

***ON SOCIETAL ASCENDANCE AND COLLAPSE: AN AUSTRIAN  
CHALLENGE TO JARED DIAMOND'S EXPLICATIONS***

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## **ABSTRACT**

In his 1997 book, *Guns, Germs and Steel*, Jared Diamond seeks to explain the ascendancy and triumphs of certain societies -- certain European societies, as examples. For Diamond, geographical and environmental differences are a principal determinant of societal destiny. In his 2005 book, *Collapse*, Diamond attributes the demise of societies such as Easter Island principally to environmental degradation and destruction. Diamond uses Easter Island as a metaphor in warning of global collapse. For Diamond, societies are entities that act independent of the actions of individuals. He sees societal ascent or collapse as being contingent upon the extent to which societies embrace a centralized structure and management. But in so doing, he ignores institutions critical to peaceful, prosperous social interaction and the formation of society: (1) private property rights and (2) human action leading to division of labor and emergence of cooperative monetary exchange. With these institutions, individuals are able to avoid conflict and rationally reckon both scarcity and capital. Without these institutions, societies such as the Soviet Union and Easter Island are seen to have a common fate in that scarcity implies conflict, chaos, 'waste' and eventual collapse.

# ***ON SOCIETAL ASCENDANCE AND COLLAPSE: AN AUSTRIAN CHALLENGE TO JARED DIAMOND'S EXPLICATIONS***

**John Brätland<sup>1</sup>**

## **I. INTRODUCTION**

In *Guns, Germs and Steel* (1997)<sup>2</sup> and *Collapse* (2005),<sup>3</sup> Jared Diamond argues that geography and environment are the 'ultimate causes' behind the fates of societies. Jared Diamond, a Harvard trained Ph.D. physiologist and faculty member of the University of California Medical School, demonstrates a scope of knowledge well beyond his original specialization. These books, both of which have been on 'best-seller lists,' can be described as embracing the fields of environmental geography and geographical anthropology. The 1997 book explores reasons behind the ascendancy of certain cultures and their 'dominance' over competing societies. He has convinced himself that the broad pattern of history can be discerned and explained within the context of geographical and environmental considerations. In his 2005 book, Diamond continues to focus on geographical and environmental considerations and seeks demonstrate the role of 'ecocide' (environmental destruction) in societal collapse. While Diamond is clearly learned, both books reflect ignorance of issues that are central to his subjects. His neglect of these factors leads him to untenable conclusions on the nature of society and the prospects for global survival.

This paper seeks to examine Jared Diamond's success in explaining the broad pattern of history within the context of geographical and environmental considerations. While Diamond addresses many disciplines in both his 1997 and 2005 books,<sup>4</sup> this paper will not attempt to comment on all of his ideas regarding the conquest and domination of one society by another or the role of germs and diseases in the fate of societies. This paper focuses on Diamond's neglect of purpose-driven

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<sup>1</sup> John Brätland is a Ph.D. economist with the U.S. Department of the Interior. The views expressed in this study are strictly those of the author and do not necessarily reflect the policy positions of the U.S. Department of the Interior. Remaining errors are, unfortunately, the author's responsibility.

<sup>2</sup> Jared Diamond. 1997. *Guns, Germs and Steel: The Fates of Human Societies*. W.W. Norton & Company: New York, New York.

<sup>3</sup> Jared Diamond. 2005. *Collapse: How Societies Choose to Fail or Succeed*. Viking Press: New York, New York.

<sup>4</sup> Diamond observes: "The time is ripe for a fresh look at these questions, because of new information from scientific disciplines seemingly remote from human history. These disciplines include, above all, genetics, molecular biology, and biogeography as applied to crops and their wild ancestors; the same disciplines plus behavioral ecology, as applied to domestic animals and their wild ancestors; molecular biology of human germs and related germs of animals; epidemiology of human diseases; human genetics; linguistics; archeological studies on all continents and major islands; and studies of histories of technology, writing and political organization --- the essence of the problem is to develop a unified synthesis" in Jared Diamond, 1997, *Guns, Germs and Steel*, p.26.

human action of individual human beings, property rights and specialization fostering cooperative exchange.<sup>5</sup> Where present, these aspects of human existence were central in the ascendance of societies and where absent, a cause of stagnation and demise of other societies. This criticism is apt for both books, *Guns, Germs and Steel* and *Collapse*. Diamond's failure can be understood from his vane attempt to attribute major social developments to geographic and environmental factors. In *Guns, Germs and Steel*, Diamond concludes that new technologies emerge randomly across continents. He further asserts that successful societies are so called *complex societies*, which in his view, must be centrally organized and centrally managed.

In *Collapse*, Diamond's objectives are equally ambitious. He interprets causes behind the demise of several societies including that of Easter Island, which he employs as a type metaphor in highlighting the role of 'ecocide' in the collapse of past societies and in warning of the immanent global collapse. 'Ecocide' refers to a pattern of continued resource exploitation by members of society that is not sustainable for the given environmental circumstances and is ultimately socially self-destructive. For example, on Easter Island, the critical resource that seems to have been used to the point extinction was the once ample palm forest, a resource that served several critical functions in Easter Island society. But Diamond's interpretation of ecocide should be interpreted in the context of both books since the aptness or inaptness of the Easter Island metaphor rests of ideas that first make their appearance in *Guns, Germs and Steel*.

## II. Diamond on Geography, Innovation, 'Complex Societies' and Societal Formation

Diamond's focus on geographical and environmental considerations leads him to essentially ignore (1) private property rights, and (2) human action leading to specialization and institutions of cooperative and calculative exchange.<sup>6</sup> In largely ignoring these institutions, he believes that social interdependence sets the stage for conflict and hence the need for a highly centralized governmental order. Diamond mistakenly attaches a great deal of importance to political unification in the formation of society. His neglect of the afore-mentioned institutions reveals

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<sup>5</sup> Gene Callahan has written an excellent critique of Diamond's approach to historical analysis in his 1997 book; "The Diamond Fallacy," a review of posted on the Ludwig von Mises Institute Blog, March 28, 2005.

<sup>6</sup> In focusing on these institutions, the paper emphasizes central tenets of Austrian economics. The phrase 'calculative exchange' refers to the fact that *only* in an economy in which private exchange is conducted with 'money' can property owners of property rationally reckon economic scarcity of particular goods and any gains or losses in the value of capital assets arising from acts of exchange. In tribal societies, the institution of private property may not have existed as modern man may understand the concept. But assuming that some form of private property were to exist, transactions would have been conducted on the basis of barter. While the exchange ratios between various goods would have given a property owner some indication of what must be sacrificed to acquire something that the individual did not own, there would have been no price to which he could refer in assessing the intended exchange. No market price could exist. In addition, there would have been no means by which a property owner could appraise the net value (net of what he owed others) of what he owned. In other words, while the concept of capital assets could have existed in some rudimentary form, 'capital' as a *calculation* of net monetary worth could not exist. This latter situation describes the plight that would have been faced by the Easter Island community. But in reality, their circumstances would have been much worse since the institution of private property appears not to have existed in any functional sense. Hence, Easter Island and the Soviet Union collapsed for basically the same reasons. See: Joseph Salerno. 1990. "Why a Socialist Economy is Impossible." Postscript to: Ludwig von Mises. *Economic Calculation in the Socialist Commonwealth*. Auburn Alabama: The Ludwig von Mises Institute.

his ignorance of the nature of society and the processes by which societies are formed. For example, mutually-beneficial market exchange allows individuals to arrive at a rational reckoning of both scarcity and capital. Moreover, to the extent that private property allays interpersonal conflict and fosters cooperation, the foundations of society itself are established.

#### **A. Geography as a determinant and its link to innovation and inventiveness**

Jared Diamond is largely a ‘geographic determinist.’ But the issue of social adaptation seems to lead him in confusing and erroneous directions. In *Guns Germs and Steel*, Diamond seeks to presents the thesis that external factors such as geography and environment actually determine the fate of societies. According to this thesis, the nature and direction of particular civilizations are largely determined by geographical considerations. Geographical determinism has been described as embracing the notion that “the physical, geological and climatic conditions of a region determine the thoughts and the actions of inhabitants.”<sup>7</sup> In this effort, Diamond pursues what he sees as a ‘scientific hunt’ for ultimate causes or ‘historical laws’ accounting for the success or failure of certain societies. Diamond ostensibly intends to make geography the active element in his thesis; but human action as manifested in innovative adaptation and receptivity to new technologies becomes a problematic issue since Diamond must find a way to link these phenomena to geographical considerations.

