

PROCEEDINGS

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Honoring the Past and Facing the Future

The loss of two old friends cast a pall over spring. Dr. Alexander King and Kenneth Hammond succumbed to the ravages of age early this year. Each had an important influence on the development of CACOR.

Ken Hammond died in March at the age of 92 after a long illness. When I used Hammond transformers in the 1950s I had no idea that the man behind that famous brand would become a close friend and colleague in CACOR. However Ken's concern about global problems started well before he knew anything about The Club of Rome or CACOR. He established a Club of Guelph in the 1960s - a group which met regularly to discuss population growth, energy, environment, food supply, pollution, etc. They also distributed a regular newsletter. Eventually his activities were noticed in CoR circles and he was invited to join CACOR. He was a leading contributor to CACOR Annual Meetings over many years. His excellent booklet¹ about the global predicament is still well worth reading.

During his retirement Ken Hammond made many attempts to introduce the Global Problematique into the University of Guelph curriculum. He seeded several of these with substantial sums of his own money. While the attempts were often frustrated by changes in senior personnel, two of them succeeded – at least for a time. A course titled “5000 Days” was made available to students at all

levels for several years. The annual Hammond Lectures, which he also endowed, still attract to Guelph distinguished speakers on topics relevant to the global problematique. Ken's unique contribution will not be forgotten. We shall miss him.

Alexander King survived his 98th birthday and completed his autobiographical memoirs² in the weeks before his death at the end of February, in spite of severe disabilities. Late chapters of this long-anticipated work provide an account of his role in the founding of The Club of Rome in the late 1960s and his relationship to it in subsequent years, including his years as President.

As a result of discussions in his office at OECD in Paris, Alex came to Canada with Aurelio Peccei in 1970, met the Prime Minister and the Governor General and obtained their support for Canada's activities related to The Club of Rome. He also addressed CACOR Annual Meetings and participated in many ad hoc discussions over the years. It was during the key period 1969 -1974 that CACOR was conceived, born, christened and finally incorporated. We were honoured to be able to take advantage of Alex King's experience and wisdom and we have lost a distinguished and valuable friend.

We had known from private communications that both Alex and Ken had become increasingly pessimistic about the future of civilization. That is not surprising because, even in the formative stages of CoR and CACOR in the late 1960s, some of us working with Alex in his OECD Committee felt that it might already be too late to reverse the effects of unrestrained population growth, excessive consumption and the resultant pollution and waste. Now, 40 years and a few billion people later, we can no longer avoid some of the worst effects of growth.

The dangers of unrestrained growth were formulated by Dennis and Donella Meadows³ in their landmark book "Limits to Growth" in 1972, sponsored by The Club of Rome. Few will remember that their preliminary findings were first presented in Canada. The presentation took place at a full meeting of The Club of Rome, which was held in the Chateau Montebello in April 1971 at the invitation of the small group that was formalized as CACOR three years later. There was initially a strong adverse reaction to its

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“doomsday” projection of disaster if we did not change our ways⁴.

We have not changed. Today, some prominent individuals in the media are now echoing the doomsday message. The Intergovernmental Panel on Climate Change now recognizes⁵ that climate change due to greenhouse gas emissions is in imminent danger of progressing beyond control; that huge reductions of carbon emissions are needed urgently if the danger is to be mitigated. But it is evident that politicians are not prepared to acknowledge the size of the problem, even if they understand its general nature. Their response to climate change is typically too little too late.

So-called ‘clean’ measures such as wind farms, ethanol fuels and changing light bulbs are attractive to politicians mainly for reasons other than global warming. They are popular with industry and the farming community for the subsidies they attract and the jobs they create. The magnitude and timing of their effect on global warming is indirect and can only be estimated by a complex series of calculations. While they may be appropriate in some circumstances, their harmful effects are often overlooked. We know that shutting down a fossil-fueled power station will save 100% of its carbon emissions immediately. So will grounding a transatlantic jet, laying up a ship, taking a vehicle off the road or discontinuing the use of fossil fuels in commercial and domestic premises.

How likely is it that any such direct measures will be taken while the global population continues to grow? New ‘clean’ sources of energy may not even

keep up with the growing demand, and may never replace ‘dirty’ sources at the rate we are growing. How likely is it that politicians in many countries will simultaneously take the draconian measures that are essential to avert the danger? At the time of their last communications, neither Alex King nor Ken Hammond thought it very likely. As Meadows implied, we all have to change our ways. Alex King and Ken Hammond realized the enormity and complexity of the problems ahead and were pessimistic about the ability of people and governments to change before the situation moves out of their control.

Perhaps we could best remember these outstanding individuals by doing what we can to address the pessimism that troubled them. It is already too late to debate technical fixes. CACOR and The Club of Rome should now be concerned with the human response to a critical situation that demands fundamental and uncomfortable change.

J. Rennie Whitehead

¹ *Laying Waste to Planet Earth* by Ken Hammond

² *Let the Cat Turn Round: One Man’s Traverse of the Twentieth Century* by Alexander King, CPTM, December 2006

³ *Limits to Growth* Meadows, Universe, 1972

⁴ e.g. *The Doomsday Syndrome* by John Maddox, McGraw Hill, 1972

⁵ IPCC Report *Climate Change 2007: The Mitigation of Climate Change* May 4, 2007



Dr. Alexander King, CMG, CBE

1909 – 2007

Alexander King, co-founder of the Club of Rome, died on Feb 28th 2007. He was a scientist, international civil servant, integrative comprehensive thinker and pioneering environmentalist, and at the forefront of new approaches about the role of science in public policy. He received wide recognition for his work and was accorded many awards among which were the United States Medal of Freedom, the Erasmus Medal from the Netherlands, and honorary degrees from several universities, including Strathclyde and the Open University.

King was born and raised in Glasgow, Scotland. He received a degree in chemistry at the Royal College of Science, followed by graduate studies at the University of Munich.

King's subsequent lecturing at the Imperial College of Science was interrupted by the outbreak of WWII when he became involved with scientific research at the Ministry of Supply. As a chemist, King was instrumental in the development of DDT, a pesticide that was urgently sought to counter apprehended typhus epidemics in the armed forces.

