Detrimental Flaws Of Guns, Germs, And Steel And The Theory Of Environmental Determinism

It is human nature to want to explain the unexplainable, to understand how and why things happen. Theories ranging from topics of evolution to dark matter to cognitive behavior look to explain how aspects of the world function. Similarly, geographers look to understand exactly how the world came to be; how does the environment and society interact and influence each other to shape the Earth. In the famous piece, “Guns, Germs, and Steel”, author Jared Diamond (1999) describes how the environment in which a society forms determines exactly what kind of culture will emerge. His work, using the theory of environmental determinism, asserts that nature explicitly defines the culture that follows. Although environmental determinism and Diamond's thesis both were widely accepted and famous at first, many moden day geographers see numerous important flaws with not only Diamond's piece but also the theory itself, that questions the validity of the theory. Environmental determinism has roots of injustice that lead to the justification of inequalities and furthermore does not fully explain the relationship between environments and societies. Although highly influential as a steppingstone for geographic theory, environmental determinism is now seen as a theory of the past. When looking at the theory's beliefs, incomplete explanations reinforced by contradictory examples are noticeable, and thus question the legitimacy of the theory in modern geography.

To understand the critiques of how environmental determinism does not fully explain the environmental and societal relationship, it is important to recognize the theory's roots and core beliefs. The theory of environmental determinism dates to classical and medieval periods and later found much focus in the later twentieth century. The basic thesis started with the idea that the physical environment was the independent variable that shapes the dependent variable of human nature. Jared Diamond's Guns, Germs, and Steel (1999) resurrected focus on this theory. Unlike alternative theories that follow Diamond’s work, like possibilism or cultural ecology which identify other possible nature and cultural interactions, environmental determinism has an extremely strict viewpoint, leaving no room for other explanations but the deterministic theory. Diamond uses the Polynesian society in his 'natural experiment' subjects to show the effects of environmental determinism in a case study. He explains that different Polynesian populations, with the same background in cultures spread out through the region’s islands, and after some time the 'Polynesian island societies differed greatly in their economic specialization, social complexity, political organization, and material products, related to differences in population size and density, related in turn to differences in land area, fragmentation, and isolation and in opportunities for subsistence and for intensifying food production' but all those differences developed “as environmentally related variations on a single ancestral society' (Diamond, 1999). Diamond argues that his case study is one of the multiple examples that demonstrates how environmental diversification directly predicts in the human society that emerges. To see the faults within Diamond's piece and the theory at the question, it is crucial to first look closely at the idea itself, before diving into the negative aspects and possible incomplete ideas that many modern geographers find.

With an understanding of an overview of Diamond's famous piece and the theory of environmental determinism, questions arise as to the controversial roots of the theory and the missing elements of both Diamond's natural experiment and the theory. Many modern

geographers see the theory containing troubling roots; it is a theory that many believe is used to justify racism, colonialism, and imperialism. In Stephen Frenkel's “Geography, Empire, and Environmental Determinism”, the author describes the U.S.'s role in Panama’s route to industrialization and the influence of environmental determinism played into the development. Frenkel describes environmental determinism as a 'plausible interpretation for American precise and actions…as a discourse that served to legitimate imperialism and racism' (Frenkel, 1992). Many modem geographers see the connections to racism and colonialism as having no place in the modern world. Beyond environmental determinisms' unpleasant roots, many see faults in Diamond’s argument, citing his lack of attention to 'human consciousness, desire, political power, and the formation of culture as determinative in the distribution of wealth and power' (Judkins, Smith, & Keys, 2008). This missing piece causes many geographers to look for alternative theories that provide a more complete and updated explanation. Many see environmental determinism as lacking any consideration of the influences of human thought or culture, and the powerful effects society can have on an environment. Although the theory was highly influential and well regarded in the past, “decades of research have demonstrated that human-environment relations are complex of intertwining influences and limitations that resist single-factor causal correlations' (Judkins et al., 2008). The combination of the theory's reproable past use coupled with the disregard for human effects culminate in many viewing the theory as an idea of the past, but not the present.

The theory of environmental determinism’s lacking validity is evident with many modern examples of countries thriving in environments determinists would deem to result in less advanced and growing societies. Like Diamond's views in his piece, author Ricardo Hausmann's piece “Prisoners of Geography” echoes the ideas of Diamond, explaining that the environment in which a society exists will determine the economy of that society. Both authors' strong opinions come into question when taking a closer look at some potential counterexamples like India, a country with a skyrocketing population and development. India's economy is growing at an extreme pace, quickly becoming one of the world's fastest-growing economies in the world ('India,' 2019), but India's extreme economic growth goes against Diamond’s and Hausmann's essential ideas, as it is a country on the equator with massive desert and mountain areas that should have resulted in a struggling country. The extreme climate and location of India would suggest a community far less advanced based on the two authors' theses about environmental determinism, yet India is quite the opposite, fast becoming a major power on the world stage. Many other countries seem to contradict Diamond's thesis, not just India, and put into question how his thesis applies to the modern world. Additionally, alternate theories such as possibilism and cultural ecology have emerged since Diamond's piece, theories that provide more modem outlooks on the environment-society relationship which are used more frequently. Countries around the world prove that communities can not only thrive in difficult environments, but also adapt and change in a changing environment. There are many ways societies can take shape, not just one possible outcome but multiple. With a growing world and a dynamic climate, the world has seen 'individuals and communities undertake adaptive strategies that involve the mobilization of assets, networks, and social capital both to anticipate and to react to potential disasters' (Adger, Hughes, Carpenter, & Rockstrom, 2005), which is a view that goes against Diamond yet describes the modern reactions to the environment. With climate change's effect becoming increasingly extreme, humans have and will continue to adapt and change to continue surviving. According to Diamond, the environment shapes the society, the environment does not change based on society, and society does not adapt to the environment, but many see problems with that statement. Humans have proven time and time again that human thought plays an influential

role in the relationship with nature, and Diamond's view fails to account for human development and growth occurring in the world.

Diamond's “Guns, Germs, and Steel” remains a crucial building block to modern geographers, although most dismiss the theory of environmental determinism as an idea in the past. Although the theory seems outdated and unused, it is important to recognize the role it has had on shaping modern theories. After looking at the theory's controversial history and strict beliefs, the lack of attention to human thought and behavior as well as contradicting examples, the theory shows its many flaws that cause geographers to look to more modern ideas. Geographers have long looked at how to explain the human-environment relationship, with many theories and ideas to try to explain it. To ignore the theory all together would be incorrect, as it has provided one of the crucial building blocks to modern-day ideas, but to still deem it as valid is outdated. It is human nature to want to explain everything in the world around us. Humans have been doing just that since the very beginning of time. It is tempting to try to understand a subject with one all-encompassing theory, but many times there are multiple factors and theories that all explain one thing. With many things, there is not just one solution. It often takes a mix of ideas coming together to create a more perfect explanation.

References

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