Certainly geography is not unimportant in the actions of human beings. But the question is: is it a determinant of human action? Diamond must find a way to deal with this question. In fact, the role played by geography in the lives of acting men is essentially three-fold. First, it provides a stimulus to action. Second, geography plays a large role in providing the means available to acting men striving toward certain goals. Third, geography can act as a restraining element affecting the opportunity costs born by acting human beings in trying to achieve certain objectives. While geography affects man in these various ways, it does not determine responses to the conditions imposed by it. Ludwig von Mises has observed that “the way in which he [man] adjusts himself, the methods of his social, technological and moral adaptation, are not determined by the external physical factors.”<sup>8</sup> Elsewhere Mises notes that “... the same situation has a different effect on different men. ... the same men react differently at different times, and there is no means of ascribing unequivocally definite modes of reaction to different ages or other objectively distinguishing periods or conditions of life. One expresses the same idea in pointing out that it is not possible to grasp how the action of the external world influences our minds, our will, and consequently, our action.”<sup>9</sup>

In a sense, Diamond is forced to at least partially accept these realities. Diamond clearly acknowledges that one of the plausible indicators of societal advance is to be seen in improvements in existing techniques and development of new technologies. Diamond sets for

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<sup>7</sup> Ludwig von Mises. [1957] 1969. *Theory and History: An Interpretation of Social and Economic Evolution*. New Rochelle, NY: Arlington House, p. 324.

<sup>8</sup> Mises. [1957] 1969, p. 325.

<sup>9</sup> Ludwig von Mises. [1960] 2003. *Epistemological Problems of Economics*. Auburn, Alabama: Ludwig von Mises Institute, p. 12.

himself the task of explaining why technological innovation has been clearly robust for some societies while others have lagged in the development of new technologies. But even more difficult is the attainment of his narrower objective of trying to explain these differentials in terms of geography and environment. Diamond attempts to answer the specific question: how do differences in the receptivity to new technologies arise.<sup>10</sup> He explores considerations that he seems to view as factors accounting for these differences. Diamond *first* notes that patent protections that protect ownership rights of inventors, has rewarded innovation in the west, while the lack of such arrangements in other parts of the world has meant a more stagnant approach to the development of new technologies. *Second*, diamond observes that capitalism with its attendant property rights has made it profitable to invest in the development of new technologies. *Third*, Diamond acknowledges the strong individualism in western countries, particularly in the United States, that allows successful inventors to retain earnings that accrue from the profitable applications of new technologies. Diamond categorizes the above elements as falling into what he labels an ‘economic or organization-of-society’ category. A *fourth*, item mentioned by Diamond is one that he places in an ‘ideological’ category, but, in fact, belongs with the preceding items: risk-taking behavior that is important in cultivating an environment in which innovation can occur.<sup>11</sup> One should note that in acknowledging these factors, he comes closest to acknowledging the importance of secure rights of private property, division of labor and cooperative exchange. But he never finds a way to fully integrate these insights into his broader examination of societal ascendance. As the subsequent discussion will reveal, Diamond finds a way to virtually assign secondary importance to these insights. Diamond remarks: “*none of these causal factors has any necessary association with geography. --- Worse yet, all of these proximate explanations bypass the question of ultimate factors behind them*”<sup>12</sup> (emphasis added). Groping for a way to explain the apparent irrelevance to geographical considerations, Diamond observes,

it is untrue that there are continents whose societies have tended to be innovative and continents whose societies have tended to be conservative. On any continent, at any time, there are innovative societies and also conservative ones. ... To the student of broad historical patterns, though it makes no difference what the specific reasons were in each of those cases. *The myriad factors affecting innovativeness make the historian's task easier, by converting societal variation in innovativeness into essentially a random variable*<sup>13</sup> (emphasis added).

The notion that innovativeness of different societies is a random variable is not only implausible but truly bizarre. One finds astonishing Diamond’s inability to recognize the real causes of societal ascendance even after he has acknowledged and discussed them. His search for

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<sup>10</sup> Jared Diamond. 1997, p.249.

<sup>11</sup> Ibid., p. 250. The actual list of elements examined by Diamond is more inclusive and mentions other factors such as the influence of religions and the availability of slave labor, for examples.

<sup>12</sup> Ibid., pp. 250-251.

<sup>13</sup> Ibid., p.254.

geographical linkages leads him to the fundamentally implausible notion that receptiveness to innovation and new technologies is a random phenomenon defying a means of prediction.

This list of conditions that Diamond ultimately rejects as being of primary importance can be briefly distilled into the following elements all bearing on some form of purpose-directed human action: (a) secure rights of private property as an inducement to successful inventing,<sup>14</sup> (b) property rights assuring an appropriable return on investment in technological advances, and (c) property rights nurturing an environment in which the actions of undertaking risky ventures are rewarded. Innovative action on the part of individual human beings only become both profitable and ‘socially beneficial’ within environments characterized by secure rights of private property, division of labor and cooperative exchange. Capitalism embraces all these features and nurtures the indispensable environment in which investment risks can be profitably undertaken in trying to introduce innovations. *To this extent, contra Diamond, the preceding capitalistic institutions must be seen as primary determinants of innovative activity and receptivity to new technologies.*

But the preceding list of three items is incomplete. An additional element (d) that belongs in the preceding list, and one totally ignored by Diamond, is the fact that the introduction of new technologies emerges out of acts of saving and investing. In other words, acts of saving are a critical underpinning of a rational reckoning of technology development and application. New technologies emerge in a growing stock of new capital goods. Capital goods embodying new technologies do not come into existence without savings. “Large savings continuously in search of the most profitable investment opportunities are providing the resources needed for rendering the accomplishments of the physicists and chemists utilizable for the improvements...”<sup>15</sup> The practical deployment of the technological innovations emerging from the natural sciences is critically conditioned by the institutions of the capitalism. And finally (e), the savings necessary to incorporate new technologies in a growing stock of capital goods is critically dependent upon monetary institutions fostering calculative exchange and a rational reckoning of alternative investment. Without economic calculation made possible by a medium of exchange -- money, the concept of capital would be virtually meaningless. Without rational capital reckoning, accumulation of new capital, goods most probably would not occur. Few technological innovations would ever come into practical use in a society that did “not employ a generally used medium of exchange.”<sup>16</sup> The ability of businessmen and engineers to make a rational calculation of the profitability of alternative investment in different capital goods also accommodates a thoughtful contrast of the advantages of applying one technology over another. The formal mathematical relations emerging in the development of physics and chemistry, the new discoveries emerging in biology would be sterile if it were not for the monetary institutions

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<sup>14</sup> Murray Rothbard is critical of patent systems and favors a ‘copyrights’ for inventors that would prevent buyers of the patented product from reselling the same or duplicate product. Murray Rothbard develops the copyright protection for mechanical of physical inventions at greater length in: Murray N. Rothbard. 2004. *Man, Economy and State with Power and Market: Scholar’s Edition*. Auburn, Alabama: The Ludwig von Mises Institute, pp. 745-754.

<sup>15</sup> Ludwig von Mises. 1962. *Ultimate Foundations of Economic Science*. Princeton, New Jersey: Van Nostrand Company Inc., pp. 126-127.

<sup>16</sup> *Ibid.*, pp. 126-127.

accommodating economic calculation.

Hence, Diamond's conclusion that the phenomenon of technological advance is a random phenomenon across continents is a gross absurdity that, in itself, greatly diminishes his credibility. One must fully reject Diamond's apparent judgement that the institutions of private property and monetary exchange are of only 'proximate' importance in explaining technological advance.<sup>17</sup> Each of the latter items listed above illustrate the degree to which the liberal institutions associated with markets are indispensable and of primary importance in fostering innovative action on the part of individual human beings and are in fact the ultimate cause of not only receptiveness to innovation and technological advance.

### **B. Diamond's centralization imperative for 'complex societies'**

In discussing the role of innovation and technological advance in the advancement of powerful and ascendant societies, Diamond allowed himself to become very close to outlining some legitimate and centrally important factor accounting for this phenomenon. These insights bore on human action and property rights. But he was finally led to assign them secondary or even minimal importance. Unfortunately, Diamond lets himself to be drawn even further astray in attempting to deal with what he labels 'complex societies.'