In 1943 Alexander King was posted to the US to foster collaboration on war directed research programs, becoming the Director of the British Scientific Office in Washington.

After the war, King returned to London and became head of the Central Scientific Secretariat, personal scientific advisor to the Lord President, and secretary of the Advisory Council on Scientific Policy. King then moved to the Department of Scientific and Industrial Research where he extended beyond his grounding in physical sciences to promote research in economic and behavioral sciences, including a ground-breaking analysis of the social, economic, educational, technological and political aspects of automation.

Having been deeply involved with the origin of its predecessor (OEEC) that evolved into the Organization for Economic Cooperation and Development (OECD), King became its Director General for Scientific Affairs. There, he pioneered the study of science in government policy. He also became concerned about the long-term consequences of untrammelled economic growth. Through his contacts King encountered other scientists, industrialists, and members of academe who shared his concern, leading to his becoming aware of the

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Kenneth William Hammond

1915-2007

Kenneth W. Hammond, who was born in and spent his whole life in Guelph Ontario, died on 26 March 2007. Hammond was a successful farmer and an industrialist. Throughout his life Hammond was devoted to his family and the Guelph community. He was in the forefront of those expressing concern about and promoting action to alleviate human-generated damage that was destroying our planet's life supporting environment.

Ken Hammond's interest in looking ahead and strategic planning figured prominently in his participation in the management team with three of his brothers in the firm Hammond Manufacturing that had been started by his father. It was this far-sightedness that promoted his interest in his community and also drove his concern about the damage that humanity is wreaking on this planet and the dire predicament that this would seem to present to future generations.

Hammond was an active participant by means of words, deeds, and donations to various Guelph organizations. He served on the Board of Governors of the University of Guelph, the Board of Managers of the Guelph General Hospital, the Board of Directors of the Guelph YMCA, and was a member of the Guelph Kiwanis Club and the Guelph-Wellington Men's Club. He also started the Club of Guelph, whose purpose was to discuss and promulgate understanding of the damage that human activity is inflicting on the environment. At the time he was unaware of the establishment of the Canadian Association for the Club of Rome which he subsequently joined and actively supported.

"What do you think of living in the economy of waste?" were the words of his auto-mechanic that hit Hammond like a thunderbolt, causing him to think about that question and of the predicament that such an economy would be creating for the future of humanity. With the consciousness generated by that provocation Hammond directed a great deal of effort right up to his death in trying to generate awareness of the situation, of encouraging educational institutions to take a more comprehensive and aggressive approach to studies that could have an effect on the environment, and of encouraging politicians to recognize the deleterious environmental situation and to take corrective action.

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writings and then meeting with Aurelio Peccei, an international Italian industrialist. King and Peccei met to discuss their mutual interests in sustainable growth that was confronted by the threats posed by the population explosion, environmental degradation and misuse of technology.

King and Peccei co-founded the Club of Rome in 1968 with a number of like-minded individuals who shared the co-founders' concern for what became known as the global Problematique. The Club's purpose was to foster understanding of the varied components—economic, political, natural, and social—that make up the global system and especially to recognize their interdependence. To further its purpose, the Club embarked on several studies that brought forth numerous books and reports, the most famous of which is the *Limits To Growth*, based on a computer simulation, which presented projections—if present trends continued—of what could occur with respect to various components of the global system such as population, economic growth, pollution, waste creation, energy consumption and resource depletion.

After his retirement from OECD in 1974, King continued to proselytize his concerns about the Problematique. In related activities he organized the formation of IFIAS—the International Federation of Institutes of Advanced Study, a group of 15 institutes that committed themselves to dealing with aspects of the "world Problematique" and became its first Chairman. He also co-founded the Foundation for International Training in Toronto, as an organization dedicated to providing on the ground technological training in underdeveloped countries. He became head of the Club of Rome on the death of Aurelio Peccei in 1984, retiring in 1992 when his wife became seriously ill.

King's autobiography, *Let the Cat Turn Round* was published shortly before his death. His earlier books include *Science and Policy: the International Stimulus*, *The State of the Planet* (1980), and *The First Global Revolution* (1991).

King's wife, Sara, died in 1999. He is survived by two daughters.

After describing a disturbing and depressing scenario for coming decades in the last chapter of his book, King ends his reflections with the following words:

Despite all my fears for the future of man and society, I find that I am still curiously optimistic. I still believe that homo sapiens has the inner capability to develop to be something greater than itself.

Significant portions of this obituary have been extracted from the *London Times* of 15 March 2007 and the *Scotsman* of 29 March.

Aside from encouraging the University of Guelph to address the environmental situation through its regular academic program, Hammond also initiated and provided substantial support for the establishment of The Institute for Environmental Policy and Stewardship at the Arboretum of the University. The Institute produced an extensive comprehensive interdisciplinary non-credit course covering the entire spectrum of considerations, scientific and behavioral, that bear on the human relationship with the natural environment. The course was well attended both by regular students and by correspondence. The Institute also provided a forum for discussions and seminars involving both the University and invited participants.

For the past several years the University of Guelph, supported by Hammond, has held each year a series of lectures by guest speakers who were recognized for their knowledge on different environmental related subjects. The lectures, including commentary on each one, were compiled into reports that were available through the University.

To further his efforts to engage others to become more involved with the environmental issue, Hammond prepared several concise pamphlets, "*Cirum Specto*", "*The Predicament of Humankind*", and "*Laying Waste The Planet*". Aside from distributing these to his friends, neighbors and colleagues, Hammond sent them to a wide range of other universities, academics, scientists, industrialists and politicians at all levels of government.

Due to his concern about human impact on the environment, Hammond was not content to just pass a quiet winter while he was still able to travel to Florida. He organized and led an international discussion group of retirees to pursue this issue, distributing his various pamphlets as a basis to prompt discussion.

Hammond was disappointed with the lack of action in response to his entreaties and with the impression that he deduced from media reports about environmental matters. To express his perception of the situation he often said: "*The cockroaches have been here long before homo sapiens and they will be here long after humans are gone.*"

Hammond is survived by his beloved wife Frances, a daughter, two sons and there grandchildren.

