

THE GLOBAL TOWER OF BABEL

Only in the last quarter of my life have we come to know what it means to be custodians of the future of Earth—to know that unless we care, unless we check the rapacious exploitations of our Earth and protect it, we are endangering the future of our children and our children's children. We did not know this before, except in little pieces, people knew that they had to take care of their own...but it was not until we saw the picture of the Earth, from the moon, that we realized how small and helpless this planet is—something that we must hold in our arms and care for.

Margaret Mead, March 21, 1977

I am confident that many humans would endorse Margaret Mead's message above, but most would not know precisely how to take action on this prophetic statement that will affect both the present generation and posterity. In addition, how can individuals and dedicated organizations become active and effective custodians of Earth when:

- (1) the global ecological footprint exceeds the regenerative powers of Earth,
- (2) humankind has many languages, cultures, ideologies, and an enormous range of per capita income,
- (3) the major global paradigm is economic growth, even at the expense of natural capital,
- (4) far more money is spent on destructive forces (e.g. military forces and equipment) than on environmental restoration and protection;
- (5) spokespeople of special interest groups denigrate and distort science when it appears to threaten their activities,
- (6) a major portion of the news industry is directly or indirectly controlled by special interest groups,
- (7) many obstacles exist when attempting to visualize the world from multiple integrated perspectives,
- (8) no single discipline can transcend the barriers to integrate knowledge throughout the planet, and
- (9) environmental literacy is inadequate for achieving sustainable use of the planet?

I immediately thought of the Tower of Babel story in which the whole world had one language and a common speech. Humans found a plain on which they built a city with a tower that reached to the heavens and were not scattered over the face of the whole earth. The Lord said, "If as one people speaking the same language, they have begun to do this, then nothing they plan to do will be impossible for them. Come let us go down and confuse their language so they will not understand each other." So the Lord scattered them all over Earth, and they stopped building the city. (There are multiple versions of this story—from Genesis 11:1-9, available on-line in many languages at <http://www.omniglot.com/babel/>; details are available at <http://www.idolphin.org/babel.htm/>.)

Of course, the key to long-term economic and social stability is sustainable use of the planet. Arguably, the key to resolving this issue is China, which is not only a very populous country with a rapidly growing consumer economy but comparatively little natural capital. How China addresses its consumption and production might represent a clear danger to humankind or, alternatively, an unprecedented opportunity to become a model nation for sustainable use of the planet (Flavin 2005).

Natural law has been "solving" bio-capacity problems for roughly 4 billion years. Nature's ways, however, are hard on both individuals and species. Even so, evolutionary processes have survived five major extinctions and will probably survive the sixth now underway. *Homo sapiens* may not be one of the surviving species, but, even if it is, a major loss of human life may occur. A common ground for simplifying this fragmentation (including language, culture, etc.) would be a global consensus on eco-ethics and sustainability ethics, both of which:

- (1) focus intently upon the ethical relationship between humankind and natural systems (Cairns 2003),
- (2) deplore the folly of humankind's unsustainable course of action, which is exhausting the planet's nonrenewable resources, such as fossil fuels,
- (3) deplore the over-harvesting of renewable resources, such as oceanic fisheries and old growth forests,
- (4) agree that global environmental quality is being degraded by automobile emissions, pesticides, nuclear wastes, greenhouse gases, and chlorofluorocarbons, which produce environmental consequences such as biotic impoverishment, global warming, and acid rain, and

(5) are deeply concerned about the exponentially growing human population, increased per capita affluence, and the increasing disparity in per capita distribution of the planet's resources.

Both concepts are essential to the quest for sustainable use of the planet. At present, it is difficult to visualize reaching a consensus or a common ground. Yet a consilience (literally, "leaping together") must be achieved for successful implementation of sustainability, and these ethical constructs are only two of many cultures/languages in the contemporary Tower of Babel. Regrettably, one can find more than one example of language and cultural barriers to a consensus in the news each day.

One major factor in the failure to make an effort to reduce cultural and language barriers is the lack of a long-term perspective, which is essential to any effort requiring a reduction of cultural barriers. Hulbert (2005) reports that investors in the stock market are not interested in the long term. They focus instead on what a stock is likely to do over the next quarter—or just the next week. Equally distressing is that these investors do not project very far, even when they attempt to consider factors that will affect a company's long-term profitability. Since they should have a strong self-interest in the long-term results of investing their personal money and do not, one would conclude they would have even less interest in events far distant in time and space. Yet, stewardship of Earth's natural resources is essential to the quest for sustainable use of the planet, and fair and equitable resource distribution is essential among those now living.

Another major obstacle to a harmonious relationship between people in different cultures speaking different languages is the high probability of an increased frequency and intensity of resource wars. As Brown (2005) notes, competition for vital resources, such as land and water, will increase as they become scarce. Of course, these resource wars will occur among ethnic and religious groups, as well as between the poor and the wealthy in the same culture. For example, the global expansion of the human population cut the grainland area per capita in half, from 0.23 hectares in 1950 to 0.11 hectares in 2000.

Finally, the supply of fossil fuels per capita is decreasing due both to population growth and increased per capita affluence. In addition, at the Prudhoe Bay oil field in Alaska, which still pumps more oil than any other site in the United States, output has fallen nearly 85% from its peak in 1987 and is expected to continue dropping (Blum 2005).

The global Tower of Babel is such a formidable obstacle to achieving sustainable use of the planet that the barriers must be markedly diminished. However, a harmonious relationship with unique local and regional ecosystems requires that cultural diversity be maintained. In a diverse biological world, global standardization is not a viable approach. Diverse languages will be less of a problem if a global consensus can develop on eco-ethics and sustainability ethics, which requires that they be compatible. Neither biological nor social evolution has prepared humankind for this sort of resource partitioning, but, if achieved, it would be a triumph for the ethical approach, which is, in any circumstances, better than the alternative. There is hope. Humankind is, more than any other species, a product of cultural evolution (Ehrlich and Levin 2005). Continual cultural evolution may permit achieving sustainable use of the planet.

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LITERATURE CITED

- Blum, J. 2005. Alaska oil field's falling production reflects U.S. trend. *The Washington Post* 7June:D01.
<http://www.washingtonpost.com/wp-dyn/content/article/2005/06/06/AR2005060601742.html>
- Brown, L. R. 2005. Stopping at seven billion. Chapter 2 in *Outgrowing the Earth: The Food Security Challenge in an Age of Falling Water Tables and Rising Temperatures*. W. W. Norton, New York.
- Cairns, J., Jr. 2003. *Eco-Ethics and Sustainability Ethics, Part I*. Ethics in Science and Environmental Politics, Eco-Ethics International Union, Oldendorf/Suhe, Germany
www.esep.de/journals/esepbooks/EB2pt1.pdf.
- Ehrlich, P. R., L. A. Levin. 2005. The evolution of norms. *PLoS Biology* 3(6):0943-0948.
- Flavin, C. 2005. The environmental burdens of China's development. Letter to Worldwatch Members, Worldwatch Institute, Washington, D.C.
- Hulbert, M. 2005. Looking long-term? Get your glasses. *The New York Times*, Business, 19June
<http://www.nytimes.com/2005/06/19/yourmoney/19stra.html>.