While the concept of the so-called complex society seems to play a key role in Diamond's explication of societal ascendance, he expends little effort in actually trying to define the concept though he acknowledges that the principal predictor of 'complexity' is population size. In fact the term 'complexity' does not even appear in the index of *Guns, Germs and Steel*. But Diamond has obviously read Joseph Tainter's book, *The Collapse of Complex Societies*, since he actually references Tainter in his 2005 book *Collapse: How Societies Choose to Fail or Succeed*. Tainter manages a definition of the term but his subsequent discussion suggests a myriad of qualifying facets. The 'short form' of Tainter's definition is:

Complexity [as applied to the characterization of a society] is generally understood to refer to such things as the size of the society, the number and distinctiveness of its parts, the variety of specialized social roles that it incorporates, the number of distinct social personalities, and the variety of mechanisms for organizing these into a coherent, functioning whole. Augmenting any of these dimensions increases the complexity of the society.<sup>18</sup>

One could infer a role for property rights and cooperative exchange in Tainter's definition; however, since property rights or market exchange do not appear in the index of his book, such an inference is clearly not warranted. Nonetheless, Diamond does not reference this definition, possibly because Tainter's characterization seems to be a bit too sophisticated for what Diamond

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<sup>17</sup> Webster's defines 'proximate' as 'being near but not primary or ultimate as a causal explanation.' See *Webster Third New International Dictionary: Unabridged*, 1981. Springfield, Massachusetts: Merriam-Webster, Inc. p. 1828. The term gives Diamond 'wiggle room' in assigning secondary importance to these market oriented institutions.

<sup>18</sup> Joseph Tainter. 1988. *The Collapse of Complex Societies*. Cambridge University Press: Cambridge, U.K., p. 23.



has in mind. When Diamond is using the phrase ‘complex society,’ he seems not to be talking about what one might call a *modern industrial society*. Rather he is talking about a social order still subject to explosive violence that one might find within the context of the primitive tribe. Without offering a definition, Diamond seems to see four characteristics as exemplary of what may be called ‘complex societies’; these are (1) large population size, (2) centralized government, and (3) the ability to produce large quantities of food, and (4) along with a centralized government, a centralized management of resources.<sup>19</sup> As the following discussion will make clear, when discussing what he labels a complex society, Diamond is still thinking about a tribal culture, writ large, with a centralized social and political structure. He is not thinking about the actual institutions that commonly characterize modern societies in the present day.

In approaching the requisite features of the complex society, Diamond poses the question of why a tribal organization is inadequate in the context of larger populations. He catalogues a series of four reasons why tribal organization cannot serve the needs of large populations. “Considerations of [1] conflict resolution, [2] decision making, [3] economics and [4] space converge in requiring large societies to be centralized.”<sup>20</sup> In effect, he is outlining a series of arguments for societal centralization. It is ironic that even though Diamond thinks he is addressing the needs of a ‘complex society,’ he never seems to be able to free himself of assumptions that would accord with the characteristics of primitive tribal cultures. It is in his manner of addressing this matter that Diamond reveals his incomplete understanding and even ignorance of human action and property rights; he fails to understand their role in a social order facing the universal issue of resource scarcity.

*First*, he notes that one of the problems that emerge within larger populations is “conflict between unrelated strangers.”<sup>21</sup> As Diamond characterizes this problem, its likelihood intensifies as the number of people becomes larger. He uses the following example to present his point:

Relationships within a band of 20 people involve only 90 two-person interactions (20 people times 19 divided by 2), but a band of 2000 would have 1,999,000 dyads. Each of these dyads represents a potential time bomb that could explode in a murderous argument. ... Once the threshold of ‘several hundred,’ below which everyone can know everyone else, has been crossed, increasing numbers of dyads become pairs of unrelated strangers. ... Hence, a large society that continues to leave conflict resolution to all of its members is guaranteed to blow up. That factor alone would explain why societies of thousands can exist only if they develop centralized authority to monopolize force and resolve conflict.<sup>22</sup>

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<sup>19</sup> Diamond. 1997, pp. 281-286.

<sup>20</sup> Jared Diamond. 1997, p. 288.

<sup>21</sup> Ibid., p. 286.

<sup>22</sup> Ibid., p. 286.

Diamond is certainly correct to raise the possibility of conflict between individuals over scarce resources. But Diamond stumbles. A more important institution for averting and eliminating the possibility of conflict is private property. Private property emerges out of the certainty of scarcity. It is clear the without the reality of scarcity, the motives for interpersonal conflict would be markedly diminished if not eliminated. Moreover, in the absence of the scarcity, the institution of private property would be meaningless and redundant. There would be no need for private property to function as a rationing institution. “It is the function of property rights to avoid such possible clashes over the use of scarce resources by assigning rights of exclusive ownership. Property is thus a normative conflict; a concept designed to make conflict-free interaction possible by stipulating mutually binding rules of conduct (norms) regarding scarce resources.”<sup>23</sup>

Diamond sees a *second* reason that ‘complex societies’ must be centralized; large populations must have effective means of communication and the means to engage in ‘communal decision-making.’ Here Diamond may be guilty of a non-sequitur; effective communication is not necessarily contingent any type of centralization. Moreover, he offers this observation under the premise that some sort of governing body is required to facilitate communications. Diamond is presumably addressing the communications thought to be required in effectuating ‘democratic decision-making.’ In other words, Diamond sees a “growing impossibility of communal decision making with increasing population size. ... Hence a large society must be structured and centralized if it is to reach decisions effectively.”<sup>24</sup> Here again one sees that Diamond is in the grip of confusion and misunderstanding largely because there is no scope for private action in the world that he posits. No allowance is made for the information acquisition capabilities of individual human beings in their efforts to pursue their own ends. He has no understanding of the fact that when individual actors have secure rights of private property and freedom to engage in market exchange, communal decision-making and supervisory intervention in private life is chaotic and disruptive. In a free market economy, the individual is able to avail himself of sufficient information to act in pursuit of his own goals and in the process generate price information useful to others in pursuit of their own ends. The type of communal decision making that Diamond has in mind would only serve a purpose, however perverse, if individual property rights were foreclosed by a tyranny of the majority and if the actions of individuals were tyrannically constrained. Ironically, this type of tyranny turns out to be the logical outgrowth of democratic government. As Hans-Hermann Hoppe has remarked:

As for the moral status of majority rule, it must be pointed out that it allows for A and B to band together and rip off C, C and A to, in turn joining to rip off B and then B and C conspiring against A, and so on. ... it is not democracy but private property, production, and voluntary exchange that are the ultimate sources of human civilization and prosperity. ... Private property is as incompatible with democracy as it is with any other form of political rule. Rather than democracy,

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<sup>23</sup> Hans-Hermann Hoppe. 1989. *Theory of Socialism and Capitalism: Economics, Politics and Ethics*. Boston, Massachusetts: Kluwer Academic Publishers, p. 8.

<sup>24</sup> Jared Diamond. 1997, pp. 286-287.

justice as well as economic efficiency requires a pure and unrestricted private property society allowing an anarchy of production in which no one rules anybody.<sup>25</sup>

In expanding upon Hoppe's latter point, one notes that private property and a freedom of individual action mean that market processes impose a 'rationality' upon social interaction that cannot possibly be replicated by interventionist actions perpetrated through 'communal decision making.' For example, the institutions of private property are self-enforcing since each property owner has a vested interest in the integrity and security of his neighbor's property. Insecure property rights as may be experienced by the single property owner have implications for the security of property rights for the entire population. Moreover, since each property owner is able to engage in exchange and is able to exclude the use of his property in lessor valued occupations. The rational property owner will always hold out for the highest bid meaning that the prices that emerge in the process of exchange. In this way, prices become a tool of rational calculation in the consumption and investment decisions of individuals in the 'complex society' essentially because prices offer the only coherent indications of relative scarcities. Communal decision-making that curtails or impedes this process can only be destructive of the society.