A tree has been planted in memory of Kenneth W. Hammond in the Wall-Custance Memorial Forest , the Arboretum, University of Guelph.

This obituary has been drawn on personal acquaintances as well as an article of 28 March 2007 from the *Guelph Mercury* and the announcement of the *Wall-Custance Funeral Home*.

Energy and Climate Narratives in Europe

A Chance for Enhanced EU – Canada Relations

by His Excellency Matthias Hopfner
Embassy of the Federal Republic of Germany

Ladies and Gentlemen, Thank you very much for inviting me to this luncheon which has chosen such a timely and relevant theme.

Let me start with the obvious: Climate change is a reality. “New Germany—Tropical nights in Bavaria...”, “Up and down—the global weather is going crazy...”, “Ski lifts relegated to museums pieces”, “Polar ice melting ...”. Such and similar headlines have appeared in German and Canadian newspapers in recent months—which have been too warm for autumn and winter.

The recently published Stern report and the report of the “Intergovernmental Panel on Climate Change” (IPCC) clearly show that not only is climate change happening, it is also advancing more rapidly than even the most sceptical climate researchers expected.

There is no longer any doubt that humans are responsible for climate change. It is a global problem—with economic and humane dimensions – that we can only address by a close international cooperation, which requires decisive political leadership. People have to adapt to the effect of climate change and the Canadian North is experiencing this quite directly.

The costs resulting from climate catastrophes will continue to rise in the future. If we do not act resolutely and swiftly now, losses in economic growth of up to 20% of the global GDP by 2100 can be expected. Therefore, taking action in climate protection is by far more cost-effective than inaction or delayed action.

Energy questions and climate change are tightly

interlinked—they are two sides of the same coin. For example, 70% of CO₂ emissions arise during the generation or conversion of energy. Linking energy policy and climate protection is therefore a vital strategy for solving the problems.

Germany took over the Presidency of the EU and the Chair of the G8 in January. We have placed the topics of energy and climate change high on the agenda at both Presidencies. The motto for our G8-Presidency is “**Economic growth and responsibility**”.

Energy is the fuel, the prerequisite for growth, an essential requirement for economic and social development. According to scientists’ forecasts by 2050 the energy demand could double or triple as the world’s population rises and developing countries expand their economies and overcome poverty. Transitions in our energy infrastructure will be needed, akin to those of the last 100 years. Today, as we face up to climate change as a major environmental threat, it is clear that we can only succeed when the international community acts now.

For this—again—we need political leadership all over the world. We are delighted that impetus is also coming from industry, e.g. the so-called **3C Initiative** on global climate protection put forward by **Vattenfall's** CEO, Professor Lars Josefsson, and I'm pleased that this initiative has received much support. We would very much welcome if many companies— if possible all companies— were able to contribute in a spirit of a new environmental corporate identity.

When it comes to economic growth, I would like to remind you of the turmoil which the **Club of Rome report** caused more than thirty years ago in 1972. The report was entitled "*Limits to Growth*" and warned against treating nature irresponsibly. We are now all aware of the dramatic consequences of climate change. Anyone who needs additional examples should be persuaded by the reports I mentioned earlier.

As Chancellor Merkel pointed out in her keynote speech in Davos, in contrast to the 1972 Club of Rome report, we've drawn a different conclusion today: zero growth can and will not be the answer. Rather, the answer is greater innovation, particularly in environmental technologies. Zero growth would ultimately result in the preservation of the status quo, an absolutely unacceptable idea for emerging economies and developing countries. We know today that those who saw an irreconcilable conflict between economy and ecology were most likely wrong. No, the two must be combined intelligently.

We urgently need agreement on the post Kyoto-Protocol era after 2012 and besides North America it is the newly industrialized countries and their emerging high consumption that hold the key to success for a post Kyoto arrangement. Germany will do everything in its power to bring forward the international discussion during our EU and G8-Presidencies. Artificial ditches, gaps, between technological approaches and CO₂-reduction

targets must in this context be bridged and there must not be any ideological ties.

The European Union is ready to contribute its share to a sustainable energy future and to combat climate change—and is ready to do even more than that in case other countries also act as we think is necessary. The European Council in March will adopt a **European Energy Action Plan on Energy for Europe** that will focus on the security of energy supply, energy efficiency and environmental compatibility. In achieving that trio of goals, we have to reduce the need for energy imports by boosting energy efficiency, saving energy and making greater use of renewable energies. Why do we need a new European Energy Action Plan, an integrated European Energy Policy? Because Europe's energy landscape is changing, for three reasons:

- **Firstly**, global energy demand is increasing, and will continue to do so.
- **Secondly**, our climate is changing significantly, as outlined earlier.
- **Thirdly**, our internal hydrocarbon reserves are dwindling. The EU is already the largest importer and second largest consumer of energy in the world. We are currently dependent on external sources for 50% of our energy needs. This could rise to 70% by 2030.

So Europe is being exposed to increasingly intense competition for global energy resources from other countries, and could become ever more dependent on oil and gas imports from geopolitical uncertain regions. But the size of our energy market, as in many other areas, is also our strength. We are already world leader on key energy technologies, and political instruments that are needed to get them out of laboratories and into markets.

Europe attaches considerable importance to developing renewable energies which is—beside

emissions trading—a cornerstone of European climate protection. Since 1990, industry’s energy productivity in the European Union has risen by 19%. That’s not enough, but it shows that we can make progress. Germany therefore welcomes the proposal by the European Commission that we offer a GHG reduction target of up to 20% by 2020 in the negotiations for the period after 2012. If successful, that would mean that by 2020 the EU would use approximately 13% less energy than today, saving 100 billion euro a year.

However, we also expect other major emitter countries to make a similar contribution. Only then the necessary planning-reliability, in particular for the emissions trade, for investments in low-emission technologies and for Europe’s energy strategy could be achieved. Everyone can and should see that we really want to change course because we have to.

In view of the growth dynamic in important emerging economies, the global challenge of climate protection and resource scarcity require “green” innovations. At the European level we therefore promote environmental technologies such as energy and resource efficient processes, products and—as a centre piece—renewable energies.

