## Presentation to the Panel on the Implications for Governance arising from Climate Change

World Academy of Art and Science General Assembly, Hyderabad, October 17, 2008

by

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There are two panels on governance in this program. Walt Anderson has organized a panel that is probably more philosophical. This panel will probably be more prescriptive. If we are lucky, these panels should complement each other.

This conference and this panel follow a history of World Academy interest in the environment. Our early conferences and publications covered such topics as The Population Crisis and the Use of World Resources, (1964, edited by Stuart Mudd), water use, and two world conferences on environment and society in transition in 1970 and 1974 which seemed to be bookends to the Limits to Growth report of 1972 in which so many Academy members were involved as simultaneous members of the Club of Rome. Personalities such as Jan Tinbergen and Robert Triffen were involved in our own meetings. They and others presented profound thoughts largely centered around preserving natural resources and having more equitable access to resources. Some ideas were perhaps less profound: René Dumont, the famous demographer, noting that rich people consume more resources than poor people, proposed saving natural resources through severe population control of rich people(!) That might not have been the right answer, but the unequal distribution of resource use has continued to grow and will need better policy answers. Others in the Acacemy's 1974 meeting recommended establishing an expert body like the International Law Commission to "engage" in continuous clarification and recommendation of prescriptions appropriate for all community levels."

In this conference we have a broader view of the balance between humanity and environment. Climate change forces that broader view. When we think about climate change, practically everyone can agree that all parts of society will be impacted by what may well be the largest challenges to face humanity's brief history. If we appropriately anticipate climate change to limit its negative impacts, societies and governments will need to change at every level. Existing functions of production, modes of living, indeed our relationship with the earth, require change. Many new functions of governance need to be created. Similarly, the laws and authorities that guide societies should be altered. Uppermost in my mind, as I come from the country where the unofficial yet official national policy regarding climate change is to ignore it, is whether there can be instituted legal consequences for a nation's course that deliberately or negligently exacerbate adverse climate change rather than reduce and mitigate it. How far can we stretch the laws of negligence and associated damaged? More generally, can legal force by a stronger ally regarding climate change?

I think that new principles of governance to better manage climate change seem to be emerging. Here are ten.

First, the underlying drivers of climate change need to be clearly identified and corresponding actions to reduce these drivers are needed. Currently, there is great concentration on end use drivers, such as petroleum-powered machinery, energy plants (particularly those producing coal), agriculture and industry. But there is very little new action on the drivers behind increased demand: namely population growth and changing consumer preferences. In a sense, the hard power parts of the economy are recognized as needing change, but the soft power parts of the economy (the family, lifestyle, and consumer education, particularly) are ignored. The population issue requires meeting demands for family planning, providing at least secondary education for girls, and wider employment opportunities for women.

Second, perhaps the greatest soft power in many societies is the ethos fostering economic and lifestyle behavior. Sustainability, that very difficult concept, has been on offer as the needed quality for individual and organizational behavior. But sustainability as a guiding concept is deficient in an era when we recognize that our imbalances between humanity and environment are so severe that it may be misleading to say that we actually know what pattern will have long term sustainability. The Dutch concept of cradle-to-cradle may show us the way to a more appropriate ethos. The concept is to leave the environment not just as it recently was, but continually better off than you found it. Hence a company in Holland is now marketing ice cream with a wrapper that when thrown away not only will melt, but will leave behind rare seeds. Cradle-to-cradle housing is being created by one of our Academy fellows. If properly conceived and conveyed by leaders of society, clear, simple and sound manners of behavior, even goals, like the need for continuous improvements in our environment, can create a consensus and framework needed in which to plan actions. Surely we need quantitative targets regarding things like emissions, but we have a more profound need for consensus on quality of life issues.

Third, almost every function in governance needs to be examined and many of these will need to be revised in order to help realize overall societal goals related to climate change. How this top to bottom review of governance is to be conducted, and what are best cases of such re-engineering, are, to me, open questions. What I do see is that we should be preparing to make as many changes in governance as we have seen in more traditional emergencies, such as the changes in production and government organization made by a number of countries in World War II.

Fourth, there may well be new functions of governance that need to be created. Over the first three decades of this century urban populations will double in size to 4 billion people, and 80% of that population will be in developing countries. Most of these people will live in cities with serious environmental challenges. While

only a minor fraction of urban populations will live in mega-cities, we already know that urban corridors and aggregations account for most of our economies. Yet these geographic areas are most often governed by a patchwork of governments. Similarly we find contiguous ecological zones managed haphazardly around the world. Perhaps climate change will force a more serious reconsideration of area management, such as is conceptualized in the work of Goa 2100 which sees a convergence of quality of life between rural and urban areas. At the global level a world water authority and a world energy authority are clear needs and we will probably also need a global oceans authority. The power to coordinate and adjudicate will need to be associated with such authorities. Another set of functions that will be new in most countries will be to greatly increase incentives to develop and manufacture more climate friendly technologies.

Fifth, it is a major mistake to assign coping with climate change to any single office or ministry. That mistake took place in the HIV/AIDS pandemic when responding to that disease was assigned to ministries of health. It turned out that to adequately address the pandemic and its consequences just about every cabinet department and nearly every sector of society needed to be engaged. Ministries of health were poorly positioned to coordinate anything this large and far-reaching. Ministries of environment are even more poorly positioned. Climate change will require top executive coordination across governments. There will be a premium on chief of staffs and chefs du cabinets who can coordinate well. And perhaps rarest of all, is the need for political leaders who can inspire all major sectors of society to act differently in so many aspects of their lives.