Diamond presents a *third* reason for believing that large populations require a centralized social structure. Diamond labels this reason as being 'economic' in nature though it bears on the first item in this list described above. He observes that situations will arise in which some individuals will acquire more of some essential commodity during some periods and less in other periods of time. Diamond sees a problem with these types of occurrence. Here again Diamond advertises his abysmal ignorance of economics. He offers the following astonishing observation:

... the same mathematics that makes direct pairwise conflict resolution inefficient in large societies makes direct pairwise economic transfers also inefficient. Large societies can function economically only if they have a *redistributive economy* in addition to a reciprocal economy. Goods in excess of an individual's needs must be transferred from the individual to the centralized authority, which the redistributes to the individuals with deficits (emphasis added).<sup>26</sup>

Here again, one sees that Diamond is unable to think in terms of the institutional framework of what one might legitimately view as a 'modern society.' There is no private property in the world that he characterizes. There is no exchange process in which the individual can make an offer to sell goods that may be in surplus. Diamond disregards markets and the emergence of prices in which each individual is able to make his own decisions with respect to buying and selling. The redistributive economy to which he makes reference is not an economy at all but a system of forced confiscation of property with distribution being made of the central authority's judgements about the needs of those receiving the 'surpluses' of other. Need is a fundamentally

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<sup>25</sup> Hans-Hermann Hoppe. 2001. *Democracy, The God that Failed: The Economics and Politics of Monarchy, Democracy and Natural Order*. New Brunswick, New Jersey: Transaction, pp. 104-105.

<sup>26</sup> Jared Diamond, 1997, p. 287.

subjective judgement that can only be made by the individual. In actual fact, since interpersonal comparisons of utility or well-being is unscientific and epistemologically impossible, the redistribution process to be conducted by the central authority is totally arbitrary and without any legitimate foundation. Only the individual is able to judge the extent to which his holdings of a particular commodity represents an excess or shortage with respect to his demand. While this sort of paternal intervention in the private lives may have its counterpart in the economic culture of primitive tribes, it has no place in a complex society that may exist in the real world.

Diamond's incoherence and seeming ambivalence on the matter of centralization is further manifested in his noting that central control is more far-reaching in complex societies and economic specialization is more extreme. With regret, he notes that not even farmers are self-sufficient. Some how, he has convinced himself that specialization and a drift away from self-sufficiency is detrimental to society. "Hence the effect on the society is catastrophic when the government collapses."<sup>27</sup> Presumably Diamond has concluded that without a centralized government, there can be no specialization, free exchange and orderly markets. He cannot bring himself to accept or understand the fact that the degree of efficient specialization and exchange are not contingent in the least on the existence of a governmental order -- centralized or not. If fact these processes are more likely to be fostered and strengthened by the absence of a centralized governmental order.

Diamond's *fourth* reason for assuming that the structure of a complex society must be centralized relates to 'space' and population densities. This reasoning is a bit difficult to understand until one realizes that Diamond is still immersed in the culture of a tribal society in which property rights do not exist. His observations have little relevance to a modern day economy with property rights and mutually beneficial exchange. Diamond reasons from the premise of generic bands of people of perhaps a few dozen people. He also explicitly assumes that these bands coexist in a state of periodic war with each other, presumably over scarce resources. But for the Diamond, the likelihood of conflict is diminished as long as bands of people exist within a sparsely populated region in which the band faces a greater likelihood of being self-sufficient. "As population density increases, the territory of the band sized population of a few dozen people would shrink to a small area, with more and more of life's necessities having to be obtained from outside the area."<sup>28</sup> As people find themselves in closer proximity to one another, and are reliant on others for the necessities of life, Diamond sees an elevated likelihood of conflict. As Diamond reasons, societal interdependence creates greater likelihood that conflict and violence will erupt. Diamond reasons that greater population density necessarily leads to intensifying conflict; conflict, in turn, requires a strong centralized government to maintain civil order.

Again it is clear that Diamond's thinking about this issue is fundamentally erroneous. He is thinking about the band of a few dozen people that make decisions and act to attain the group's objectives. But within a larger society, the individual groups become more dependent upon other

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<sup>27</sup> Ibid., p. 279.

<sup>28</sup> Ibid., p. 287.

outside the band for the necessities. For Diamond, such situations set the stage for periodic conflict since he is unable to bring property rights and cooperative exchange into the orbit of his thinking about any society -- simple or complex. The error in this type of thinking can be amply highlighted by reiterating a point made by Hans-Hermann Hoppe: "It is the function of property rights to avoid such possible clashes over the use of scarce resources by assigning rights of exclusive ownership [to particular individuals]."<sup>29</sup> The extent to which Diamond fails to grasp this point raises the question of whether or not he actually understands the nature of society as a concept.

In the closing chapter of *Guns, Germs and Steel*, Diamond reprises the issue of organization in a retrospective that appears to have been written some time after the preparation of the main text. In this chapter, Diamond seems to deal with 'organization' as a decision variable with which some 'central authority' chooses from among alternative patterns of organization in order to attain some type of social goal. He poses the following questions:

[W]hat is the best way to organize human groups, organizations and businesses so as to maximize productivity, creativity, innovation and wealth? Should your group have a centralized direction (in the extreme, a dictator), or ... diffuse leadership, or even anarchy? Should your collection of people be organized into a single group, or broken down into small or a large number of groups? Should you maintain open communication between your groups or erect walls of secrecy between them? ... These questions may arise at many different levels and for many types of groups. They apply to the organization of entire countries: remember the perennial arguments about whether the best for of government is a benign dictatorship, a Federal system, or an anarchical free-for-all.

The way in which these questions are framed only tends to reinforce the impression that Diamond has only a confused understanding of the legitimate role of organization in a modern society and what context in which legitimate organizational decisions are made. As noted, these questions seem to suggest the idea that organization is a type of decision variable that can be manipulated by some governing authority. While, there are two principal contexts in which organization has become a decision variable, only one is ethically justifiable. The *ethically unjustifiable role* of organization as a decision variable emerges out of the democratic process in which governmental power has become more centralized and more invasive through the thicket of regulations impinge upon the affairs of the common citizen and encroach on the rights of private property. A noted scholar on these subjects has observed: "It does not follow from the right and need for protection of person and property that protection should or effectively can be provided by a monopolist of [territorial] jurisdiction and taxation. To the contrary, it can be demonstrated that any such institution is incompatible with the rightful and effective protection of property."<sup>30</sup> While the concept of centralization of organization has become a type of

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<sup>29</sup> Hoppe. 1989, p. 8.

<sup>30</sup> Hoppe. 2001, p. 226. See also Robert Higgs. 1987. *Crises and Leviathan: Critical Episodes in the Growth of American Government*. New York, NY: Oxford University Press, p. 67; and T. Alexander Smith. 1988. *Time and Public Policy*. Knoxville, Tennessee: University of Tennessee Press, pp. 134-135.

decision variable within a political context, it has become an unethical detriment to the general health and well-being of society as a whole.

One such area in which the government tries to use organization as a decision variable is in governmental efforts to regulate and alter the structure of industry. Legal sanctions such as anti-trust laws and their accompanying regulations have created a complex interventionist bureaucracy with the stated purpose of protecting the consuming public from monopoly and anti-competitive practices within industry. Implicit in this type of interventionist agenda is the assumption that the government can regulate the number, size and behavior of firms in an industry to increase the welfare of consumers. However, there exists no scientifically legitimate means by which this can be done.<sup>31</sup> Moreover, there are no legitimate analytical methods by which monopoly prices or predatory prices can be empirically discerned.<sup>32</sup> Attempts by government to treat 'societal organization' as a decision variable in regulating industry are invalid and certainly unsupported by any scientific rationale.

The legitimate and ethical context in which organization can be treated as a decision variable occurs in the size and internal structure of private firms *when these decisions are made by the owners of the firm*. In this context, the questions posed above by Diamond become practical and important concerns. But the questions, as they pertain to firms, only have coherent answers within an aspect of society to which Diamond is largely oblivious. The same institutions that facilitate economic calculation also allow the entrepreneur to assess new technologies and investment in the capital goods that embody the technologies also present the same entrepreneur to answer several questions posed above by Jared Diamond. These institutions include private property in the means of production and competitive prices for both consumer goods and capital goods emerging through actions of *voluntary monetary exchange*. A rational reckoning of profits (net monetary gain) allows the entrepreneur to decide what activities should remain within the firm and what services should be obtained through transactions with other firms.<sup>33</sup> Economic calculation helps the entrepreneur to formulate answers to questions on the size of the firm, the degree of centralization or decentralization, the degree of competition verses cooperation to build into the operation of the firm, the nature of the communications and any other issues that affect the ability of the firm to profitably serve its customers.