In this way we can contribute to the highest possible level of environmental protection, sustainable economic development, competitive advantages and —last but not least—create employment. Environment industry is an emerging and innovative sector that creates more and more jobs. We are convinced that—in order to address both climate change and energy security—we need a new **industrial revolution**: the development of a low carbon industry. And Canada as a knowledge-based and technology-based society should also be on the cutting edge of it.

Research is also crucial to lower the costs of clean

energy and to put our industry at the forefront of the rapidly growing low carbon technology sector. To meet these objectives, the EU (Commission) is preparing a strategic **European Energy Technology Plan**.

Ladies and gentlemen, As some of these points reveal: We are talking about a new “**Energieaußenpolitik**” —energy related foreign policy. This notion emerged only recently in Germany. It was forged by FM Steinmeier. But the international concern about the security of supplies about the scarcity of reserves— not only oil and gas—has changed some of the coordinates. These days the power play, action and counter-action, revolving around energy questions has created a dangerous dynamism. The global hunger for resources and international stability are at an increasing risk of conflicting with each other. Our energy, our foreign, our security policy must take this into account and make preventive conflict mitigation a priority on the agenda.

One key factor in this context is—as mentioned before —the security of **energy supplies**. Germany is looking for a diversification of its supplies and we are planning to expand our energy policy cooperation with Norway, Northern Africa and the Central Asian countries. For Central Asia we will introduce an EU strategy during our current EU presidency.

Another key factor of such a new “Energieaußenpolitik” is **energy cooperation** on a global scale. We need international energy institutions capable of acting, institutions that more strongly embed the emerging industrialized countries. This is one of the objective of the G8-summit in June in Heiligendamm (Germany) involving partners from China, India, Brazil, Mexico and South Africa in a dialogue on the security of energy supplies.

I mentioned already the crucial role of energy

efficiency and the economic benefits of energy efficiency technologies.

In the context of future energy policy energy saving is still not central enough. The German Government has approved a CO₂-reduction-programme that affects millions of households in Germany, e.g. by creating incentives to renovate and insulate old houses in an energy efficient manner. These types of programmes, are currently leading to much more awareness in Germany. And this demonstrates that government action is indispensable to move things in the right direction. Joint implementation by both government and the business community must be the objective.

Ladies and gentlemen, this all underlines the potential for an enhanced transatlantic cooperation in the field of energy and climate change. We are currently preparing with our Canadian counterparts the next EU-Canada Summit in June that will be preceded by an EU-US Summit end of April. We agree with Canada that the Summit should give transatlantic relations—including EU-CAN economic relations—a new push.

Premier Charest called in Davos for a wide-ranging EU-CAN agreement on trade and investments. This was very much in line with what Chancellor Merkel pointed out in her key-note speech in Davos—saying that we should aim to create transatlantic economic structures “similar to those of an internal market”. Certainly, there still is a long way to go. But with that in mind, we will try to use our presidencies for concrete and pragmatic steps forward.

Canada is in my view sometimes still slightly underexposed on the political radar screens in Europe. A country that is—as PM Harper puts it—an “emerging energy super power” or—at least—a major global energy player—should be seen as a priority partner for Europe and its member states.

Energy questions clearly are a “door-opener” to raise the interest for Canada in Europe. As everybody is speaking about energy security, it is our interest to increase the dialogue with major energy players in the world. And Canada in geopolitical terms is certainly one of the most stable and reliable partners with impeccable democratic rule and of law traditions. An enhanced Transatlantic EU-Canada dialogue and as an integral part of that a cooperation in the energy and related fields—like energy efficiency, research and development (particularly related to renewable energy), environmental sustainability, energy security, is in my view compelling.

And, beyond energy issues, I think that there is a broad scope for action and cooperation between Canada and the EU, when it comes to questions like non-6 tariff trade barriers, regulatory cooperation, harmonization of technical standards, rules for financial markets and intellectual property rights and also the environment and climate protection. An enhanced cooperation could also include questions related to the labour market, recognition of professional qualifications and a host of other fields. And it should also include political issues, e.g. cooperation in police training programs in Afghanistan, international crisis management etc.

To finish, let me quote Achim Steiner, the executive director of the UN Environment Program. He said in the context with the release of the ICPP report: “The public should not sit back and say ‘There’s nothing we can do. Anyone who would continue to risk inaction will on the basis of the evidence presented here one day in the history books be considered irresponsible.”

Thank you for your attention.

Note: The above address was delivered to a luncheon meeting of CACOR on February 21, 2007.

TOWARD WORLD COMMUNITY

A proposed project for members of the Club of Rome (CoR)

by Charles Beaubien

Charles Beaubien has had an unusually wide ranging academic and professional career. A graduate of Civil Engineering in 1955 from McGill University, he later studied philosophy (L. Ph.) at the University of Montreal, did a Master's degree in Public Administration at Harvard, and in more recent years studied theology at St. Paul University. His professional career included employment as a hydroelectric engineer, Science Advisor to the Science Council of Canada, teaching philosophy at the University of Montreal, and serving as Senior Policy Advisor to Agriculture Canada.

A Precedent for Choice of Project by the Club of Rome

In *The Launch of a Club* by Alexander King(1) the author asks how we should begin to attack the problematique—the idea of which suggests the need for a holistic approach in policy planning. “The only realistic approach, he felt, is a top-down one,” “otherwise we would fall immediately into parochialism”. The only historical precedent for the type of body he envisaged is that of the *Lunar Society of England* which was active in the late 18th century.

The Lunar Society was a small group of eminent scientists, industrialists and philosophers who met over dinner in Birmingham once a month when the moon was full to lighten the safe return home in their carriages to various towns in the English Midlands. They soon became known as “the lunatics” and the poet William Blake wrote a lampoon, thus entitled, denouncing them. They were well known and esteemed members of society, independent but quite critical of the establishment, on rational rather than party political grounds; indeed they sided with the American colonists, enraging the Birmingham merchants who paid a mob to burn down Joseph Priestley’s house during one of the Club dinners. Very voluminous records of their discussions survive. Their themes covered a wide range of issues from science, the economy, politics and philosophy to religion. They were particularly interested in the influence that the new inventions and new concepts of science might have on social well-being. This is clear from their vision of how the improvement of the steam engine by one of their members, James Watt, might lead to the arising of great new industries and eventually to the abolition of poverty. They were in fact the fathers of the Industrial Revolution. Independence, multi-disciplinarity, foresight, imagination, ambition to influence and not for power—these characteristics of the Lunar society seem to fit the needs of the CoR two centuries later.

