

"THE TRAGEDY OF THE COMMONS" BY GARRETT HARDIN, 1968

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Summary

Garrett Hardin's now famous polemic, "The Tragedy of the Commons," has been tremendously influential in the more than thirty years since its original publication (in 1968). His simple but powerful parable of herdsmen sharing a common pasture has sparked debate in a wide range of disciplines and given birth to an extensive research effort conducted by numerous scholars. The essence of Hardin's parable of tragedy is that herdsmen sharing a common pasture are led, by the inexorable logic of individually rational decisions for optimizing personal gain, to ultimately overstock their herds and destroy their shared resource. Although Hardin's argument was originally made with the problem of human population growth in mind, it has become widely accepted as a general theoretical framework to explain diverse cases of resource over-exploitation, and has had a considerable influence on resource policy around the world. Hardin's thesis has also met with sharp criticism, and it is in the context of such critique that most contemporary research on the problem of managing "common property" or "common pool" resources has taken place. Critics have argued that both resource systems and property regimes are more diverse and complex than Hardin's thesis allows. They have also demonstrated that common property regimes have a history of success, especially

in local and/or traditional resource management contexts. Despite the veracity of these critiques, Hardin's thesis remains relevant today, particularly as pressures on resources begin to be felt at a global level. The political and moral questions raised by his parable of herdsmen sharing a common pasture must today be confronted in the context of the possible demise of global commons, such as the oceans and the atmosphere.

1. Introduction

More than thirty years have passed since the first publication of Garrett Hardin's now famous polemic, "The Tragedy of the Commons." The argument that Hardin originally intended as an ecologist's interpretation of the problem of unfettered human population growth has subsequently become widely accepted as a general theoretical framework to explain diverse cases of resource over-exploitation. Hardin's simple parable of the inexorable logic that leads the users of a common pasture to overstock their herds—and so destroy the commons—has apparent parallels in the degradation of a wide range of common goods such as fisheries, grasslands, forests, water resources, and the atmosphere. In fact, the "tragedy of the commons" is often invoked as a catchall explanation for the origins of the ecological crisis that currently confronts the human species. And, for those who accept the veracity of Hardin's pessimistic diagnosis, the only solution to the crisis is seen to lie in the elimination of the commons—either through the institution of private property or by way of a strong, even authoritarian state.

Hardin was not the first to delineate the basic parameters of the commons problem. In his original essay he cites as his inspiration the little known work of William Forster Lloyd, published in 1833. In a later article he credits the original recognition of the problem to Aristotle. In fact, Hardin was also not the first in his era to revive the problem of common resources. This credit goes to fisheries economists Gordon and Scott, who both wrote on the subject in the mid 1950s. Hardin's account, however, came at a time when concerns over the state of the earth were on the rise and governments were increasingly being called upon to take a more active role in environmental protection. In this context Hardin's thesis became widely accepted, exerting a significant influence on resource management policy, becoming required reading for a generation of students in numerous disciplines, spawning numerous debates and stimulating extensive research efforts.

2. The Tragedy in Review

2.1. The Population Problem

Hardin's article is primarily focused on the problem of world population growth, and a largely forgotten contribution of his argument is its still relevant criticism of technologically based solutions to this challenge. He argues that runaway population growth belongs to a set of problems for which technical solutions do not exist. Rather, such problems make it necessary to re-examine fundamental principles of morality, and to confront tough political questions about what is just versus what is necessary. In this respect, Hardin's polemic is a powerful attack against both the pervasive faith in technological solutions, and the associated cornucopian view that the resources of the

earth are essentially limitless. In place of this worldview Hardin posits one which recognizes not only the fact of the earth’s ultimate finitude, but also the reality of scarcity which confronts so many of the planet’s inhabitants.

The political issues which Hardin raises revolve around the question, “what shall we maximize?” He claims that confronting the population question forces us to abandon Bentham’s goal of “the greatest good for the greatest number.” This is because it is neither desirable nor possible to maximize these two variables (greatest good and greatest number) at the same time. Maximizing population necessarily means decreasing to a bare minimum the “good” available to each individual. Hence, the optimum population, which will maximize the good available to each individual, must be less than the maximum possible population. Hardin is quick to admit that determining what is “good,” and what might be an optimum population for the realization of that good, are difficult tasks. Nevertheless, he is convinced that positive action based upon rational analysis of these two questions is necessary if humanity is to avert a population disaster.

