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## Editorial: Where is the Leading Edge?

by John Maskell, Ph.D., Editor

Today, more than ever as we approach the beginning of the third millennium, human society needs to tap its best leading edge thinking. But where is the leading edge? What is it? Where does one look for and expect to find leading edge thinking?

In 1962 Rachel Carson published her classic work *Silent Spring*. In it she traced the cumulative effects of the insecticide DDT. She demonstrated that a negligible residue here and a tiny bit of DDT there added up to a lethal dose of poison for whole populations of animals higher up the food chain, particularly birds. Prior

to Carson's work, the phenomenon of bioaccumulation was publicly unknown. Carson was criticised by many, particularly those with a vested interest to protect. What she suggested was almost beyond imagination, but it changed the way thinking people view the world around them.

In the mid to late 1960s a very great thinker and activist, Aurelio Peccei, pioneered the idea of a global problematique. He broadcast his concerns for the future in a series of lectures in several countries and together with his colleague, Alexander King, founded the Club

of Rome in 1970. Peccei's thinking, writing and speaking covered all the problems of population growth, energy, global warming, ecology, food and hunger, conflict, governance, values and human behaviour. He personified the wholistic approach to global problems which has characterised the Club of Rome. Peccei's work changed the way thinking people view the world around them.

About three decades ago, a several members of the Club of Rome, became very concerned at the rate of human consumption of natural resources. They catalysed the funding for a small group at MIT, under the leadership of Dennis Meadows, to adapt Forrester's Systems Dynamics computer model to study global dynamics in detail. The report, called *The Limits to Growth*, demonstrated that unless society recognises, accepts and acts within the limits and constraints of natural resources and the Earth's capacity to absorb waste products, human society will collapse in the foreseeable future. *The Limits to Growth* was criticised by many, especially those with a vested interest to protect. What it suggested was almost beyond imagination, but it also changed the way thinking people viewed the world around them.

In 1972, the United Nations, under the leadership of Maurice Strong, convened the United Nations Conference on the Human Environment (UNCHE). As a companion initiative Barbara Ward and Rene Dubos wrote *Only One Earth*. Strong, Ward, Dubos and the UN proclaimed that, contrary to popular belief at the time, there was not (and is not) an unlimited capacity for the earth to produce natural resources. More importantly, there was not (and is not) an unlimited capacity for the Earth to absorb the by-products and ramifications of human activity. Furthermore, they proclaimed that environmental issues were no longer just scientific issues; they were also political and economic issues that affected all people in all nations. UNCHE was criticised, particularly those with a vested interest to protect and those Developing Countries which believed that development, not environment, was the crucial issue. What UNCHE suggested was almost beyond imagination, and it changed the way thinking people viewed the world around them.

In 1983, the UN established an independent world commission on Environment and Development (UNCED) under the leadership of Gro Harlem Brundtland to examine, on a global basis, the implications of both environment and development. The

Brundtland Commission heard testimony from thousands of grassroots people and experts. It concluded that human society must learn to develop in its intellectual, financial, cultural, emotional, spiritual environment such that its political and economic behaviour becomes sustainable with the natural environment. It recommended convening an unprecedented world conference of Heads of State and Governments (which became the Earth Summit) to examine the challenges of sustainable development. Brundtland was criticised for the idea of sustainable development. It was almost beyond imagination, but it changed the way thinking people viewed the world around them.

*Leading edge thinking arises from stretching the imagination.*

History has been kind to Carson, Peccei, King, Meadows, Strong, Ward, Dubos and Brundtland. These people are now generally recognised and respected as having been leading edge thinkers. Their thinking is not still leading edge. It has become accepted and respected by many (but not all) as having great validity and as being part of common knowledge. The leading edge is always almost beyond imagination for most people. It is not a comfortable place to be. As long as it is leading edge it more often evokes vigorous, perhaps even vicious, criticism than recognition and respect and often from very powerful people in society. Leading edge thinkers have to continually defend their thinking to power brokers and believers in the status quo, and at the same time continue reaching almost beyond imagination to perceive those changes in direction for which society yearns, yet remains ignorant. It is leading edge thinking that leads to change in the way most people view the world around them.

Not all stretches of imagination become leading edge thinking but all leading edge thinking arises from stretching the imagination. Twenty-five years ago CACOR gave itself the mandate to follow the example of Peccei, King and others such as Strong, Ward and Brundtland. Let us hope that the membership of CACOR will continue to engage in leading edge thinking and that CACOR *Proceedings* will provide a place where people normally look for and expect to find leading edge thinking. There cannot be many organizations that embody greater capacity and expectation for stretching the imagination than CACOR.

With this issue I will be taking over editorship of CACOR *Proceedings* from Dr. Rennie Whitehead who has served with distinction for many years. I invite all members to direct their own and other people's leading edge thinking to CACOR *Proceedings* for publication.