An Extremely Ambitious CoR Project Candidate

The following proposal, although inspired – as above – by Dr Alexander King, and leaning heavily on the work of Aurelio Peccei, was authored by

Charles Beaubien after months of the study of Aurelio, and especially of his book *The Human Quality*. I thought that Aurelio’s vision of the *interdependence* of nations, together with his

doctrine of a *redeeming humanism*, could be his most important legacy for our CoR to follow. The Proposal attempts to bring this out.

The above “precedent” of the Lunar Society shows how bold were the men of that time in daring to dream of their work as helping to bring about the abolition of poverty. When I take up that challenge now in the light of the legacy to us contained in the writings and initiatives of Aurelio Peccei, and of how he would have certainly wished his example of spiritual daring to be emulated by people of this millennium, I am emboldened to advance as a project the stimulation of a giant step toward world peace, the containment of world population, the alleviation of world poverty and of environmental damage, even also the rectification of world governance.

This cornucopia of blessings seems presently, as we know, almost totally out of reach. We say this based on mankind’s vast experience of arduous struggle in every one of these domains. How then can such thoughts be responsibly uttered?

Firstly, and this thought is certainly aurelian: All these problems are linked together and cannot satisfactorily be resolved singly. Together they constitute a mass of intertwined difficulties that the COR terms the *problematique* and which must be addressed together, both globally and long term.

Secondly, and what is also aurelian, is that the good of the world is indispensable to the good of the constituent parts—and not the other way around. Our approach should be top-down (from the point of view of ideas, that is; not managerial *diktat*).

What then would be the central and super-ordinate problem to be solved, which could render the constituent problems solvable? I believe that Aurelio hit upon it with his notion of *interdependence* in international life. State sovereignty would give way to a greater and greater

interdependence between nations—toward communal blossoming. The super-ordinate problem could then be termed *Toward World Community*.

A true community (according to M. Scott Peck’s *A Different Drum*) is a society of honesty and openness. “The spirit of true community is the spirit of peace, and the making of true community and the making of peace are one and the same”. It is then likely that World Community would greatly enhance world peace.

World Community would also help regulate the population problem. Supported medically and financially, citizens should assume obligations towards society and not over-breed. (France has been ‘pro-natalist’ largely to not fall behind other countries).

World Community and the democratic forces it would unleash should help alleviate severe world poverty.

World Community should help alleviate the dangers of starvation in the world (In E. Gibbon’s *Decline and Fall...*, “Accidental food scarcities in any single Province were immediately relieved by the plenty of more fortunate neighbours.”)

World Community should greatly diminish world environmental problems as many of these are attributable to meeting world competition for export markets.

World Community should do away with the problem of so-called ‘multinational corporations’, as these are nearly all *national*, working through subsidiaries abroad.

World Community would make of the quarrelsome UN a central World Government, interacting with present national governments (minus today’s Security Council).

Revolutionary Humanism

Man must do more than re-order the world system. He must change himself, so as to live in harmony with the universe. He must learn to govern the planet and fulfill his role as leader of life within it. This is Aurelio's "redeeming humanism" — man re-establishing cultural harmony in himself and equilibrium in his earthly enterprise. There will be new values — spiritual, ethical, social.

Three aspects should characterize the new humanism: a sense of globality, a love of justice and an abhorrence of violence. Cultural and political variety must enrich the human system, which has to be made compatible in all its parts; the concept of system is indispensable to *globality*. Man must decide what kind of future he would have, and regulate his actions accordingly.

A prime objective of the human revolution is social *justice*— fundamental to the new humanism. An equitable society is demanded. Social and political inequalities acceptable yesterday are intolerable today. Ethical and moral considerations remain mandatory, but an equitable society has now become a political precondition for everything else. Without social justice, there cannot be peace, security or social development; there cannot be freedom, human dignity or a decent quality of life.

Aurelio sees a guaranteed minimum standard of life (food, habitat, health care, education) becoming the birth right of every citizen, and excessive consumption and waste being penalized or repressed. With equality the social goal, national plans give growth lower priority.

Justice can only be preserved by *non-violence*. Violence is not inbred in any social system according to Aurelio, and is rather the consequence of cultural deviation. Cultural development is then the best antidote to violence, which is the supreme ill to be combated. Until our technological society becomes human as well, violence will win.

Human development is therefore the objective towards which mankind must strive in the decades to come. What is of essence now is human progress and better human beings. Every person must be assured of a minimum of education and a useful job, i.e. universal education and full employment.

A similar effort should also be made to realize that technological advance — 'progress' cannot go on anarchically and torrentially, irrespective of its usefulness. The establishment of a code of restraint and responsibility for scientific and technological enterprise is mandatory.

The above points in this section are all from Aurelio. To them should be added in my opinion certain of the positions of **Immanuel Kant**:

In his essay of 1795 entitled *To Eternal Peace*, Kant set out his plea for a change in international relations, by which governments had either to ensure survival or face joint self-destruction. He proposed a plan for nations to break free from destructive patterns of conduct by deciding to co-operate in bringing about lasting peace.

For this purpose, he called for autonomous states to join in submitting voluntarily to laws they would themselves have authored. He advanced the notion of a law freely enacted and self-imposed to bear on all three levels of human conduct: on that of individuals, of communities or nations in their internal affairs, and of a future federation of states. First to disappear, for any person or group taking autonomy seriously, would be those policies of violence, deceit, and open or secret treachery, which violate human rights and do most to increase distrust, exacerbate conflict, and endanger world peace.

In his essay and in other works elucidated by Sissela Bok (*A Strategy for Peace*, 1989), Kant sets forth a framework of four principles of conduct basic to many moral and religious traditions. When these

principles are violated, utter distrust is the most reasonable response.

He proposed certain ‘preliminary articles’ to help prepare the atmosphere for the weightier institutional reforms to follow and for lasting peace. These articles cannot solve the problems of nations or communities of nations by themselves, and yet, if they are not taken into account, there can be no lasting solutions whatsoever.