### **C. Diamond on the formation and nature of society**

To an extent, Jared Diamond treats society as a type of living being with an existence of its own independent of the actions of the individual human beings that make up the society. Jared Diamond has employed such metaphorical techniques in examining the requisite conditions accounting for the growth of bands and tribes into larger societal entities such as nations or states. It is in his explanation of societal formation that Diamond finds himself relying on a

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<sup>31</sup> This idea is resoundingly debunked by Murray Rothbard; see. Rothbard. 2004, pp. 629-754.

<sup>32</sup> Rothbard. 2004, p. 661 and pp. 681-687.

<sup>33</sup> Such decisions are at the heart of Ronald Coase's 1937 article, "The Nature of the Firm" reprinted in George J. Stigler and Kenneth E. Boulding. 1952. *Readings in Price Theory*. Chicago, Illinois: R.D. Irwin Publishing Company, pp. 331-351.

militaristic explanation based on one group somehow acquiring power and eventual control of other groups. For Diamond, the formation of societies occurs through a process of cascading amalgamation through a perpetual process of conquest or union to ward off threat of conquest. In coming to this view, Diamond eschews Rousseau's notion that societies are the product of a social contract.

Contrary to Rousseau, such amalgamations never occur by a process of unthreatened little societies freely deciding to merge, in order to promote the happiness of their citizens. Leaders of little societies, as of big ones, are jealous of their independence and prerogatives. Amalgamation occurs instead in either of two ways; by merger under threat of external force, or by actual conquest. Innumerable examples are available to illustrate each mode of amalgamation.<sup>34</sup>

While Diamond mercifully refrains from attempting to offer innumerable examples of each of each type of event, he does offer a few instances that superficially seem to support his case. In the case of amalgamation by threat of attack, he gives as his most prominent example to the formation of the Cherokee nation in dealing with the influx of white settlers in the 18<sup>th</sup> century North America. He also notes the unification of the thirteen colonies in revolting against the British and the example of the German unification in 1971 in response to a French declaration of war. In the latter category of amalgamation by conquest, Diamond of course includes the example of the Roman Empire and the Empire of Alexander the Great. Among his examples, he could just as well have included the conquests of Genghis Khan in the late middle ages and the formation of the Soviet society in the twentieth century.

Do Diamond's examples really support his argument? The answer is 'no.' Diamond fails to understand that societies are not necessarily formed by political unification and centralization of governmental control. The thirteen colonies of North America did not suddenly become a society after having adopted a centralized Federal government under the current constitution. The colonies were a society, independently of the form of government. But centralization of governmental control seems to be a principal criterion that he employs in labeling agglomerations of people as societies. To the extent that the Cherokees, the thirteen American colonies and the Germans were successfully able to cohere in the face of an external threat was because they were already societies. Political unification was an ancillary event almost unrelated to the actual events that made the formation of these societies possible. With respect to amalgamation by conquest, Diamond's examples are singularly unconvincing. While Genghis Khan tried to bestow power on his sons at the time of his death, the empire that emerged from his conquests soon disintegrated. The Soviet society was not really a society as made evident by its immediate dissolution in the wake of socialist collapse in 1989. The same has been said of Alexander's empire; it did not survive as a society after Alexander's demise. These disintegrations occurred principally because these empires did not exist as societies in the true sense of the word. They were held together by tyrannical force. Of course the Roman Empire eventually collapsed most probably because, it did not exist as a society but rather as coercive amalgamation held together by military tyranny. The Roman Empire did continue to exist in a

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<sup>34</sup> Diamond. 1997, p. 289.

highly transformed way by the fact the Emperor Constantine adopted Christianity as the official religion of the Empire. But this example hardly validates Diamond's argument regarding the formation of societies.

But if societies exist prior to the establishment of a state wielding centralized control, what legitimate criteria can be employed to recognize a society and to understand its formation? As noted, Diamond is of a mind to label large agglomerations of people as societies if there is a centralized governmental authority to establish a state. From such a perspective, society is thought to have an existence separate and apart from the lives of individual human beings. But Ludwig von Mises has been critical of this metaphorical treatment of society on the part of historians and philosophers: "society is nothing but the combination of individuals for cooperative effort. It exists nowhere else than in the actions of individual men. It is a delusion to search for it outside the actions of individuals. To speak of a society's autonomous and independent existence, of its life, its soul, and its actions is a metaphor which can easily lead to crass errors."<sup>35</sup> For Mises, society emerges out of the actions of individual human beings. He offers a distinctly different perspective that acknowledges private property and cooperative exchange between individual human beings.

Society is concerted action, cooperation. Society is the outcome of conscious and purposeful behavior [on the part of individual human beings]. This does not mean that individuals have concluded contracts by virtue of which they have founded human society. The actions that have brought about social cooperation and daily bring it about anew do not aim at anything else than cooperation and coadjuvancy with others for the attainment of definite singular ends [of individual human beings]. The total complex of the mutual relations created by such concerted actions is called society. It substitutes collaboration for the--at least conceivable--isolated life of individuals. ... In his capacity as an acting animal man becomes a social animal.<sup>36</sup>

Mises explains the role of the mundane but, nonetheless, indispensable role of specific market institutions in the formation of societies. For example, he notes the fact that Western civilization emerged as a process of cooperation between individual human beings based on essentially contractual relations. In essence, cooperation between human beings is fostered by contractual relations between buyers and sellers. These contractual arrangements brought about the emergence of civilization in a process by which individual families abandoned action aimed at self-sufficiency and resorted to inter-familial exchange of goods and services. "When inter-familial exchange of goods and services was substituted for each family's economic self sufficiency, it was, in all nations commonly considered civilized, a cooperation based on contract. Human civilization as it has been hitherto known to historical experience is

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<sup>35</sup> Ludwig von Mises. [1949] 1998. *Human Action: A Treatise on Economics: The Scholar's Edition*. Auburn Alabama: Ludwig von Mises Institute, p. 143.

<sup>36</sup> Ibid., p. 143.



preponderantly a product of contractual relations.”<sup>37</sup>

Mises also gives prominent emphasis to the division of labor as a fundamental element in the formation of society. “In a hypothetical world in which the division of labor would not increase productivity, there would not be any society. There would not be any sentiments of benevolence and good will.”<sup>38</sup> Work performed under division of labor is the fundamental impetus to cooperation, society and civilization and historically has been responsible for converting animal man into human man. Man's recognition of the fact that work performed under the division of labor was more productive than the ‘isolated work’ done under attempts at self-sufficiency. Without this latter recognition, human beings would have remained deadly enemies in a perpetual state of war as envisioned by Jared Diamond. Without specialization and rights of private property, the perpetual conflict over scarce resources as described by Diamond would have been a description of the real world. Each individual would have viewed other human beings with covetous suspicion and would have been unable to seek cooperation in the attainment of mutually beneficial ends. No sense of community would have been possible and what we have come to know as society could not come into existence.

### **III. Diamond on Societal Collapse and the Meaning of His Easter Island Metaphor**

By his focus on geographical and environmental matters in *Guns, Germs and Steel*, Diamond chose to ignore several types of institutions that have historically be central and pivotal in the ascent of societies during that last several millennia. These include (1) private property rights, and (2) human action leading to specialization which, in turn had led to institutions of cooperative and calculative exchange. Rather Diamond places heavy emphasis on centralized governance explaining the success and survival of what he referred to as ‘complex societies.’<sup>39</sup> In *Collapse: How Societies Choose to Fail or Succeed*, Diamond explores the ways in which failure of centralized governance fostered the destruction of their environmental resources and, in the process, destroyed their ability to sustain themselves. He places heavy emphasis on the Easter Island experience and uses his interpretation of that societal collapse as a metaphor in warning of a future global disaster. He expends considerable effort in explaining the ways in which faults in social decision making may occur in ‘complex societies’ and may account for unsustainable uses of resources. Diamond repeats his willful disregard of the role of property rights and economic exchange in assuring resource conservation. Without these institutions, societies such as the Soviet Union and Easter Island have a common fate in that scarcity implies conflict, chaos and eventual collapse. However, Diamond rejects these insights in his examinations of societal ascendance and collapse.

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<sup>37</sup> Ibid., p. 198.

<sup>38</sup> Ibid., p. 145.

