#### **CHAPTER 47**

#### OIKOS, ECONOMICS, ECOLOGY, AND THE FUTURE OF THE SIXTH BIOSPHERE

**"WHILE SO-CALLED EMERGING COUNTRIES, SUCH** AS CHINA AND INDIA, ARE NOW RESPONSIBLE FOR MOST OF THE GREENHOUSE GASES THAT ARE CAUSING CLIMATE CHANGE, THE ESTABLISHED (POST) INDUSTRIAL COUNTRIES IN THE WEST HAVE LED THE WAY OVER THE LAST CENTURY. THIS DICHOTOMY HAS LED TO AN UNHEALTHY AND SILLY DEBATE OVER WHO IS MOST AT FAULT AND WHO SHOULD CHANGE MOST. THE EMERGING COUNTRIES WANT THEIR PLACE IN THE ECONOMIC SUN, AND THE OLDER ECONOMIC COUNTRIES WANT TO PRESERVE THEIR POSITION. THE TRUTH OF THE MATTER IS THAT NO ONE IS GOING TO BE ABLE TO PRESERVE THE CURRENT TRAJECTORY. IT IS THAT SERIOUS." 1

This is no time for political games — this is the time to do everything possible to leave a habitable world for posterity!

"OIKOS IS THE GREEK WORD FOR HOUSEHOLD, WHICH MEANS THE WORDS ECONOMY (OIKOS-NOMOS, THE PROPER MANAGEMENT OF THE HOUSEHOLD), ECOLOGY (OIKOS-LOGOS, THE STUDIED KNOWLEDGE OF OUR PLANETARY HOUSEHOLD), AND ECUMENICITY (OIKOU-MENIKOS, AN OPENNESS TO THE WORLDWIDE HOUSEHOLD) ALL SHARE A BASIC ORIENTATION TO HOME. IN AN AGE OF CLIMATE CHANGE, FINANCIAL CRISIS, AND GLOBAL PROTEST, THERE IS A GROWING RECOGNITION THAT THE PRESENT WAYS OF ORDERING OUR HOUSEHOLD LIFE TOGETHER CANNOT BE SUSTAINED. THE TIME IS RIPE FOR A NEW ECONOMY."

(http://www.garrett.edu/index.php/the-oikos-of-god)

- Humanity has decupled economics, ecology, and ethics/morality with disastrous consequences.
- Economics must become congruent with the other two legs of a threelegged stool.

# HUMANITY IS FACING ITS MOST SEVERE CRISIS IN 200,000 YEARS, CAUSED BY THE ILLUSION THAT IT IS NOT COUPLED TO THE UNIVERSAL LAWS OF PHYSICS, CHEMISTRY, AND BIOLOGY.

- However, *Homo sapiens* evolved and flourished in the sixth Biosphere and its fate is strongly coupled to the fate of this present Biosphere.
- Since humanity is strongly coupled to the present Biosphere, it seems reasonable to assume that humanity would be urgently trying to eliminate the nine interactive threats to the Biosphere. <sup>2,3</sup>
- Recoupling efforts (i.e., humanity to Biosphere) are at present far from adequate, so *Homo sapiens* is a species threated with a simultaneous collapse of civilization and the present Biosphere.
- Homo sapiens is an exceptional species in many ways, but is not exempt from the universal laws that have produced many millions of other species and resulted in their extinction.

#### # "A GREAT CIVILIZATION IS NOT CONQUERED FROM WITHOUT UNTIL IT HAS DESTROYED ITSELF FROM WITHIN."4

- The costs of doing nothing about climate change are becoming clearer after Hurricane Sandy devastated New York state and the state of New Jersey.
- \*For years, the city and the state of New York commissioned reports about the dangers of rising sea levels combined with a powerful hurricane. And for years, dissuaded by the costs of doing something, New York put in place few new preparations for a massive storm surge." 5
- \*Following Hurricane Sandy, estimated recovery costs have skyrocketed."5
- "... we haven't even begun to figure out what a dream protection system would look like, much less what it would cost..." <sup>5</sup>

#### **♣** ONE WOULD EXPECT SENIOR EXECUTIVES TO PAY CLOSE ATTENTION TO REGENERATION OF NATURAL RESOURCES BECAUSE THEY ARE THE BASES OF THE HUMAN ECONOMY. WRONG, WRONG, WRONG – THEY ARE NOT!