Force and fraud, violence and cunning are means of aggression and prevent any lasting peace. They are to be cut back and kept under control. A third constraint is stressed: that of betrayal, or the going back on one’s word. Fidelity to one’s promises is essential, and betrayal is the breaching of it.

Violence, deceit or lying, and betrayal or treachery are the three prime constraints or prohibitions advocated by Kant, to which a fourth was added by him: excessive government secrecy. For governments **all** recourse to secrecy should be justified, as the functioning of the representative form of government depends on citizens having access to accurate information on which to base decisions. No star chambers please.

An Approach

The **first part of an approach** should consist in a deepening of the universal understanding of what the achievement of World Community could mean for the whole globe. It should be a thorough and probably lengthy process, involving all parts of the world.

It has seemed evident to people everywhere that such a state of affairs would be a beneficial one. Let us see then just how beneficial it could indeed be. Properly presented, such a determination should attract a number of the wisest of mankind. They could form a committee constituted of people of both sexes and all races.

The situation is probably helped by the fact that the present state of the world leaves so very much to be desired. The present outlook for humanity stirs up the gravest concerns for people everywhere.

Should there be general confidence in those chosen to form part of the inaugural group, I believe that people everywhere would listen and weigh attentively what they would subsequently be hearing.

People chosen for the Committee should then include wise men and women of outstanding wisdom and experience. At least the following should be chosen from the various cultures:

- 2 Chinese
- 1 Japanese & 1 from S.E. Asia
- 2 From S. Asia (India, Pakistan)
- 2 From the Near East and N. Africa
- 2 From Black Africa
- 2 From E. Europe
- 2 From W. Europe
- 2 From South and Central America
- 2 From North America

Furthermore, a number of outstanding individuals would be needed to represent:

- 3 Spiritual Traditions – at least Christianity, Islam, Buddhism, Confucionism
- 2 World History
- 2 Ecology and Animal Welfare

The **second part of an approach** could begin when a reasonably viable picture of a desirable future of the world would appear theoretically within reach.

Notes

(1) Published in CoR’s *The Dossiers* 1965-1984.

Edited by Pentti Malaska & Matti Vapaavuori

(2) Refer comments received from Dr. Alexander King on page 16.

Alexander King Comments

Editor's Note: Soon after Charles Beaubien completed the above article it was suggested to him that in view of the references to the work of Dr. Alexander King, the Club of Rome's co-founder, he should forward a copy to Dr. King. He did so and received the following reply:

August 13th 2006

Dear Charles,

Thank you for your interesting letter about communities and world government. It interested me very much. I liked its approach from the human side up. In my early days there was considerable general interest in world government on a federal basis. As this was conceived in the general interest of all citizens, it was essentially economic in approach, paying little attention to the individual or to communities.

At its origin the Club of Rome arose through the concern of Aurelio Peccei and myself on our concern about the absence of life support and of justice. We had no thought of political structures or infrastructures in any economic sense, concentrating only on arousing world concern on forthcoming problems which related to poverty and lack of justice, if they were to be alleviated.

Our lack of sympathy for structural and pure economic forces were such that we created not an organization but a club, initially without President, structures or budget. It may interest you to know that the club never had a budget during its first 25 years. We refused to appeal for funds from government and industry, most of our money coming from foundations and other non profit bodies for specific projects. We did occasionally accept government or bank financing for major events in a particular country in the hope that it would benefit from our meetings there.

Rennie knows practically everything about our early history which has been described briefly on a number of occasions. I am at present editing my autobiography, due to be published later this year, which contains a good deal about this early history.

Yours sincerely,

Alexander King

PS I apologize for the late reply due to illness. A. K.

Turning the Elephant Around

Achieving Sustainability in a World Entering Overshoot

By Fred Thompson

There have been many reports and scientific studies indicating that the world is in “overshoot” in the sense that consumption is greater than the resources available. If present trends continue the situation is certain to get worse.

It is time for persons who are knowledgeable and understand the supporting data for this condition to end debate and focus on solutions. This essay will provide an overview of the situation and approaches to mitigating or reversing present trends. It is clearly apparent that tough measures are now required. Are we ready for them? It won't be easy. It is equivalent to “turning the elephant around”.

A Review of the Present Situation

There are many factors that are impacting the future of the planet that place in question the sustainability of life as we now know it. I like to distinguish between a problem and a nuisance. An alleged “problem” now in the public eye is terrorism. But terrorism cannot really be defined as a problem; it is in the category of a nuisance. Problems include the increasing consumption of life support resources and changes in the earth's climate. Terrorism puts a few people at risk, but shrinking resources and global warming puts everybody at risk!

Both shrinking resources and global warming are direct results of two human induced factors. These are population increase and economic growth. Each of these factors will be discussed below.

Population Increase

About 30 years ago I plotted on letter size paper the growth curve of world population for the last

10,000 years. The growth was gradual until very recent years when it began exploding exponentially, at which point it began going straight up, close to the vertical! I could not conceive of the curve bending over and flattening out, as I knew it must. So I just put it aside as I did not know what further use I could make of this discovery at the time. But today, with the world's population continuing to grow upwards from the present 6.6 billion, there can be no doubt that the curve has to flatten toward the horizontal. The unavoidable questions are **when?** And **how?** And by **design** or by **default?**

Jonas and Jonathan Salk did a study for the United Nations in 1981 showing the direction of global population growth with a curve flattening at the top. They made the observation that to achieve this condition, humans will have to replace competition with cooperation. They also stated that what was required was a revolutionary

change in policies and practices. How would the business community, for example, deal with the need to change from competition to cooperation? Not an easy change. We know when certain biological species become too numerous to be supported by the natural support systems, their kill rate by predators or by other forces in Nature increases to return their populations to a level that is in balance with Nature.

When rabbits multiply, foxes or coyotes quickly return their numbers to survival levels. It has happened in Nature for all species, unfailingly, in the course of biological time.

