

COERCIVE POPULATION CONTROL IS NECESSARY

1. The earth is finite in size
2. The resources that the earth can provide humanity are finite and limited.
3. Therefore, both economic and population growth must cease
4. If economic growth ceases, at the same time or shortly thereafter, population growth must cease.
5. Humanity is in overshoot compared to the resources that the earth can provide to it.
6. Any species that remains in overshoot MUST suffer a violent, uncontrolled and massive decline in population.
7. According to the Global Footprint Network, the population today of 7.6 billion is using the resources of 1.7 planets.
8. Since humanity has only one planet, to get out of overshoot humanity must reduce its resource usage.
9. Since no one can predict when the violent, uncontrolled and massive decline in population will occur if humanity were to remain in overshoot, humanity must get out of overshoot as quickly as possible.
10. There are only two ways that humanity can get out of overshoot-- reduce human population from the current 7.6 billion and/or reduce the average per capita usage of resources.
11. The number of human beings on the planet times the average per capita usage of resources equals the total resources used by humanity.
12. The resources used by humanity can be divided into two broad groups--- renewable resources and nonrenewable resources.
13. Almost every theoretically renewable resource is presently being used by humanity at a rate greater than it can be replaced by natural processes and, therefore, almost every theoretically renewable resource must be considered nonrenewable.
14. Assuming no change in the average per capita usage of resources, the human population would have to be reduced from 7.6 billion to 4.47 billion ($7.6 \div 1.7$ equals 4.47) to get out of overshoot
15. If the average per capita usage of resources were to increase, the level of population to get out of overshoot would be substantially lower than the 4.47 billion set forth above.
16. According to the latest medium variation numbers issued by the UN, the UN population will attempt to increase by about 3.6 billion by the year 2100, to a total population of about 11.2 billion.
17. Any increase in the human population will drive humanity deeper into overshoot. And the deeper into overshoot humanity goes, the sooner humanity will suffer a violent, massive uncontrolled collapse.
18. Every day humanity uses huge amounts of both theoretically renewable resources and nonrenewable resources. And the more resources used today, the less will be available for use in the future. The less resources that are available in the future, the sooner the collapse of civilization will happen.
19. Fossil fuels and every mineral humanity obtains from the earth are examples of nonrenewable resources.
20. Fish from the ocean is an example of a theoretically a renewable resource--- humanity captures fish and fish breed so that there are new fish in the ocean. However, as indicated above almost every theoretically renewable resource is in reality nonrenewable. Many species of fish used for food have been over fished and in the future will not be available to humanity.
21. Notwithstanding the possibility of new technologies, humanity must assume that the average per capita usage of resources will increase due to the ever growing economies of nations, and in particular the nations of the Third World.
22. Any increase in the average per capita usage of resources will drive humanity deeper into overshoot.
23. New technologies and all other actions that could be taken by humanity will only delay the start of the collapse of civilization. Any actions taken by humanity will never permit continuous/infinite population or economic growth.
24. Today the average worldwide total fertility rate is about 2.42 children per woman
25. While the estimate varies from country to country, the best estimate is that an average fertility rate of 2.1 children per woman will stabilize the human population.
26. In order to REDUCE the human population the average total fertility rate has to decrease from its current level of about 2.42 children per woman to below 2.1 children per woman.
27. If the average total fertility rate fell to 2.1 children per women, population would not stabilize for about 75 years.
28. Both the economies of nations and the human population grow in a compound/exponential manner
29. Compound growth is the most powerful force in the universe. If you invested one dollar at 4% simple interest, it would take 25 trillion years to earn \$1 trillion. If you invested the same one dollar at 4% compound interest, it would take less than 700 years to earn the same trillion dollars. If you cannot do the math, contact me at jbrent6179@aol.com and I will do the math for you
30. Since this essay is being written in 2018, it would take 82 years to you reach the year 2100.
31. The rule of 70 provides an easy way to determine the doubling time of something that grows in a compound manner
32. To determine the doubling time, divide the interest rate used into 70 and that result will give you the doubling time. Example: if something were to grow at the annual rate of 2%, it would double about every 35 years-- 35 years now it will be twice as large, 70 years from now it would be four times as large and 105 years from now it would be eight times as large.
33. If the economy of the planet were to grow at the annual rate of 3 ½ %, it would double about every 20 years resulting in a growth factor of 16 (2,4,8,16) by the year 2100
34. Economic growth requires the use of the physical resources that the planet provides to humanity.
35. Economic growth cannot and will not be completely decoupled from the use of the physical resources the planet provides to humanity.
36. At an annual growth rate of 2%, the economy of the planet would double about every 35 years. In 350 years there would be 10 doublings resulting in a growth factor of 1,024 (2,4,8,16,32,64,128,512,1024). Using round numbers, in 350 years the growth factor is one thousand, in 700 years one million, in 1,050 years one billion and in 1,400 years one trillion.
37. While no one has determined the ratio between economic growth and the use of physical resources, to be very conservative I will use a ratio of 50%. Therefore, if the economy of the planet were to grow by a factor of eight, the use of resources would grow by a factor of four.

