have to spend obtaining calories. They seek to maximize their return on calories while minimizing their risk of starving. But there are tradeoffs with other aspects of obtaining food, such as hunting for the sake of prestige rather than maximizing calories collected.

Chapter 7: How to Make An Almond
Plant domestication relied on humans identifying and selecting wild species with desirable characteristics, then cultivating and modifying those traits to improve their usefulness. Most of Earth's plants are not suitable for human consumption.

Chapter 8: Apples or Indians
The domestication of plants flourished in areas like the fertile crescent, but did not take hold in other fertile areas (like South Africa, California, and parts of South America). There are two possible explanations: 1) the availability of crops with desirable traits, or 2) the willingness and capability of the people in those areas to domesticate plants.

It is not likely that the willingness or capability of people hampered the development of farming and domestication. Diamond argues that there are many distinctive features of the fertile crescent that make it more likely for domestication to occur there than other places. Its unique climate, environment (more extreme seasons that promote a variety of vegetation), shear size (it is one of the largest Mediterranean climate zones in the world), which foster a wide variety of wild plants and animals collectively offer a more convincing explanation as to why domestication took hold in this region.

Local constraints, like a lack of biodiversity among edible species, may have slowed or prevented domestication efforts in other fertile zones.

Chapter 9: Zebras, Unhappy Marriages, and the Anna Karenina Principle

Anna Karenina Principle: “We tend to seek easy, single-factor explanations of success. For most important things, though, success actually requires avoiding many separate possible causes of failure.”

The ability to domesticate wild animals was dependent on an animal species exhibiting a number of desirable factors. The absence of any single factor dooms the domestication effort. The issues that prevent the domestication of certain animals:

- Growth rate
- Nasty disposition (some animals are dangerous to humans)
- Problems with captive breeding (some animals don’t like to be watched when breeding)
- Social structure
- Tendency to panic

Chapter 10: Spacious Skies and Tilted Axes

Natural topographic barriers can disrupt the spread of agriculture and the domestication of animals (mountains, deserts, etc.). These barriers also inhibit the spread and adoption of technologies like the wheel or writing.

Chapter 11: Lethal Gift of Livestock

Food production leads to germs, literacy, technology, and centralized government

Harmful germs evolved from those that afflict other animals and eventually spread to humans. Food production brought humans closer to animals (livestock) and increased population densities, which promoted the development and spread of diseases from one human to another.

Chapter 12: Blueprints and Borrowed Letters

The earliest writing systems had 2 prerequisites: 1) societies would find writing useful, and 2) a society had the ability to support scribes (necessary food & provisions). Thus, the earliest forms of writing developed in the fertile crescent, Mexico, and China--the same locations where the earliest forms of agriculture flourished. The earliest forms of writing served the needs of political institutions--not as a form of communication for the masses, but for those in the ruling class to maintain power over the illiterate. Writing, like agriculture, would eventually spread and evolved to other societies.

Chapter 13: Necessity’s Mother

The potential to develop advanced technologies is predicated on agriculture, as it leads to a sedentary society where people are not limited to tools they must carry around. It also frees up time and resources to be used to develop new inventions. Agriculture and a more sedentary society lead to greater population densities, which increases the number of people available to develop new inventions. These new technologies develops cumulatively, rather than in isolated acts, and often become most useful after they have been developed (most inventions find their value in ways the inventor never imagined). Most technologies are not invented locally but are,

instead, borrowed from other societies--the diffusion of a given technology can be more important than the technology itself.

Chapter 14: From Egalitarianism to Kleptocracy

Large societies cannot function with band organization. Instead, they are complex kleptocracies because:

1. Centralized governments help resolve conflict between unrelated strangers. In close knit bands, relatives can mediate between two quarreling parties. With larger groups, people are less related, so no one mediates. The fighting that results can lead to mayhem that destroys the society.
2. The possibility of communal decision making declines with increasing population size. A centralized structure is required to make effective societal decisions.
3. Large societies need a central organization that can facilitate a redistributive economy (transferring excess goods from one individual to another individual with deficits)
4. Larger groups of people require organized societies to facilitate the spatial requirements needed by the group (for food, housing, etc.)

The amalgamation of smaller societies into larger ones occurs under two circumstances: by merger under the threat of external force, or by actual conquest.

Chapter 15: Yali's People

The foundation for modern-day Australian society was largely imported by white Europeans. The native Aborigines made little societal progress (they remained hunter-gatherers) over the course of 40,000+ years because Australia's environment wasn't very supportive of agriculture (and remains so to this day).

By comparison, New Guinea (once attached to the major Australian continent) was able to develop basic agriculture, but did not advance much further. The New Guinea environment did little to promote the domestication of livestock, which limited further advancement of these societies.

Criticisms

https://mises.org/library/diamond-fallacy

"Diamond's work falls within the broad class of theories purporting to detect universal historical laws, and are therefore subject to the same criticisms that Collingwood, Mises, and Oakeshott directed against his intellectual predecessors. His attempt to discern typical patterns in humanity's past is not, in and of itself, absurd or doomed to failure. The main problem with his enterprise is that he seemingly is unaware of what sort of investigation creates the truly historical past. As a result, he proposes substituting his own "geographical past" for the genuinely historical past."