For the human species, however, our technologies, as well as our natural compassion to extend life, now serve to override the controls of Nature. But while we have temporarily acquired the means to defy Nature, it is only for a short time. If we do not design policies to halt, and then reverse population growth, Nature by default will soon exact a most punishing solution.

Responding to Population Increase

The reduction of human population by default means in plain language the reduction of human numbers by war, disease and famine. Not pleasant scenarios or useful to build upon. Since population is increasing in the poorer and less developed nations, and is reasonably stable in the more advanced nations, it has appeared logical to some that we should raise the standard of living of people in the poorer nations. Unfortunately, the world cannot tolerate the environmental damage of the very large populations in China, India, Africa and other regions of the world should all begin consuming resources and producing wastes at the level of present day Europeans and North Americans. So what is the answer?

We have no alternative but to improve the education of people in the poorer countries to

assist them to understand the wisdom of smaller families. At the same time a way must be found to improve the standard of living of people in poor countries, but with appropriate constraints on levels of consumption. The necessary measures will have to be developed over time as a better understanding of the global situation unfolds. Over-consumption is, of course, the basic cause of polluting the atmosphere and global warming. So it must be dealt with.

One possible scenario would be the imposition of birth control by a world government which possesses the capacity to enforce it globally. Not a pretty scene, but an alternative to global war, disease and starvation.

A modest and localized control of over-population would be the reduction of immigration into the more developed countries where population levels are already stable. Compassion says let the poor people come in. Reality says, keep them out and keep our country on a sustainable basis.

Growth in Consumption and Economic Constraints

The behavior of the world economic system is built on “incentives” and “constraints”. For example there are built in “incentives” for businesses to expand and grow. Bigness seems to generate increased profits and economies of scale. In the process it creates lower prices for the consumer. An unrestrained system seems to benefit everybody. Wal-Mart competes in an open market and attracts the customers who crowd into their stores. While smaller companies cannot compete and fall by the wayside, investors and customers are grateful for the success achieved by Wal-Mart. But then we must ask, can it go on forever? Is the current trend to global marketing feasible in the long run? Can the world afford to let India and China, for example, grow to the per capita economic level of North Americans and

Europeans? The logical answer is no. Think of the resource consumption and air pollution when the Chinese exchange the bicycle for the motor car. It is already happening.

Globalization and free trade will have to be re-examined. They both tend toward bigness and increased consumption on a global scale. A modest form of protectionism may indeed have to be implemented. In Trudeau's time there were regulations controlling the buying out of Canadian companies by foreign corporations. In the interests of "small is beautiful" it may have to be reconsidered. Countries may have to restrict the export of natural resources in the interests of establishing local stability and conservation. In the place of growth there should be increased emphasis on the achievement of excellence.

Also the economics of production does not factor in the cost of disposal of the product (packaging for example), or the cost of renewal of resources, the cost to the environment of resource depletion, or the cost of the generation of the CO₂ and global warming. An entirely new look at the cost of doing business is required. A possible new look could well require the introduction of incentives for environmental sustainability and constraints on bigness and over-consumption. A tall order but a necessary one.

The loss of the Atlantic cod fisheries is a good example of how economic incentives can destroy a natural resource. When collapse occurs everybody loses.

Conclusion

Reversing the effects of "overshoot" will indeed be equivalent to turning the elephant around. The

first and most important first step is to inform the elephant what must be done. Creating public appreciation of the future, should present trends continue, is critical. Al Gore's movie "An Inconvenient Truth" is an important contribution, but much more is needed. It is also important that government leaders and political parties become informed and fully aware of the seriousness of longer term issues.

Population control is an important issue that must be addressed. For Canada immigration control is part of the solution and we must overrule acts of compassion in letting more people into the country. Education of families in the poorer countries would also be a step in the right direction. Canada could help show the way for other countries.

Turning the elephant around also requires containing economic growth. The economic system is built on incentives and constraints and these must be re-examined. It will take new ideas, new approaches, and a broader vision to succeed. In order to protect the environment for us all, it is necessary to determine new ways to solve problems. The business community must become part of the solution by becoming more aggressive in moderating overshoot in consumption for the good of us all on this finite planet.

Editor's Note:

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The Present Moment

By Jerzy A. Wojciechowski

Dr Jerzy A. Wojciechowski is Professor Emeritus, Philosophy, of the University of Ottawa. He is a member of CACOR and a former member of the organization's Board of Directors.

We live in the most revolutionary times in history. The revolutionary nature of the present is not the result of terrorist activities, or the Nine-Eleven type of events. It is not caused by negative feelings, or a protest against an existing situation. On the contrary, it is the result of positive attitudes and actions. The reality around us changes ever faster because of the explosion of knowledge. It is the result of increasingly more massive, conscious and systematic rational activity of legions of researchers: scientists, technologists of various sorts engaged in the broadening of the field of knowledge. Present day revolution is animated by positive feelings and intentions, directed not against somebody or something, as was the Marxist revolution, but by positive desire to improve the existing situations, *to know more, to do more, to be more.*

Never before has the rate of change been so rapid, so much desired, so much approved. The impact of knowledge is nothing new. But presently, because of the level of knowledge, it is more powerful than ever before, and a factor making life constantly more complex. It may sound strange, but knowledge which was supposed to facilitate life and solve problems is fast becoming a source of growing problems. Has something gone wrong? Have we worked ourselves into a blind alley? Not really. Knowledge facilitates life for our muscles. It liberates us from tedious manual chores, but it makes life constantly more demanding for our intellect. *Knowledge demands constantly more knowledge from us.* The more knowledge there is, the more we have to know to succeed in life, to compete with others, to be rational animals. The present situation is the logical result of human evolution and a means of furthering this evolution.

One of the most important consequences of the development of knowledge is the disappearance of physical distances separating us from each other. This changes radically our existential situation.

Since the beginning of humanity we lived as individuals and societies in a given place which we called our own, distinct and distant from others. The distances between these places made communication difficult, and contributed to the evolution of distinct personal and societal identities with all their complex consequences.