<sup>39</sup> Recall that Diamond characterizes ‘complex societies’ as having the following features: large population size, centralized government, the ability to produce large quantities of food, and along with a centralized government, a centralized management of resources.

### **A. Diamond's interpretation of the Easter Island experience**

Easter Island appears to have been first settled by human beings between the years 400 A.D. to 900 AD and flourished as a society for the next several centuries.<sup>40</sup> The Easter Island social collapse seems to have occurred during the period between 1,400 and 1,500 AD. Diamond attributes Easter Island's social collapse principally to 'improvident' deforestation by its inhabitants. Besides the enigmatic statues that one finds on Easter Island, the other remarkable feature of the island is the virtual absence of trees. But as Jared Diamond and other scholars have established, Easter Island once had a great forest of very large palm trees with diameters reaching 7 feet at the base. Diamond has made a convincing case that the forest was a critical element in the early prosperity enjoyed by the Polynesian community that first settled the island. One of the major employments of the forest resources bore on the transportation and erection of the famous statues for which the Island has become famous.

Jared Diamond uses the Easter Island experience as a metaphor in interpreting other collapses in world history and sounding an alarm regarding global collapse from environmental degradation. After noting benefits yielded by the forests, Diamond outlines the tragic consequences of using this resource to the point of total extinction. While there is little doubt that the depletion of forest resources played a critical role in the collapse of Easter Island society, he attributes this pattern of unsustainable use to faulty group decision-making as revealed in what Diamond perceives as political failures to develop sustainable regulatory constraints over the use of resources. In this sense, Diamond's interpretation of the Easter Island collapse is meant to be seen as a metaphor for the issues of sustainability that face the modern world. In fact, one must acknowledge the fact Easter Island is an apt metaphor but not in the way that Jared Diamond intends. Diamond sees centralized social decision making as critical to the survival to societies such as Easter Island as well as to this planet as a whole. This paper examines Diamond's interpretation of faulty group decision-making as a cause of the Easter Island collapse and the need for governmental intervention as the key to sustainability in the modern day.

The once abundant timber resources played a central role in early prosperity enjoyed by the Islander during earlier the earlier centuries of habitation of the island. For example, trees were being used for firewood and also for cremation of dead bodies. Certainly a substantial number of trees were simply cleared to provide open area for the planting of gardens and the planting of crops. Larger trees would also have been used to make large sea worthy canoes for fishing and hunting porpoises. But the trees were also centrally important in the building and movement of the now famous statues for which Easter Island is known. Apparently, the statues (or moai as they were called) and the huge platforms (ahu) upon which they stood were part of a ritualistic religious observance. The early chieftains of the island community were ostensibly the initial organizing impetus behind the building of the statues.

Yet at the same time they seem to have become a type of competition between the twelve clans or tribal communities then living on the island. Diamond offers the following conjectures on the

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<sup>40</sup> The date appears to be of some doubt. Jared Diamond put the date nearer 900 A.D.: Diamond. 2005, p. 90. However, in his 1997 book, Diamond presents a map in which the settlement of Easter Island is placed at 500 A.D.

motivations behind the fact that these statues seemed to increase in size as time progressed. “The increase in statue size with time suggests competition between the rival chiefs commissioning the statues to outdo each other. ... I cannot resist the thought that they were produced as a show of one-upmanship.”<sup>41</sup> Diamond speculates on the reasons for this peculiar ‘and costly’ type of competition on Easter Island. First, the stone found on Easter Island is excellent for carving of statues; second, the island’s isolation from other Pacific islands meant that other forms of competition based on trading, raiding, exploration, colonization and emigration were foreclosed to its inhabitants; third, the terrain of the island is such that the respective clans were availed of open access to the stone quarries as well as the forest; and four, the building of platforms and statues required the feeding of large number of people; according to Diamond, food surpluses for feeding large numbers of people were produced by “elite controlled upland plantations.”<sup>42</sup>

This period of sustained building of statues and platforms involved not only an intensive but a profligate use of the once substantial forest resources of the island. The statues alone weighed between 10 to 90 tons and required the efforts of 50 to 500 people for their transport to other parts of the island. But this undertaking was critically dependent upon the availability of thick, long and strong ropes that were made from the bark of the trees on the island. Moreover, the transport of the statues and platforms required a substantial number of large trees to make the sleds, ladders and levers to get these massive objects to their desired location.<sup>43</sup> However, the trees were also used for a variety of other purposes. For example, the trees were a habitat for a variety of birds that were an important part of the diet on Easter Island. Moreover, the trees were important in providing material for canoes and rafts that could be used in fishing on the open ocean.

## **B. Diamond on why even ‘complex (centralized) societies’ may collapse**

Diamond sets himself the task of answering one central question: why do complex societies make decisions with respect to the use of resources that have the consequence of self destruction? He calls attention to the skepticism voiced by Joseph Tainter, the author of *The Collapse of Complex Societies*. In considering the possible alternative explanations for the collapse of ancient societies, Joseph Tainter could not bring himself to believe that a society

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<sup>41</sup> Diamond. 2005. *Collapse*, p. 98.

<sup>42</sup> Diamond begins his description of this building program by examining the extent of the food resources required for such an undertaking. “The whole operation of constructing statues [moai] and platforms [ahu] must have been enormously expensive of food resources for whose accumulation, transport and delivery the chiefs commissioned the statues must have arranged. ... Archaeologists who first tried to calculate the work performed, the calories burned, and hence the food consumed overlooked the fact that the statue itself was the smaller part of the operation: an ahu outweighed its statue by about twenty times, and all that stone for the ahu had also to be transported. ... [G]iven the number and size of Easter’s ahu and moai, the work of constructing them added about 25% to the food requirement of the Easter’s population over the 300 peak years of construction. ....those years coincided with the centuries of plantation agriculture in Easter’s interior uplands producing a large food surplus over that available previously.” Diamond. 2005, pp. 101-102.

<sup>43</sup> Ibid., p. 102.

could destroy itself through a process involving the gradual destruction.

One supposition of this view must be that these societies sit by and watch the encroaching weakness without taking corrective actions. Here is a major difficulty. Complex societies are characterized by centralized decision making, high information flow, great coordination of parts, formal channels of command, and pooling of resources. Much of this structure seems to have the capability, not the designed purpose, of countering fluctuations and deficiencies in productivity. With their administrative structure, and their capacity to allocate labor and resources, dealing with adverse environmental conditions may be one of the things that complex societies do best. It is curious that these societies would collapse when faced with precisely those conditions they are equipped to circumvent ... as it becomes apparent to the members or administrators of a complex society that a resource base is deteriorating, it seems most reasonable to assume that some rational steps are taken toward resolution. The alternative assumption -- of idleness in the face of disaster -- requires a leap of faith at which we may rightly hesitate.<sup>44</sup>

Diamond notes that Tainter's believed that complex societies are unlikely to allow collapse to occur through a failure to properly manage environmental resources. But Diamond emphasizes that these events have, in fact, occurred many time in the earth's history. Hence, Diamond's question: why have these things happened? Diamond then presents a series of possible explanations to account for such phenomena. In each case the central difficulty is to be found in the process of 'group decision making.' First, he notes that the group may fail to anticipate a problem before it actually emerges. Diamond notes that a group may not have had any prior experience with a phenomenon or the group may mistakenly assume that the problem is similar to events that have occurred in the past when in fact the new situation is quite different.<sup>45</sup>

Second, the group may fail to properly diagnose or accurately perceive the nature of a newly emerging problem. Misinterpretation may arise, according to Diamond, if the origins of the problem are quite imperceptible or obscure. Also, Diamond raises the possibility that group may not expend sufficient energy in actually observing and examining the phenomenon that appears to be causing the problem. In addition, as Diamond notes, the problem, what ever it may be, occurs very gradually over long spans of time, perhaps spanning several generations. In reference to the latter cause of misdiagnoses, Diamond mentions *creeping normalcy* and *landscape amnesia* making reference to the slowness with which a problem may emerge yet remain unnoticed.<sup>46</sup> Diamond notes the consequences of certain religious values such as the continued efforts of the Easter Island society to continue to build statues that were in the process depleting a valuable resource (the timber).<sup>47</sup>

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<sup>44</sup> Joseph Tainter. 1988, p. 50, as quoted by Jared Diamond, 2005, p. 420.

<sup>45</sup> Diamond. 2005, p. 421.

<sup>46</sup> Ibid., pp. 424-425.