38. Using the previous numbers, if the economy of the planet were at the annual rate of 2%, in just hundred and five years the economy of the planet would be eight times as large as it is today and would use four times the resources that the economy uses today.
39. Since humanity is in overshoot, to increase the resource usage by a factor of four would almost certainly lead to the collapse of civilization as the planet would be unable to increase the resources it provides humanity.
40. See number 33 above. If humanity were to cause the economy of the planet grow at the annual rate of 3 ½%, that growth will result in an economy 16 times as large as the current economy by the year 2100, using 8 times the resources as humanity is using today. That cannot and will not happen as the planet cannot supply humanity with 8 times the resources used today.
41. Not one economist has shown, nor can any economist show, that the above calculations are incorrect.
42. The conclusion that must be drawn from the above calculations is that planetary economic growth must cease in the near future, most likely before 2100 and certainly before 2150
43. Every economist on the planet, with only a very few exceptions, has not advised the leaders of humanity that economic growth must cease in the near future and any attempt to maintain economic growth will cause the collapse of civilization.
44. As noted in number 4 above, when economic growth ceases population growth must then, or shortly after, cease.
45. Every single person opposed to a discussion of coercive population control and a comparison of all the problems and benefits of voluntary population control with coercive population control, has refused to present a detailed paper showing when population growth will cease and the level at which it will cease, if humanity were to gamble its survival on voluntary population control.
46. Without preparing and submitting detailed papers supporting their position that humanity must gamble its survival on voluntary population control and their position that coercive population control should not and must not be evaluated, considered or compared with voluntary population control, their positions are ridiculous and morally and intellectually wrong
47. Every single person today opposed to discussion of coercive population control, has refused to state what future factors, if any, will cause him/her to change his/her position regarding a discussion of coercive population control. Every person who takes the position that no matter what happens in the future he/she will never consider a discussion of coercive population control is a total and complete fool. And that statement is not name calling; it is the simple truth
48. Since population cannot continue to grow forever, it must stabilize at one of three levels--- at a level lower than today's level, at today's level, or at a level higher than today's level.
49. It is my contention that it is in the best interest of the long-term survival of humanity for population to stabilize at a level substantially lower than today's level. I challenge anyone to present an intelligent and factually supported paper showing that it would be in the best interest of humanity to stabilize the human population at today's level or a level higher than today's level.
50. Many of the world's religions are doing all in their power to prevent voluntary population control from stopping continuous population growth. Orthodox Jewish Rabbis demand extremely large families. The Catholic Church is violently opposed to any modern means of birth control and abortion. Many Protestant Pastors are opposed to abortion. Most Mormons have at least four or five children. Leaders of Islam have openly and frequently stated that Islam will conquer Western Civilization by producing large numbers of children.
51. Those that are prepared to gamble the collapse of civilization on voluntary population control have not adequately considered the demands of religion for an ever growing population. A very strong case can be made that voluntary population control will fail as long as the religions set forth above do not change their positions
52. Humanity does not need family planning; humanity MUST have birth control. Someone approaches you and asks you to help him plan his family of eight children. Do you respond—great you are planning your family or you are a fool causing the collapse of civilization?
53. Since having more than one child will cause humanity to remain in overshoot, having more than one child must logically be considered a cause of the collapse of civilization, the deaths of billions and even the extinction of humanity.
54. No one opposed to a discussion of coercive population control has shown, or even attempted to show, that the latest numbers issued by the UN that population will attempt to reach about 11.2 billion by the year 2100 are incorrect or overstated.
55. No one opposed to coercive population control has shown, or even attempted to show, that the average per capita usage of resources will remain the same or decrease in the future.
56. The fact that some nations now have fertility rates below replacement level and that additional nations may decrease their fertility rates below replacement level in the future, does not lead to the conclusion that the UN's numbers are incorrect or that population growth will be reduced to zero in time to prevent the collapse of civilization.
57. The UN's demographers are some of the best on the planet and they have taken into account the fact that some nations now have, and additional nations will have in the future, fertility rates below replacement level when they issued their latest numbers predicting that humanity will attempt to reach about 11.2 billion by the year 2100.
58. Anyone who takes the position that voluntary population control has zero chance of failure, (and by failure I mean population growth will continue until it is stopped by war, disease, famine and other horrors), is more than a fool and idiot; that person is a potential mass murder. And that statement is not name calling; it is a simple statement of fact.
59. No one has shown, nor can anyone show, that a discussion of all the aspects of coercive control and/or a comparison of coercive with voluntary population control will be harmful to humanity. If those that are opposed to a discussion of coercive population control are unable to show that harm will come to humanity from such a discussion, there isn't any reason why such a discussion should not be immediately started.
60. While I believe it is almost certain that voluntary population control will fail before the year 2100, my personal belief is important. However, it is almost absolutely certain that voluntary population control has at least a 10% chance of failure before the year 2100.
61. Since failure of voluntary population control will result in the collapse of civilization and since there is at least a 10% chance that voluntary population control will failure, and since a comparison of voluntary with coercive population control cannot and