The emergence of instant, world-wide communications abolished the spaces among us. Suddenly, we became next door neighbours, but remaining ourselves, outwardly unchanged. Although no physical change can be noticed in our appearance, our mental condition has changed dramatically. We became not only physically and mentally interdependent, influencing each other more and more, realizing McLuhan's idea of the global village. More importantly, we became morally interdependent. A shining example of this is the decision of Indian authorities to accord Mother Teresa the honour of a state funeral. Whether they realized it or not, the Indian government indicated to humanity the direction evolution has to follow. Thus, the humble nun

became in her death the beacon indicating the road from the present day morass into a sustainable future.

In an ever more crowded world, with knowledge giving us constantly more accessible and varied means of mass destruction, the only chance for humanity for a viable future is a more evolution. It entails the development of the ability of a global coexistence. This, in turn, requires better knowledge of our close and distant neighbours. The need to know each other, to understand us as we are, with all our peculiarities, and accept them as positive factors accounting for the richness of the human phenomenon, is a fundamental condition of human advancement.

Solidarity was the name of a Polish workers union. But “Solidarity” is an idea expressing the basic need of inter human relations for the future. Its strength and its radical novelty lies in its nonviolent nature.

And so does its ability to overcome the most armed and violent regime in existence—the Communist empire, and do it in a peaceful way. Like the Indian government honouring Mother Teresa, like Mother Teresa herself, solidarity shows humanity the direction to follow. May we heed their example.

Moral responsibility is proportional to the level of knowledge of each one of us and to the awareness of the situation we find ourselves in. As philosophers we have a particular duty to comprehend our times and the moral responsibility to act accordingly. If we act in communion with each other we create synergy which multiplies our forces and our impact on the world. Such acting becomes the beginning step on the road which we should follow, to enrich philosophy and make important contributions towards finding a way out of the evermore complex problems of the present moment.



Letter to The Editor

5 Chartwell House
London W11 3PG
16th June 2006

Andrew A. D. Clarke
512 Indian Lake Road,
Elgin, Ontario K0G 1E0

Dear Andrew Clarke,

Many thanks for sending me two recent numbers of your Proceedings. I am beholden to Rennie for asking you to do so. I was also happy to receive your account of that meeting in Windsor Castle so many years ago. It was in fact the only time I have been in the Castle.

I have read the Proceedings from cover to cover and found them balanced and comprehensive. I can only bewail the failure of the international Club to focus so clearly on the critical problems facing humanity. I was particularly happy to read Buzz Nixon's splendid Synthesis of his many earlier pieces.

In recent months I have received many indications from people in different countries appreciating the danger to our quality of life, to the continuation of human society as we know it, and even perhaps the very existence of life on our planet. From whatever study of the problematique these people may start from, population explosion, global warming, or social decadence, they seem to conclude that the possibly catastrophic outcome results from the simultaneous aggravation of all the different parameters.

None of these studies gain priority of attention in contemporary politics which are devoted to short term issues and hence give little priority to more distant but frequently more fundamental matters. Should a political leader become convinced of the credibility of this argument and the need to mobilise immediately, counter-measures to check their advancement, the system would render him virtually impotent. At the next election, the voters, concerned with immediate grievances would never allow such radical issues to interfere. Hence, persistence by the leader would result in his immediate political suicide. Should a national leader be convinced of the gravity of the situation, he would be impotent to act. Are we to conclude that salvation cannot be generated within democracy?

With best regards, Yours sincerely

Alexander King

Editor's Note: The meeting at Windsor Castle referred to in the first paragraph of Dr. King's letter was a three day conference held in March 1972 and sponsored by the World Federalist Movement. In attendance were 23 participants including Aurelio Peccei and Alexander King. At the time of the meeting I held the position of Secretary General of WFM. — Andy Clarke

**THE OBJECTIVES
OF THE
CANADIAN ASSOCIATION
FOR
THE CLUB OF ROME**

Recorded below are the objectives of the Canadian Association for the Club of Rome as stated in its application for incorporation in 1974, section III:

(a) **to promote study and discussion** among all segments of the Canadian public of the nature of world problems and the need to develop new policies, attitudes and courses of action to ensure a stable and viable future for mankind; and **to cultivate a new humanism** that will contribute to world peace, social justice and individual well-being;

(b) **to stimulate and conduct study and research into problems of human well-being and future survival**, and the interactions and inter-dependance of such problems, to understand better the workings of the world as a finite system, and **to suggest alternate ways to meet critical needs**;

(c) to assess Canada's situation and identify any particular and specific aspects of it that may affect or be affected by world problems and to determine the implications for Canada of possible world solutions; **to be a catalyst in seeking solutions** and the identification of Canada's possible roles and **to promote their implementation**; and

(d) in furtherance of the objectives aforesaid, to solicit, receive and accept subscriptions, gifts, legacies, bequests, grants and other contributions.

SIGNIFICANT QUOTES

Humanity May Well Opt To Let Climate Change Run Its Course

“The message of science is clear: humans will soon find themselves in a different world than any they have ever lived in. Altering our way of life to cope with these conditions will be phenomenally difficult — if it can be done at all. Yet all sections of opinion are in denial regarding the scale of the shift and the magnitude of the challenge it poses.

“Abrupt climate change seems an apocalyptic prospect, and rather than face up to it and do what can be done to mitigate its effects, humanity may well opt to let it run its course.”

John Gray, NEWSTATESMAN 29 May 2006

Endless Growth Will Destroy Us

“One thing is clear to me now, our values must be compatible with the exigencies of the natural world we live in and depend upon. They must implicitly recognize the laws of thermodynamics, energy’s role in our survival, the dangers of certain kinds of connectivity, and the nonlinear behavior of natural systems like the climate. The endless material growth of our economies is fundamentally inconsistent with these physical facts of life. Period. End of story. And a value system that makes endless growth the primary source of our social stability and spiritual well-being will destroy us.”

Thomas Homer-Dixon, *The Upside of Down* 2006

A Brief Historical Interlude

“Ours are the most fortunate generations that have ever lived. Ours might also be the most fortunate generations that will ever live. We inhabit the brief historical interlude between ecological constraint and ecological catastrophe.”

“The only means, by which we can ensure that there is a chance that the temperature does not rise to this point (beyond which certain major ecosystems begin collapsing) is for the rich nations to cut greenhouse gas emissions by 90% by 2030.”

George Monbiot, *HEAT* 2006