<sup>47</sup> Diamond. 2005, pp. 427-429.

Third, groups may try to solve the problem once it is properly understood but, nonetheless, fail in such endeavors. Diamond gives several examples of why such failure may occur. He notes that there may be a clash of interests in situations in which the benefits of private behavior may be detrimental to the interests of others; while Diamond does not use the term ‘externality,’ this phenomenon seems to be what he is describing since he goes on to mention the tragedy of the commons with respect to occurrence of such clashes. It is at the point that Diamond actually stumbles onto a bit of truth since he mentions privatization of the resource as a means to eliminate the clash of interests. He then proceeds, quite correctly, to mention difficulties raised by migrating species such as fish and the costs incurred from policing certain kinds of private property such as ocean fisheries. He also is quite correct in calling attention to attenuated property rights such as leases in which the owner of the concession has no long-term interest in conservation. In the case of timber leases, the perverse incentive structure inherent in the heavily regulated leasing programs, the timber lessees resort to intensive exploitation in the form of ‘clear cutting.’ “There is no incentive for the lessee to preserve the value of the resource, since he does not own it. It is to his best interest as a lessee to use the resource as intensively as possible *in the present*.”<sup>48</sup>

The latter problems arise most prominently in the management of public forests and petroleum lands owned by governments. In the case of petroleum leases, the counter-productive behavior is more likely to arise on the part of the lessor. The lessor is most interested in rapid collection of royalties on petroleum extracted and sold. But the lessor can only achieve this goal if the lessee is induced to explore, develop and produce at an expedited rate. Hence, the lessor is supported by the law in forcing the lessee into a schedule of production antithetical to the management of reservoir as a capital asset. The lessor’s interests are in conflict with the economic conservation of the resource. The law supports the interests of the lessor with the consequence that the lessees’ efforts to manage reservoir as capital assets are foiled.<sup>49</sup> While Jared Diamond acknowledges a role for property rights, he sees their function in only the narrowest of terms and not as a centrally important institution in preventing societal collapse.

### **C. An alternative interpretation of ‘ecocide’ as a cause of collapse**

As noted above, Diamond employs Easter Island as a metaphor in looking at the possible fate of

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<sup>48</sup> Rothbard. 2004, p. 1128.

<sup>49</sup> John Brätland. 2001. “Economic Exchange as the Requisite Basis for Royalty Ownership of Value Added in Natural Gas Sales.” *Natural Resources Journal*. 41(3), p. 694. But a resolution can be found in a system in which first discoverers acquire full and complete ownership of petroleum reservoirs through the process of ‘original appropriation.’ See: Robert L. Bradley, Jr. 1996. *Oil, Gas and Government: The U.S. Experience*. Lanham, Maryland: Rowan & Littlefield Publishers, Inc., pp. 71-73. Under this proposed system first outlined by Murray Rothbard, surface owners would certainly have the right to charge a price for surface access to accommodate exploration, they would no longer have a contingent claim to a share of the petroleum discovered and produced from beneath their property and would not be able to use the institutions of state-imposed law to supersede production decisions of the owner. See: Murray Rothbard. 1998 [1982]. *Ethics of Liberty*. New York, NY: New York University Press, pp. 71-72. As a full owner of the petroleum reservoir, the petroleum developer would be able to manage the resource as a capital asset hence providing further assurance of long-term sustainability.

the planet earth. *But if the metaphor is to apply to contemporary society, the Easter-Island experience must be assessed by contemporary standards even if some institutional adaptations were beyond the reach of that primitive society.* But this is not what Diamond has in mind. While Diamond acknowledges that collective governance within a ‘complex society’ can fail to prevent resource destruction and collapse, he clings to the view that there are no realistic alternatives. He touches on the institution of private property but views the usefulness of such institutions only in the narrowest of contexts. Diamond sees the solution to the despoliation problem as central regulatory management. Yet in this matter, his instincts are largely wrong. As the following discussion will emphasize, despoliation can best be prevented by a *decentralization* in which individual property owners are able to choose uses and exclude other uses in their quest for the highest economic return. In other words, through private property, owners have the ability to restrict uses of owned resources and hold out for a price that also forces those who would use resources to economize in paying for access.

In the case of Easter Island, for example, the absence of these critical institutions proved to be disastrous and, in this sense, Easter Island is an apt metaphor, but clearly not in the way that Diamond supposes. A true society, in order to succeed, requires a rational means of reckoning of both scarcity and capital (see footnote 6). Individuals in the society require institutions that provide information on what provisions for the future represent a net gain and which do not. These same institutions are those that yield information on scarcity and exhaustion of resources. These institutions include rights of private property free market exchange. The individual owner can select uses and impose a cost (a competitive price) upon other parties seeking the services of scarce resources that he owns. In other words, the owner is empowered to bar others from using the resource and in this sense has the ability, through his own actions, to define the economic scarcity of the resource. “Whether a good is scarce or plentiful from this stand point depends on the wishes of the owner of that good. ... Whether a particular good will be scarce or plentiful relative to potential use then depends on how much property that good’s owner demands for it; the question of how best to produce something cannot be answered outside of the framework of a property rights system for determining what factors are available (attainable) for its production. Indeed the availability of factors in an *economic sense* plays a role in determining what should be produced in the first place”<sup>50</sup> (emphasis added). Hence, ownership imparts a social signal of scarcity in the use of resources that helps to assure sustainable use over time. The people of Easter Island had no such institutions of property with respect to some their most important resources. Eventual destruction of the timber resources was a foregone consequence of failure to develop property rights.

But realistically, survival of the Easter Island society would probably have required more than just private property and a free exchange of goods. A capital stock as could have been represented by their extensive timber resources can only be reckoned in a market in which exchange of goods between property owners is indirect. Indirect market exchange employs a common as a medium of exchange; this medium or money emerges as that commodity that is most marketable. With monetary exchange, the costs and uncertainty of barter exchange are

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<sup>50</sup> Dan Mahoney. 2002. “Ownership, Scarcity, and Economic Decision Making.” *The Quarterly Journal of Austrian Economics*. 5 (1): p. 43.

greatly diminished. The ‘double coincidence of wants’ is not barrier to the expansion of trade. Producers of goods are able to sell more items than would have been possible without the common medium of exchange. As noted above, specialization in production becomes possible such that people are principally engaged in the production of goods to satisfy the demands of others. Transactions are conducted in common units and exchange ratios emerge denominated in common units of money. *In other words prices came into existence.*

Holders of money are afforded the transactional ability to acquire many more goods than was previously practical and those who own goods to be sold are assured of a much wider array of potential customers in an expanded market. Once the individual knows prices of things bought and sold in the market, the owner is able to reckon gains or losses associated with specific acts of exchange. Monetary exchange allows the individual human being to know “whether what he wants to achieve will be an improvement when compared with the present state of affairs and with the advantages to be expected from the execution of other technically realizable projects which cannot be put into execution if the project he has in mind absorbs the available means. Such comparisons can only be made by the use of money prices. *Thus money becomes the vehicle of economic calculation*”<sup>51</sup> (emphasis added).

While these types of institutional adaptations may have been a virtual impossibility for the people of Easter Island, there are some issues that need clarification and emphasis in applying the lessons of that society to the contemporary world. The Easter Island population used the forests as a common property resource. It is nearly axiomatic that common property resources are used intensively to the point of despoliation. Ocean fisheries are probably the most apparent modern-day example of this phenomenon at work. Over the earlier centuries of Easter Island settlement in which the forest resources were used to transport statues, the trees were used as a free good. No rationing mechanism was in place to restrict use of resources to the most highly valued uses. The inevitable consequence was that the forest was despoiled and destroyed. Diamond leans toward the view that the most effective solution would have been found in more thoughtful collective governance.