- will not cause any harm to humanity, humanity must immediately undertake a comparison between voluntary and coercive population control.
62. No one has determined, as best it can be determined, the chance that voluntary population control will fail before 2100 and/or 2150. Based on that fact, to gamble the collapse of civilization on voluntary population control without considering coercive population control is an act of madness and supreme arrogance.
 63. At this point let me make it very clear, that is not my position that coercive population control is the solution to any or all the problems presently faced by humanity and/or that coercive has a better chance of success than voluntary population control. Rather, it is my position that both methods must be discussed, considered and compared in every manner possible.
 64. Let me be very clear. I understand that coercive population control will cause monumental problems far beyond the imagination of anyone alive today. Also I understand that a cessation of economic growth will cause monumental problems far beyond the imagination of anyone alive today. However, the choice is very simple-- solve those problems or permit continued economic and/or population growth that will lead to a collapse of civilization.
 65. An absolute statement that cannot be challenged. Since the earth is finite and since the resources it provides humanity are finite, both economic and population growth must cease. The only questions are when will they cease and how will they cease? Neither action taken by humanity nor the energy received by our planet from the sun will permit infinite economic and population growth.
 66. There are numerous factors that will determine if voluntary population control will fail or be successful in preventing the collapse of civilization. Set forth below are just a few questions about what humanity knows or does not know about those factors.
 - a) Will the religions set forth above ever change their respective positions regarding sex education, abstinence, abortion, population growth and similar matters?
 - b) If the religions mentioned above do not change their respective positions, what effect will the failure to change their respective positions have on the ability of voluntary population control to prevent the collapse of civilization?
 - c) Assuming that humanity continues to rely on voluntary population control (vcp) when, if ever, will the "exhaustion" of fossil fuels (use any definition of "exhaustion" you consider appropriate---exhaustion could be economic, physical or in some other manner) cause a reduction 50% or greater in air travel? When you answer this question, describe in detail your definition of "exhaustion".
 - d) When, if ever, will the "exhaustion" of fossil fuels cause reduction in international trade of 50%, or greater?
 - e) When, if ever, will the "exhaustion" of fossil fuels cause a reduction of fertilizers of 50%, or greater.
 - f) When, if ever, will the "exhaustion" of fossil fuels cause a reduction of plastics of 50%, or greater?
 - g) When, if ever, will the "exhaustion" of fossil fuels require Greater New York City, and 15 other major cities around the planet, to obtain more than 50% of their energy from alternative sources of energy?
 - h) When, if ever, will the "exhaustion" of fossil fuels require more than 50% of all the trucks on the planet to obtain their necessary energy from alternative energy sources?
 - i) What is the best estimate of the number of automobiles that will be on the roads of the planet in the year 2100? When, if ever, will more than 50% of those autos require alternative sources of energy to propel them?
 - j) How will the answers to (c)- (i) above affect the chance that voluntary population control will fail?
 - k) Has anyone calculated in great detail how much energy would be required by Greater New York City, if it were required to obtain 50% of its entire energy requirements from alternative sources and how that energy would be obtained, stored (if necessary) and at what cost?
 - l) Since it is a fact that cannot be disputed that most underground aquifers being used to irrigate food crops are being depleted (more water is being withdrawn from them than can be replaced by nature), at some point of time most of them will either not produce water, or produce water at very limited amounts-- the questions become for each aquifer--when will that happen and how will that affect the local and worldwide food production situation?
 - m) Have those that are prepared to gamble the collapse of civilization on vpc calculated what alternative sources of water will be available to replace the water that was previously supplied by the aquifers?
 - n) A simple math calculation shows that to just maintain the total current worldwide output of CO2 gas by humanity, the per capita output of CO2 by the year 2100 will have to be reduced by about 32.1% (total output today of 7.6 billion units assuming a population of 7.6 billion at an average of one unit per capita---at a population of 11.2 billion (see # 16 above) the output per person would have to be .679 units per person---11.2 times .679=7.6) That decrease would have to be further reduced by the increase in CO2 production due to the increasing economic activity of the nations of the world and in particular the nations of the Third World. In view of the fact that is almost certain that the per capita usage of resources will increase, will humanity be able to control the production of CO2 such that global warming does not cause one or more major catastrophes to occur before the year 2100?
 - o) Will global warming cause the oceans to rise such that many coastal cities would be flooded and causing hundreds of millions to be relocated before the year 2100? Will global warming effect the rivers of India and Southeast Asia such that massive starvation will occur prior to the year 2100?
 - p) What is the chance that the lack of resources in relation to the ever-growing human population will cause one or more wars before the years 2100 or 2150 between nations that have weapons of mass destruction?
 - q) What is the chance that there will be one or more wars between Pakistan and India, both of which have weapons of mass destruction, over the lack of resources necessary to feed their exploding populations before the year 2100?
 - r) What is a chance that there will be one or more wars, with weapons of mass destruction, between Israel and its Arab neighbors due to the exploding populations of Israel, Egypt and the other Arab nations before the year 2100?
 - s) What is the chance that the average per capita usage of resources will increase between now and 2100?
 - t) What will be the effect of an increase of the average per capita usage of resources be on the ability of humanity to get out of overshoot before civilization collapses with the deaths of billions?