2.2. The Inexorable Logic of Tragedy

Engaging in positive action based upon rational analysis is Hardin’s political formula for a resolution of the population problem. Therefore, though he does not seek a *technical* answer to the challenge, he is certainly a proponent of rational *scientific* management. This approach forms the basis for his critique of liberalism, with its doctrines of individual rights and *laissez-faire* economics. Hardin stages his argument as a direct attack on Adam Smith’s classic thesis that individuals in pursuit of their own gain are led by the invisible hand of the market to simultaneously advance the general public interest. Based upon the need for rational scientific management, Hardin proposes to examine the veracity of Smith’s assumption, and to decide if the liberal freedoms it anchors are consistent with or antagonistic to the requirements of achieving an optimum population.

It is in this context, as direct evidence for his case against liberal freedoms, that Hardin recounts his now famous parable of herdsmen who share a common pasture. This story is a tragedy in the dramatic sense, its conclusion predetermined by the “remorseless working” of the logic which is established as its premise. In this common pasture the herdsmen approach their shared resource as “Smithian” individuals, operating according to a basic rationality of personal gain, calculated in terms of marginal utility. Each herdsman sees that the benefits from each animal that he adds to his herd accrue to him, while the losses from increased pressure on the pasture are distributed amongst all users. Hence, he rationally concludes that adding as many animals as possible is his best strategy for economic gain. Of course, the pasture can support only a limited number of animals, and it is ultimately destroyed. The tragedy results from the systematic and relentless progression toward ruin which is written into the logic of a political order that upholds freedom in the commons. This is a political order that Hardin sees at work in the range lands of the American West, in the world’s oceans, in America’s national parks, and generally in relation to the earth’s air and water. Of course, this political order is also what Hardin sees as the root of the population crisis, the freedom to breed being analogous to the freedom to add animals to a herd.

2.3. Preventing the Tragedy: Mutual Coercion, Mutually Agreed Upon

Given the stark nature of the tragedy as Hardin portrays it, there are a limited number of solutions that he can offer. He suggests that private property constitutes part of the solution, though his position is by no means a *carte blanche* for the total privatization of all public goods. He recognizes, for instance, that the institution of private property often makes the production of pollution economically rational. Furthermore, he suggests that certain commons, such as the earth’s air and water, cannot be privatized and must be protected in some other way. The tool which he finds at hand to prevent tragedy in such commons—and population is included here—is administrative law.

Hardin is perfectly aware that his argument for the regulation of population by administrative law is bound to be repugnant to most people, offending the popular morality—enshrined, as he observes, in the Universal Declaration of Human Rights—which understands the right of family planning to lie with the family. He argues, however, that morality is (or at least should be) system sensitive. In his words, “the morality of an act is a function of the state of the system at the time it is performed.” Hence, in the context of a global population boom, the freedom to breed is “intolerable.” In this circumstance, and others like it, the only solution is for society to adopt “mutual coercion, mutually agreed upon.”

Anticipating objections to his hard-line position by those who would favor population control through the use of education and appeals to conscience, Hardin argues that both of these softer approaches are doomed to failure. Education is effective, but against the “natural tendency to do the wrong thing” it needs constant renewal, and hence is ultimately a fragile basis for avoiding tragedy. Conscience, on the other hand, is simply a red herring—being both “pathogenic” and self-eliminating. In the short term, the pathogenic effects of conscience come in the form of a double bind, by which the individual is condemned publicly for not being responsible or ridiculed privately for being so simple as to behave altruistically while others continue to look-out for their personal gain. In the long term, conscience in the act of breeding leads responsible individuals to have fewer children (who also have fewer children), while irresponsible individuals breed freely (and pass their irresponsibility on to their offspring), until the former are simply overwhelmed by the latter.