However, collective governance would not have been an adequate substitute for private property and monetary exchange. First of all, one should acknowledge that there was no physical reason why the forest had to remain a common property resource during the Easter Island exploitation. Secondly, it is very unlikely that a resource such as a forest could be *efficiently managed* as a capital asset within the context of collective governance. However, with private property and exchange of goods conducted with money, prices would emerge. In the contemporary world, private indirect (monetary) exchange would be absolutely critical in reckoning the ‘worth’ of the forest as a capital asset. Such a reckoning would not have been possible in the absence of exchange conducted in terms of money and it would not have been possible for the individual Easter-Islander to rationally reckon the capital worth of efforts to plant new trees (investment). A stable medium of exchange would have been essential for these types of decisions. While the economic maturity of the planted trees would probably have been reached well before physical maturity, this period of time could still have exceeded the life span of the average person on the island; hence, the benefits of planting new growth (return on investment) would have accrued to

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<sup>51</sup> Mises. [1949] 1998, p. 209.

later generations -- not to the planter.<sup>52</sup>

Without property rights, there would have been little incentive for the average islander to invest time and effort in planting new trees. But a market system employing monetary exchange would have been able to appraise the worth of what his investment in new trees. His investment would have had a calculable market worth that could be transferred to others in a mutually beneficial transaction. Economic calculation would have assured the property owner choosing to plant new trees a net return on holding an appreciating and marketable asset. Of course the rate of appreciation would have been contingent upon the rate at which trees were used since use would affect scarcity and scarcity would have been reflected in prices of the trees. The monetary appreciation of the asset would have provided a return even though the trees may not have reached maturity during the owner's lifetime. However, common property governance by a collective would not have been able to replicate this process. If it were at all likely that the institutions of private property and monetary exchange could have evolved at an early stage of Easter Island settlement, there is a great likelihood that the community could have survived into the modern day. But it is certain is that the vitality of the community would have endured much longer that would otherwise have been possible.

One can readily see that even if an individual or family were to have secure private property rights in a portion of the forest, the private action of harvesting trees could have imposed social costs not necessarily borne by the owner. For example, the forest provided a habitat for creatures that were part of the diet of the Easter Island population (creatures that disappeared once the forest was extinct). One such example is a species of flightless bird that lived in the forest and apparently was an important source of protein for the island population. Other islander would have had a strong vested interest in delaying the harvesting of trees. In the case of birds, such a flightless species could probably have been brought into private ownership meaning that the owner of a portion of the forest would have had to balance the relative return from harvesting trees and the return from selling the marketable meat of the bird. In other words the external cost would have been internalized in a sense. But with other migratory species of birds living in the forest, such private husbanding may not have been possible. In such cases, forest owners contemplating the harvesting of trees could have been bribed by the community to forestall harvesting to preserve the habitat. Bribes or payments of some kind would have been another means by which external costs could have been internalized.<sup>53</sup> But the general point here is that property rights and some manner of indirect or monetary exchange could have provided the Easter Islanders with means to have prevented or dramatically delayed societal collapse.

What of Diamond's use of Easter Island as a metaphor in examining the causes of collapse? Earlier, this writer offered the observation that Easter Island was an appropriate metaphor for the future of global sustainability but not for the reasons that Jared Diamond supposed. Diamond acknowledges that he chose to use Easter Island as a metaphor because he sees that collapse as

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<sup>52</sup> The time of economic maturity would be determined as that moment when the rate of appreciation of the planted trees failed to exceed the rate of time preference of the property owner. Presumably at that moment, the trees would be 'ripe' for harvesting.

<sup>53</sup> Obviously, such a bribing process, were it to occur, would be an example of the *Coase Theorem* in action.



an example of the way in which a group may fail to make appropriate decisions in collectively manage a resources base for the common good. The intended link that Diamond proposes is that Easter Island is a metaphor for the modern world, suggesting the possibility of global collapse arising from destruction of the environmental (ecocide). The ostensible inference that one is to draw is that prevention of global ecocide requires ‘better group decision making’ and a more centralized management of what are seen as global resources. But if the Easter Island experience is to yield a lesson for the modern world, this is surely not it.

The collapse of Easter Island was the result of using a resource on an open-access basis when, in fact, portions of the resource could have been owned by individual islanders. The resource was used to the point of total extinction in the absence of prices that could have functioned as a rationing device in the face of increasing scarcity. There may well have been cultural (i.e., tribal) barriers to the emergence of private property rights but the modern world is not necessarily limited in this way.<sup>54</sup> The resource degradation that may be occurring in the modern world, such as depletion of ocean fisheries or alteration of climate, is not going to be successfully arrested by stronger, more centrally-structured regulatory schemes of the type that Diamond seems to favor. Rather, as difficult as the task may be, the solution will only be found in efforts to more clearly define and enforce private rights of property. Centralized management of resources has an established track record of failure; there is little expectation of success in continuing to pursue failed agenda.

#### IV. Summary and Concluding Comments

In these two treatises, *Guns, Germs and Steel* and *Collapse*, Jared Diamond attempted to write the story of modern man with geography and environmental play the central role in human destiny. This paper has outlined ways in which Diamond has failed in this undertaking. Irrespective of geography and environmental circumstances, man has emerged as an acting force in the formation of society and designing institutions that assure long-term societal sustainability. One can note the emergence of institutions of private property and modern market exchange as critical and essential landmarks in societal ascent. Modern man has also been able to witness the tragic failure of societal experiments in which these centrally important institutions have been ignored and eschewed. For example, the modern-day failure of the Soviet Union was not a failure of group decision making as Diamond seems prepared to allege. Rather, that tragic collapse occurred because the Soviet state was an ill-informed ideological attempt to suppress the actions and preferences of individual human beings and to centrally manage the use of scarce resources. But Diamond has shown himself to be unable to appreciate or acknowledge this insight.

In neglecting free market institutions, Diamond finds himself attributing technological

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<sup>54</sup> The prospects of such institutional adaptation are admittedly very unlikely for a primitive people such as those on Easter Island. The tribal nature of society may well have been an overwhelming impediment. However, other recent scholarship has established that such adaptations have been accomplished in primitive societies such as are found in the Polynesian chain of Island in the Pacific Ocean. Elinor Ostrom. 1990. *Governing the Commons: The Evolution of the Institutions of Collective Action*. Cambridge, UK: Cambridge University Press, p. 21. Ostrom also acknowledges that such adaptation is not inevitable; in some instances, institutional adaptation does not occur. However, Ostrom has in mind a kind of collectivist management of common access resources.

innovation to random events that occur across continents rather than to the formation of property rights which he treats as a secondary or 'proximate' consideration. His ignorance of recent twentieth century history is made manifest in his treatment of what he refers to as 'complex societies.' He observes that complex societies, by which he means principally large agglomerations of people, require centralized organization and centralized management of resources. He cites several concerns for advancing this idea that bear respectively on conflict resolution, decision making, economics and space. For example, Diamond clings to the view that violent conflict is inevitable within large aggregations of people finding themselves mutually dependent upon each other while experiencing increasing population density. Additionally, Diamond sees a need for centralization in achieving what he describes as an 'efficient' distribution of goods. Here again Diamond fails to understand that one of the principal roles of private property in a civilization is to allay the need for conflict over scarce resources. Moreover, where property rights are secure and property owners are able to engage in mutually beneficial exchange, an efficient distribution of goods is achieved. In fact, these are the only institutions by which any efficiency is achievable in both the distribution and production of goods.

Diamond's views on what he refers to as 'complex societies' betrays a level of ignorance on the nature of society and the way in which true societies are formed. For Diamond large agglomerations of people under one centralized government constitute a society. Yet this view is clearly erroneous. He makes reference to the Empire of Alexander or the Soviet Union as examples of societies. But clearly these were not examples of societies as made evident by their rapid dissolution subsequent to the death of the great military leader or the collapse of coercive military government. True societies need no centralized government to establish cohesion and unity. Moreover, societies are formed quite independently of any sort of governmental organization. The bonds of social cohesion are nurtured and strengthened by mutual interdependence, division of labor and cooperative exchange between peoples. These activities and institutions have the power to transcend even ethnic differences that may exist within a true society.

Diamond applies his erroneous perspectives intact in examining the phenomenon of societal collapse. These lessons have their relevance to the experience of Easter Island and the saga of despoiling a centrally important forest resource to the point of extinction. Again, the missing institutions in his telling are private property and mutually beneficial exchange which could have functioned as a rationing mechanism in conserving a valuable resource. Without these institutions, the Easter Islanders had the benefit of no rational means of reckoning encroaching scarcity. The paper acknowledges that these forms of institutional adaptation may have been impossible for the Easter Island community. But since Diamond has employed Easter Island as a metaphor in raising concerns over the sustainability of the global community, it is critically important to avoid the lessons that he thinks he has learned in the writing of these treatises. The answers are not to be found in his persistently reiterated theme of 'better, more comprehensive group decision making.'