- u) What will the effect be of the predicted population growth on the ability of humanity to get out of overshoot before civilization collapses with the deaths of billions?
- v) How long can humanity remain overshoot before the collapse of civilization commences?
- w) In view of all the problems presently faced by humanity, can a rational argument be made at the collapse of civilization has already commenced?

These are at least hundreds of more questions that must be answered and considered by humanity in order to determine the risk of failure of vpc to prevent the collapse of civilization. While the UN's demographers are not gods and cannot guarantee the accuracy of their estimate/prediction/projection of the human population for the year 2100, in considering vpc we must assume that their projection of humanity attempting to add 3.6 billion people between now and the year 2100 is accurate. To the best of my knowledge, no reputable demographers dramatically disagree with the 3.6 billion estimate made by the UN's demographers.

Those that are opposed to any discussion of coercive population control and are prepared to gamble the collapse of civilization on vpc have the moral and ethical duty to state when population growth will cease and the level at which it will cease, if humanity were to continue to gamble its survival on vpc. In addition, they have the moral and ethical duty to show that growth will cease prior to the collapse of civilization. To the best of my knowledge, not us one person that refuses to discuss coercive population control has produced a paper or document providing the date on which population growth will cease and the level at which it will cease, if humanity continues to gamble survival on vpc.

A quote from a paper written in 2010 by William N. Ryerson is set forth below. Mr. Ryerson has studied the population problem for over 40 years and is founder and president of Population Media Center and president of the Population Institute.

"The top three countries for population growth are India, China, and the United States. India grows by about 17 million per year, China by about 7 million per year, and the United States by about 3 million per year. These three countries plus Nigeria, the Democratic Republic of the Congo, Pakistan, Indonesia, Uganda, Ethiopia, Bangladesh, Brazil, and the Philippines, are poised to grow by 1.6 billion by 2050, representing 63% of the world's projected growth of 2.6 billion in the coming four decades. THESE PROJECTIONS ARE BASED ON ASSUMPTIONS ABOUT REDUCED FERTILITY RATES IN ALL TWELVE OF THESE COUNTRIES. IF THE REDUCTIONS DO NOT OCCUR, THE WORLD'S POPULATION COULD DOUBLE TO 13.6 BILLION BY 2067." (Emphasis added)

