

Book Review

BALANCING NATURE AND CIVILIZATION: Alternative Sustainability Perspectives from Philosophy to Practice

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Abstract: The book is a collection of papers presented at an international symposium on “Sustainability—Can We Design the Future of Human Life and the Environment?” The Graduate School of Environmental Studies of Nagoya University hosted this event to remember the atomic bomb that struck Hiroshima in World War II. Researchers from all over the world, hailing from different backgrounds and disciplines, came together in this symposium to explore, present, and discuss the various issues, causes and possible solutions for the various environmental challenges that are presently plaguing the world and the environmental impacts caused by different civilizations and values on nature and ethics.

Keywords: Environmental Impacts, Nature and Civilization, Sustainability.

In the Introduction, titled, “Can We Design the Future of Human Life and the Environment?” Yoshitsugu Hayashi, the chairperson of the symposium, spoke on the changes in the world environment and gave his insights for maintaining the balance between nature and human-

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generated activities. The Earth, with its finite resources, cannot fulfil the infinite and unbridled ambitions of humankind. We need to discover new ways of achieving environmental balance, set interim targets for reducing greenhouse gases, invent the necessary technologies, and implement policies at global levels in the developed and developing world (3).

In chapter 2, "The Fate of Twentieth-Century Civilization - A Discussion of 'Post-oil Strategies,'" Yoshinori Ishii, a geophysicist, highlights the scarcity and paucity of natural resources and discusses possible sustainable ways for living in the future. Humanity is long past peak oil production, and the 'Petroleum Civilization' reign is about to be over (10). In his view, it is unrealistic to look forward to methane hydrate and hydrogen as substitutes for the currently available energy resources (15). He suggests solar and bio energies as sustainable energy sources, if appropriately tapped. The Japanese ideal of *mottainai*, curbing financial and material squandering, is necessary for the well-being of the people and the planet.

According to Hans-Peter Durr, a nuclear physicist, humanity, like a bank robber, has been pillaging and looting the natural resources of this world indiscriminately. As a house of cards crumbles quickly and effortlessly, so will the biosystem we live in. In his paper, "Sustainable Use of Energy," he stresses that spirituality and value-based cooperation are the roads we must travel, balancing nature and civilizations. We need new forms of political assembly that work for our future, which considers what will become of our children's and grandchildren's generations (27). The rich and industrialized countries use a disproportional share of energy and hence contribute massively to CO₂ emissions. Though they expend nominal energy, the poor and developing countries suffer the most from human-generated climate change. Using the notion of 'energy slave' (28), he talks about the required number of energy slaves for each of the various resources that are presently available and the energy slaves used by a single person. One kilowatt per hour is akin to keeping one energy slave. An average Japanese is using 50 energy slaves. To bring that down to 15 energy slaves, which is considered an ideal for the sustainability of the biosphere, the Japanese must alter their lifestyles and cut down on their energy consumption considerably.

In chapter 4, "Sustainability from the Perspective of Environmental Archaeology," Yoshinori Yasuda, an environmental archaeologist and biologist, explains the close connection between the human diet and its effect on forests and ecosystems. Through the extraction and study of fossilised pollen from Earth, he reconstructs past environments and explains how forests or the climate changed (33). He argues that countries can save their flora, fauna, and other natural resources by adopting environmentally friendly diets through various examples. Vegetarian and aquatic food is preferable to meat to protect the ecosystem of forests and the water cycle. He presents the Japanese model with well-maintained forests and water cycles to solve worldwide ecological erosion (47). The Japanese revere nature, and the Japanese ideal of *jihhi*, meaning benevolence, for the whole of humanity and nature (49) is the key to saving Earth and humanity.

Minora Kawada, in chapter 5, "Re-evaluating the Traditional Japanese Perspective on Nature and Ethics," examines the works of Kunio Yanagita, a pioneer of modern Japanese folklore study, to show that the perspectives on nature and ethics held by ordinary people are highly significant (52). According to Yanagita, people believed in a local god, Ujigami, who oversaw their day-to-day life and lived according to the ideal of inter-generational justice - "work for the continuation of descendants and watch over their future" (56). The current generation must not limit future generations through their daily lifestyle and the overuse of natural resources for their needs (53). The adherence to nature, which is embedded in their daily life routine, is called 'living environmentalism' (58). Kawada points out that modernization is necessary, but the resource consumption lifestyle may cause severe problems in the future (60). Though Yanagita approached these issues in the turbulent situation of Japan in the 1920s, the same could be applied to issues of regional environmental protection and the coexistence of human beings with nature (60).

Chapter 6, "*Kosa* (Asian Dust Particles) and Air Pollution in Asia," by Yasunobu Iwasaka, a climate scientist, sheds light on the environmental phenomenon. *Kosa* research started in earnest in the fields of meteorology, atmospheric science, etc. in the 1960s and 1970s because of the energy problems Japan was facing at that time (65). With the passage of time, researchers started to use *kosa* as a tracer to study global climatic patterns and their shifts (67). While *kosa* is airborne, it reacts chemically with other nearby airborne particles.

Furthermore, *kosa* may be blocking, absorbing, or reflecting radiation from the sun, thus actively affecting nature and the quality of the environment instead of it being a passive element. Governments around the world are being asked to “handle *kosa* as an agent of global warming rather than as a tracer” (71) and tackle *kosa* as a serious environmental problem (76).

In chapter 7, “Environmental Charges Levied on Heavy Goods Vehicles in the EU,” Werner Rothengatter, a German transport economist and a traffic engineer, stresses the need for penalising heavy goods vehicles, one of the worst offenders in creating air pollution. The revised Directive 2011/76/EU added environmental costs for air pollution and noise (e 86). All the EU countries have fully agreed to reform toll systems, put a bar on emission thresholds, and have taken other pollution curbing measures. The paper gives many data with no significant analysis, arguments or conclusions.

Later, a report of the panel discussion is given. Yang Dongyuan, Vice President, Tongji University, stressed the need for China, the 2nd largest market economy after the US, to solve the environmental problems that affect China, neighbouring countries, and the world in general. Lee Schipper, the second panellist, called upon India and other developing countries to emulate Japan in overcoming environmental challenges by introducing various regulations. However, Itsuo Kodama, the third speaker, argued that the Japanese are more interested in health-related media than media on environmental challenges. He further reiterated that the ecological footprint of the US is far more than that of any other country, yet it is least affected by it. On the contrary, underdeveloped countries, the least emitters of pollution, are the most impacted. The questions and answers session clarified some of the issues raised and added further insights into the environmental challenges afflicting humanity.

Overall, the book is an excellent addition to the reservoir of new knowledge and fresh perspectives concerning the environmental problems of the modern world. The lessons learnt from the symposium will make humanity aware of the various problems and challenges for the survival and wellbeing of the people and the Earth. Many of the solutions and directions that were given as a result of extensive research, will help humanity live in harmony with nature. The book is an asset for students, teachers, scientists, political science students, policymakers, and general readers.