- \* "The survey, of 475 senior executives in Brazil, China, South Korea, the UK and the US, shows that many are not prepared to look at the issue of resource shortages now and believe they will not need to make significant changes in their business operations to combat resource scarcity until 2018."6
- **(\*)** However, renewable resources are an output of the sixth Biosphere, which is already badly damaged by ecological overshoot.
- (\*) "... research shows that many organizations are 'asleep at the wheel' when it comes to addressing sustainability and resource scarcity, doing nothing to address a problem they indicate could hit their operations by 2018." 6
- No mention was made of collapse of the sixth Biosphere.

# H THE RESPONSE TO THE DAMAGE CAUSED BY SUPERSTORM SANDY IS A SUPERB EXAMPLE OF COGNITIVE DISSONANCE: HUMANKIND IS BUILDING BARRIERS TO SEA LEVEL RISE BUT NOT DOING ENOUGH ABOUT THE CAUSE OF SEA LEVEL RISE — ANTHROPOGENIC GREENHOUSE GAS EMISSIONS.

- Climate change is affecting biological evolutionary processes in species with short life cycles, but social evolution should be the primary response in *Homo sapiens*.
- The preponderance of scientific evidence confirms that there is a close connection between anthropogenic greenhouse gas emissions and climate change.
- A carbon tax on all fossil fuels would have immediate short-term benefits as well as on long-term benefits.<sup>7</sup>

♣ AFTER SUPERSTORM SANDY, THERE HAS BEEN MUCH DISCUSSION ABOUT REBUILDING THE STORM DAMAGED AREAS (E.G., SUBWAYS, RESIDENTIAL HOUSING) BUT WILL THE REBUILDING BE FOR THE OLD CLIMATE NORM, WHICH NO LONGER EXISTS, OR THE NEW CLIMATE NORM THAT REQUIRES MUCH EFFORT AND EXPENSE?

- For example, 2012 was the hottest year on record in the contiguous United States.8
- Almost everyone will wish to return to the climate of the 20<sup>th</sup> century once the new normal 21<sup>st</sup> century climate affects their lives adversely. However, passing climate tipping points produces irreversible change to which humanity may not be able to adapt.
- However, action to eliminate further damage to the climate system (e.g., reduction of anthropogenic greenhouse gas emissions) and damage to the present Biosphere is essentially nonexistent.
- It is essential to eliminate economic practices that result in climate change and damage the present Biosphere.

## THE TRANSITION TO A SUSTAINABLE WORLD9 WILL NOT BE EASY. IT WILL MEAN A NEW PERSPECTIVE ON RESOURCE AVAILABILITY AND DISTRIBUTION.

- Neither biological nor social evolution has prepared *Homo* sapiens for the rapid climate changes that greenhouse gas emissions from over 7 billion people has caused.
- Greene<sup>10</sup> states "Although Einstein refused to take his own theory at face value and accept that the universe is neither eternal nor static, Alexander Friedmann did."
- It is indeed a dangerous world but humankind can make it less dangerous by reducing greenhouse gas emissions.

## # EXAMINING THE WORST CASE SCENARIO CAN BE USEFUL, ESPECIALLY WHEN HUMAN DENIAL IS INVOLVED. SOME WORST CASE SCENARIOS FOLLOW.

- This is the way the world ends. Not with a bang but a whimper."

  T. S. Eliot, The Hollow Men (1925)
- To be Irish is to know that in the end the world will break your heart."

  Daniel Patrick Moynihan (1963)
- (1) "I sat in the dark and thought. There's no big apocalypse. Just an endless procession of little ones." 11

"THE POINT IS THAT WE'RE LOADING THE DICE AGAINST OURSELVES. WE'RE ALTERING ALL THE BIOPHYSICAL CONDITIONS AROUND THE ENTIRETY OF THE PLANET THAT WE'VE BEEN ADAPTED TO FOR HUNDREDS OF THOUSANDS OF YEARS AS A SPECIES. WHAT'S MORE, WE'RE ALTERING THOSE CONDITIONS EXTREMELY RAPIDLY, AND WE DON'T FULLY UNDERSTAND THE CONSEQUENCES. WE'RE PLAYING WITH A LOT OF PARAMETERS SIMULTANEOUSLY - RISING TEMPERATURES, CHANGING WEATHER PATTERNS, SEA LEVEL RISE, OCEAN ACIDIFICATION, CHANGES IN THE DISTRIBUTION OF INFECTIOUS DISEASES - WITHOUT A FULL OR EVEN PARTIAL UNDERSTANDING OF WHAT ALL THE IMPLICATIONS OF THESE CHANGES MIGHT BE."12

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