No one on the face of the earth can guarantee with 100% certainty that the reductions in fertility rates referred to above will be achieved. Since humanity will be gambling the collapse of civilization on a worldwide basis, if there even is a 10% chance that the reduction in fertility rates referred to above will not be achieved and that population will attempt to reach the 13.6 billion referred to above by 2067, the failure to consider coercive population control and compare it to vpc is an act of supreme stupidity and arrogance on the part of those opposed to a discussion of coercive population control. Those that refuse to discuss coercive population control believe they are God on earth and that their knowledge is sufficient to gamble the collapse of civilization on voluntary population control without considering coercive population control or any other alternative to vpc. It is extreme stupidity and arrogance to refuse to gain additional knowledge by a discussion of coercive population control and the comparison between it and vpc. And, in my view, there is at least a 10% chance that the reductions in fertility rates referred to above will not be achieved.

Since the earth and the resources it can provide humanity are finite and limited, at some point in time both population and economic growth must cease, no matter what actions are taken by humanity. No one can dispute the fact that, at present, both the population and the economy grow in a compound/percentage manner. No one can dispute the fact that compound growth is the most powerful force in the universe—see number 29 above. Based upon these three facts, I hold every economist face of the earth, with only very few exceptions, in contempt for their failure to advise the leaders of humanity that society must be modified to exist in a steady state--- that is a state in which neither the population nor the economy grow. In fact, I hold them in contempt for their failure to advise the leaders of humanity that due to the fact that humanity is in overshoot that both the economy and the population must immediately be reduced on a worldwide basis, if humanity wants to survive into the future. In simple terms, any person who contends or states that humanity can remain in overshoot is a total and complete idiot and a mass murderer. If humanity desires to survive into the future, it must get out of overshoot as quickly as possible and this can be done only by reducing the human population and/or reducing the average per capita usage of resources. It is my contention that if the economy of the planet were to attempt to grow at the annual rate of 3.5% per year (doubling every 20 years resulting in an economy attempting to grow by a factor of more than 16 by the year 2100-2,4,8,16) that attempted growth would result in the collapse of civilization before the year 2100 due to nations fighting wars, with weapons of mass destruction, over the resources to support that economic growth. I challenge any economist to show that the planet will be able to supply the resources necessary to support an economy 16 times as large as the current economy. I challenge any economist to show, with at least 70% certainty that the planet will be able to supply the resources necessary for a human population of 11.2 billion that is predicted to exist in the year 2100, when the average per capita usage of resources increases by a factor of 1.5 compared with the average per capita usage of resources today.

Let me be very blunt, I am almost 83 years of age and I do not care if I insult anyone or everyone who reads this essay. If they are insulted, it is due to their own stupidity, arrogance, and belief that they are God on earth.. What I do care about is a simple question--can anyone find errors in math, facts or logic of this essay. I invite anyone reading this essay to attack it by showing that there are errors in the math, facts or logic. My email address is jbrent6179@aol.com

Attached is a copy of pages 4-7 of the introduction to a book entitled "Ethics for a Finite World" written by Herschel Elliott and published by Fulcrum Publishing of Golden, Colorado. If you are concerned about the future of humanity, you are urged to read this book. It can be obtained from Amazon and Barnes & Noble and costs about \$13 plus shipping. If you cannot afford to buy the book, please contact me and I will be happy to buy it for you. I am not a shill for the book, but, in my opinion, it is so important that everyone concerned about the future of humanity should read it.

To elaborate the first point: as the Earth's natural capital is spent down, the profits from economic production can no longer be invested to finance the exploitation of more land and natural resources. Profits can no longer be used to build the manufacturing facilities needed to create more jobs, expand infrastructure, and produce more consumer goods and services. When nature can no longer tolerate the further human exploitation of the Earth's lands and capital resources, the people of the rich industrial nations will have to revise—downsize—their way of life. A steady increase in economic production will no longer be available to pull the increasing billions of the world's poor into the state of security and prosperity enjoyed in the modern industrialized and urban societies. Capitalist economics will become a steady state system, or it will falter and become extinct.