Having demonstrated the necessity of mutual coercion, Hardin attempts to demonstrate that it is not such a hard-line position after all. He uses the word “coercion” to refer to any social arrangement which produces responsibility—arrangements such as laws against bank robbing and the mandatory payment of taxes. Laws against robbing banks are a case of *prohibition*; what Hardin is proposing is something more like incentive or disincentive taxation—a coercive device that legislates *temperance* through persuasion. Nevertheless, his proposal to limit the freedom to breed may still be perceived as unjust. Hardin replies that the alternative to the commons need not be perfectly just to be preferable—after all, “injustice is preferable to total ruin.” Posed in this manner, as a choice between mutual coercion or total ruin, Hardin’s argument appeals to the force of necessity. Personal liberties have no meaning in a ruined world; hence, the practice of freedom *necessarily* depends upon the employment of coercion to prevent the tragedy of the commons.

3. Research and Policy: Hardin's Legacy

3.1. Proponents of Hardin's Logic

During the first decade following the publication of Hardin's article it was favorably received. Indeed, in much of the scientific, policy and environmental communities, Hardin's thesis became widely accepted—though rarely in specific application to problems of population. Rather than being remembered for its prescription to limit the freedom to breed, the portion of Hardin's treatise which is constantly invoked is the simple parable of the herdsmen on a common pasture. Whether or not Hardin was correct to include population in the set of problems defined by the tragic logic of the commons, this logic was widely accepted as the best theoretical framework for understanding a whole range of other resource management issues. This acceptance led to generally pessimistic conclusions about the possibility that users of resources might be capable of self-regulation. Trapped by a logic beyond their control, individuals could only be effectively regulated by external authority. In a flurry of activity, the academic community set to work verifying and elaborating upon Hardin's thesis. Mathematicians demonstrated the validity of the tragic logic of the commons in models and formulas. Economists documented the fact that unchecked competition for resources leads to rent dissipation, resulting in economic overexploitation—or declining levels of productivity—even before ecological overexploitation becomes an issue. Political theorists embraced Hardin's argument and developed it further, many making efforts to tie it to the existing theoretical canon—particularly to the work of seventeenth century thinker, Thomas Hobbes. Hobbes had argued that the constant war of all against all in the "state of nature" leads men to seek security by giving up their freedoms to a Leviathan. The parallels to Hardin's argument are clear, and this congruency was used to strengthen the "hard line" aspects of Hardin's thesis and argue the need for a strong, even authoritarian state. Hardin was also drawn into this hardening of his position, using Hobbesian language in subsequent writing on the topic.

The policy community also enthusiastically embraced Hardin's ideas. Following Hardin's prescriptions for avoiding tragedy, resources around the world that were once held in common were increasingly privatized or placed under strong centralized management. Fisheries became progressively more regulated by the principles of economic efficiency and "scientific management." Pastoralists were forced to leave behind nomadic lifestyles and settle on individual ranches. Forests were nationalized and local irrigation systems replaced by state-planned hydraulic infrastructure. The list of examples is long, and the specific ways in which Hardinesque policy was implemented differ significantly from place to place. Variations aside, Hardin's impact on resource policy has been profound. Changing attitudes about the state, beginning in the early 1980s, have engendered a turning away from centralized management, but Hardin's parable has proven resilient. If mutual coercion is not to be the chosen solution for the tragedy of the commons, it cannot be forgotten that his article also provides a conditional argument for privatization. Recent efforts to extend the discipline of the market to influence individual decisions that affect common resources such as the atmosphere --using such tools as "green" taxes or emissions trading-- can also be considered offspring of Hardin's thesis.

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Biographical Sketch

Alex Latta is a Doctoral Candidate in Political Science at York University, Toronto, Canada. He holds a B.Sc. (Honours) in Geography and Political Science, attained at the University of Victoria, and an M.A. in Political Science from York University. His research focus is environmental politics and political theory, with an interdisciplinary approach combining ideas and methodologies from Political Science, Geography, and Sociology. Current research is focused on the relationship between the city and nature, both within the discourses of environmental politics and in the material context of contemporary socio-ecological relationships. Other interests include biotechnology, Foucauldian theories of government, and social movements.