






CHAPTER 31

TRANSITION FROM A HUMAN CENTERED TO A BIOSPHERE CENTERED WORLD VIEW



“WE DON’T PERCEIVE THE WORLD AS IT IS, BECAUSE OUR NERVOUS SYSTEM EVOLVED TO SELECT ONLY A SMALL EXTRACT OF REALITY AND TO IGNORE THE REST.”¹



-  *“We never experience exactly the same situation twice, so it would be uneconomical to take in every occurrence.”¹*
-  *“Instead of conveying everything about the world our nervous system is ‘impressed’ only by dramatic changes.”¹*
-  *“This internal spotlight makes us sensitive to the beginnings and endings of almost every event more than the changes, whether gigantic or tiny, in the middle.”¹*







“ALTHOUGH PRELIMINARY ESTIMATES FROM PUBLISHED LITERATURE AND EXPERT SURVEYS SUGGEST STRIKING AGREEMENT AMONG CLIMATE SCIENTISTS ON THE TENETS OF ANTHROPOGENIC CLIMATE CHANGE (ACC), THE AMERICAN PUBLIC EXPRESSES SUBSTANTIAL DOUBT ABOUT BOTH THE ANTHROPOGENIC CAUSE AND THE LEVEL OF SCIENTIFIC AGREEMENT UNDERPINNING ACC.”²



“NEARLY 7-IN-10 (69%) AMERICANS SAY THAT THERE IS SOLID EVIDENCE THAT THE AVERAGE TEMPERATURE ON EARTH HAS BEEN GETTING WARMER OVER THE PAST FEW DECADES, COMPARED TO 26% WHO DISAGREE.”³

-  ***“Americans are divided along partisan and religious lines about the underlying causes of climate change.”³***
-  ***“Only 4-in-10 Americans believe that scientists generally agree that Earth is getting warmer because of human activity.”³***

 **“CHANGE DOES NOT ROLL IN ON THE WHEELS OF INEVITABILITY, BUT COMES THROUGH CONTINUOUS STRUGGLE. AND SO WE MUST STRAIGHTEN OUR BACKS AND WORK FOR OUR OWN FREEDOM.”** (Martin Luther King)










-  Clearly, the global general public is far from reaching a level of literacy about the impact of global warming and other climate changes upon the Biosphere to be motivated to take strong, immediate, and remedial measures.
-  One of the major causes of the disconnect between science and society is the scientific evidence that humanity's present lifestyle is unsustainable.
-  A sustainable lifestyle must be congruent with the universal laws of biology, chemistry, and physics.







“EVERYONE IS ENTITLED TO THEIR OWN OPINIONS, BUT THEY ARE NOT ENTITLED TO THEIR OWN FACTS.” (Daniel Patrick Moynihan)

- 🌍 **Earth’s life support system, the Biosphere, is being damaged, and damage continues.**
- 🌍 **Deniers that global warming is worsening due to human greenhouse gas emissions have not produced any contrary scientific evidence.**
- 🌍 **In matters of human health, the principle is “First, do no harm.”**
- 🌍 ***“When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically.”⁴***
- 🌍 **Surely the planet’s life support system is a “must” situation for applying the precautionary principle.**





THE TRANSITION TO A SUSTAINABLE RELATIONSHIP WITH THE BIOSPHERE WILL REQUIRE THAT ALL OF THE FOLLOWING CONDITIONS BE MET.


-  **Atmospheric greenhouse gas concentrations must be reduced to the pre-industrial level.**
-  **The human population must be reduced to and remain within Earth's carrying capacity.**
-  **Ecological overshoot must be eliminated.**
-  **Biodiversity loss and biotic impoverishment must cease, accompanied by conditions that will favor evolutionary replacement of lost species.**
-  **The growth economy must be replaced by a steady state economy.**
-  **Refugees displaced from any part of the Biosphere must be halted or they will drain resources from the areas they perceive as advantageous and damage local portions of the Biosphere.**
-  **Widely disproportionate allocation of both energy and resources must be curtailed to reach societal stability.**
-  **Damaging natural capital to foster economic growth must cease.**
-  **Humanity must cease ignoring the universal laws.**




 **IN ORDER TO MAKE AN EFFECTIVE TRANSITION TO A BIOSPHERE CENTERED WORLD VIEW, IT IS ESSENTIAL TO EMPHASIZE THAT THE BIOSPHERE IS EARTH'S LIFE SUPPORT SYSTEM AND THE SOURCE OF THE RENEWABLE RESOURCES THAT ARE THE RAW MATERIAL OF THE HUMAN ECONOMY.**

-  **To most people, the word *environment* means a miscellaneous collection of plants and animals with no apparent function. The word *system* conveys both structure and function.**
-  **Collapse of the Biosphere is the most serious threat to both global and national security, not the price of gasoline or a nuclear threat.**
-  **An equally serious threat to both global and national security is humanity's inability to take any substantive action on any of nine interactive threats to the Biosphere.⁵**

SAVING AND NURTURING THE PRESENT BIOSPHERE WILL REQUIRE A GLOBAL CONSENSUS ON THE GOALS AND CONDITIONS NECESSARY FOR ESTABLISHING A SUSTAINABLE WORLD.

-  **Sharply focused special interest groups are a major obstacle to achieving a holistic perspective on large, multivariate, interactive systems such as the Biosphere.**
-  **Science must play a major role in this endeavor by verifiable evidence to facilitate value judgments.**
-  ***“ . . . at the moment the gravest threat is our own inability to take action on fundamental threats, like global warming.”⁶***
-  **In order to adequately inform the public, the news media must give high priority to the preponderance of scientific evidence instead of giving equal weight to both “sides” regardless of the amount of evidence.**

 **IN ELEMENTARY AND MIDDLE SCHOOL, “. . . ‘SCIENCE EDUCATION’ WOULD BE REDEFINED, WITH A LASER-SHARP FOCUS ON GAINING THE SCIENTIFIC HABITS OF MIND THAT WILL BE NEEDED BY EVERYONE TO SUCCESSFULLY NEGOTIATE HIS OR HER WAY THROUGH OUR INCREASINGLY COMPLEX, CROWDED, AND CONFUSING SOCIETIES.”⁷**

-  If this strategy were implemented, then when scientists were accused of perpetuating a hoax or engaged in conspiracies, citizens would ask: “Where is the scientific evidence?”
-  A scientifically literate public would understand that the uncertainty in science is no different than uncertainty in all aspects of life — one cannot possibly include all the possible variables.
-  A scientifically literate public would not tolerate the misinformation of the “merchants of doubt.”⁸



“ONLY BY HEEDING THE VOICES OF THE NEXT GENERATION CAN WE SUCCEED IN BUILDING A BROAD-BASED SCIENTIFIC COMMUNITY THAT CAN ADDRESS THE DAUNTING CHALLENGES OF OUR TIMES — FOR IN A VERY REAL SENSE, THE FUTURE IS IN THEIR HANDS.”⁹

- ① **Humanity cannot restore the Biosphere to its condition when the present generation “inherited” it; however, human society can educate future generations so that they will better understand the present Biosphere and the need for goals and conditions to nurture it.**
- ① **Humanity can continue its present unsustainable lifestyle, possibly for a few decades, or make some immediate “sacrifices” to preserve the present Biosphere for its children and grandchildren. Your move, *Homo sapiens*.**

Acknowledgments. I am indebted to Darla Donald for transcribing the handwritten draft and for editorial assistance in preparation for publication and to Paul Ehrlich and Paula Kullberg for calling useful references to my attention.

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