To elaborate the second point: as the Earth's stock of natural resources is depleted, the focus of moral life can no longer be human centered. That is, the moral goal cannot be to meet all human needs, to relieve the suffering of billions of the world's poor, and to assure equal justice and equal opportunities for all members of an expanding human population. To be specific, moral behavior can no longer be directed toward growing more food; creating more jobs; building more low-cost housing; expanding municipal water and sewage-treatment plants; constructing a greater infrastructure of highways and parking lots; making medical care available universally; finding cures for AIDS, malaria, and other devastating diseases; building and staffing more schools, libraries, and research facilities; or setting aside more parks and nature preserves where city residents can find relief from the hubbub of urban life. The Earth no longer has the land and material resources necessary to satisfy

the physical demands of the steady growth in population and in economic production—which the principles of Western ethics validly entail.

When faced with a scarcity of land, water, fuel, and natural resources, more compassion, greater moral effort, more sacrifices, and an equal sharing can do nothing to create more of these vital necessities. They can do nothing to alleviate the poverty and inequities caused by overpopulation and environmental degradation. The Earth no longer has the resources that allow an expanding human population to satisfy, with equality and justice for all, its expanding material needs. Unfortunately, this will be true especially for the hundreds of millions of the most needy who live in the shantytowns surrounding many of the world's megacities.

In short, the error of Western ethics is to attribute persistent human need and suffering to the moral failure of the citizens of the wealthy nations to make the sacrifices necessary to lift the world's poor out of poverty. As long as an egalitarian ethics entails the moral obligation to give philanthropic aid without conditions, it will subsidize the status quo—a steady increase in the population and a steady increase in the exploitation of the Earth's limited lands and natural resources. Eventually, continual growth will so degrade the world environment that it will be physically impossible to support the practice of this ethics.

The argument in support of an ethics for a finite world has four parts. In chapter one, the task is to establish the environmental principle and the empirical nature of ethics. The Darwinian explanation for the evolution of species suggests a similar explanation for the evolution of social behavior. Human moral conduct is only a special case of the conventions that direct the behavior of all social animals. Human

societies can only propose the conventions that they will try to live by; nature either tolerates their proposals or it denies them. The physical necessity to maintain the durability and resilience of an evolving ecosystem makes the knowledge of ethics incomplete and conditional. Inevitably, nature—not a rational argument from the human-centered definition of value and from moral principles that are merely assumed—is the final determinant of the ethical theories that can guide human behavior on this finite Earth.

In chapter two, the task is a critical one: to point out the conceptual and methodological errors at the foundation of Western ethics. The first section lists moral principles and human rights that are not subject to empirical refutation. The second section shows the inadequacy of rationalist methods for justifying moral theory. The third section demonstrates that to maintain the naturalistic fallacy is to make it impossible for empirical evidence to refute a moral theory. And the fourth section details the deficiencies of an ethics conceived as moral rules for personal behavior.

As long as moral theory uses nonempirical and rationalist methods to justify universal human rights and moral principles, it cannot resolve—indeed, it is likely only to exacerbate—the present destructive exploitation of the Earth's finite resources.

Chapter three has a constructive task: to state the principles that are suited to direct moral behavior in a finite world. It builds on the environmental principle—the factual necessity of assuring the endurance and resilience of the Earth's system of living things. It requires both physical and biological constraints on moral behavior. There are eight corollary principles that help maintain a durable and resilient environment. The goal of these principles is to

reduce the human population as rapidly as possible and to stop the destructive exploitation of the Earth's natural and biological resources.

Chapter four has a practical task: it lists many of the proposals that environmentalists commonly advocate. It also suggests new ones, and it calls for thinking up an indefinite number of others. However, all proposals require empirical evidence to test whether they further or thwart the goals of moral behavior in a finite world.

The fact that a proposal wins the approval of the majority of voters is not an appropriate test because voters often disregard long-term societal and environmental needs. Similarly, proposals that support a larger human population or an increase in the production of consumer goods and services may win majority approval but fail objective environmental tests; they may destabilize society or put the environment in jeopardy.

There are no final moral answers. Nature never tells people what they ought to do; but it does alert people to what they cannot do. Nature always has a veto over the moral laws and principles that people use to guide their lives. The indirect empirical method of sloughing off what does not work and retaining what does makes the knowledge of ethics cumulative and open-ended.

No ethical theory can tolerate moral behavior that allows a scarcity of resources to force people to abandon their moral ideals. It is a moral duty for people to live within the support capacity of their national boundaries and for them to maintain an ample margin of safety. Clearly, both the size of the human population and the quantity of material resources that human beings utilize work together to alter the rules for moral behavior. Human rights and moral