Sixth, the lower the level of governance, the greater is the chance of coordination. Officials in China report how easy it is at the village and municipal levels to gain cooperation between sections of government when it comes to sustainability matters, but how hard it is to get cooperation across ministries at the national level. This argues both for more decentralization and for more creativity in coordinating higher levels of government.

Seventh, the political benefits of taking leadership on climate change issues are thin, take too long to manifest and need to be enhanced. As Ferry de Kerckhove, Canada's Foreign Ministry official in charge of international organization affairs recently wrote, "Politics does not square well with long-term crisis...there is not enough consensus to create the necessary takeoff effect." ("Multilateralism on Trial," in Alexandroff, Alan S. (ed.) Can the World Be Governed?, Wilfrid Laurier University Press, 2008) Policy makers must be able to provide short-term payoffs to political leaders in order to enhance leader's political capital and courage to take longer-term actions.

Eighth, since science has had a leading role in defining climate change, it will have a disproportionately large role in judging the adequacy of actions intended to address climate change. As well, scientists will be central to the development of many new ways to operate societies with less stress on the environment. To act well, scientific societies and academies may well need special attention to enhance their capacities as innovators, arbiters and as potentially decisive advocacy groups. The IPCC offers one model..overwhelming numbers. High level scientific advisory groups are another model.

Ninth, the UN has very special significance, not because it is powerful. On the contrary, its powers are soft ones of convening, consensus building, and enabling new understanding. But it also has the power to model good behavior, and in so doing it is our most important international organization. The fact is that the UN has been timid about mobilizing for climate change. Senior UN staff think they are able to anything. The General Assembly thinks that tinkering with the UN system will suffice. Instead, we need a UNFPA reinvigorated to meet the demands for family planning around the world. We need a UNDP capable of advising on public administration for climate change. We need a UNEP able to carry out its prime task of coordination by co-locating numerous UNEP staff in the office of the Secretary General, to help the whole system reorient. We need an enormously beefed

up UNHCR to help countries cope with quickly growing crossborder flows of environmental refugees. We need a World Court advising on new legal theories of international law to help induce appropriate national behavior. And we need to invigorate the pressure points: the CGIAR and FAO to help countries adapt agriculture to changing climate conditions; UNESCO helping countries teach new generations to live in balance with nature: a new function to help guide foundations into the sciences and research requirements to mitigate on a massive scale; and as this Academy and the UN Intellectual History Project jointly pointed out, a different way of conducting policy so that outside intellectual centers are far better integrated into policy making at the UN. Many of these changes can be instituted by administrative fiat. The stakes for such changes go well beyond climate change. They relate to an unfortunately spreading feeling among some academics and some political leaders, based on the failures to implement the Responsibility to Protect Doctrine, the weak progress of the Human Rights Council, the failures of the Non-Proliferation negotiations and much else, that the UN is irrelevant for the really important purposes. Indeed, if the UN cannot react more aggressively and imaginatively to climate, the greatest challenge, that dismal reading will gain validity. Thus actions announced must have real accountability attached to them.

Let me just add that all these recommended changes to the UN go only part of the distance I feel will be needed. The wild speculations of the global capital markets and the looming climate change crisis will inevitably lead us to what our late Academy President, Harlan Cleveland, called a global public sector. In other words, global governance with more than soft power.

Tenth, and finally, while I devote a lot of my life to UN-related matters, we must find a better way of negotiating climate change issues than is now found in the UN. Some feel the two greatest polluters, the US and China, must find bilateral agreement and be lead dominos for new global agreements. Some feel that only

when the Security Council and the World Bank have updated voting can there be true agreement on climate. Some feel that India will be the hardest major country to agree to a far more rigorous Kyoto. The UN Foundation and the Club of Madrid recommend a gathering of rapidly industrializing countries to agree on reduced energy intensity. A recent blue ribbon group of the US-based Council on Foreign Relations recommends creation of a standing Partnership for Climate Cooperation consisting of the world's largest emitters to work together to implement aggressive mitigation strategies. These and many more options are the subject of academic studies.

Jeff Sachs, who follows these matters as special advisor to the UN Secretary General, told me recently that he is not aware of any major official policy center examining the question of improving the strategies and effectiveness of climate change negotiations.

My only observation is that the Doha round on trade, the operations of the General Assembly, and much else I follow in the UN tells me that global negotiations will not bear fruit nearly as easily as smaller negotiating settings. I believe that a study of the negotiating options to best achieve needed global climate change agreements is needed by the UN, perhaps in concert with regional groupings, and an aggregation of talent is needed to make the best option happen. There are also clear lessons on what makes for a good treaty. Scott Barrett's book, *Environment and Statecraft*, covers this ground well.

All ten of these observations are rooted in having more creativity in public administration than we have seen to date. Where are we going to find such creativity? Such creativity will have to be fostered from fields like social entrepreneurship, and from the identification and teaching of best cases. One of the reasons I'm so enthused about the candidacy of Barack Obama in my country is that he is committed to establish an office of Social Entrepreneurship in the White House. I commend to you the work of Ashoka, a non-profit organization that has fostered nearly 2000

social entrepreneurs in all parts of the world. At the moment, I am working with Ashoka on creating a series of open source competitions to engage the United Nations in a new way to solve problems facing. Open source competitions invites expertise from all around the world and identifies creative options as solutions far more quickly than is now done by the UN. In so doing, it would promote linking the UN policy process with outside communities of competence, much as the World Academy has recommended.

Friends, I have not talked about many topics that deserve attention, such as the compounding of governance issues in the poorest countries as climate change really takes hold, which has been constructively addressed in part by the Stern Report. But I have sketched some ideas that I hope will stimulate discussion.

The biggest issue that these kinds of recommendation raise is how one stimulates movement on them. My concern is that for all the fine work of the Intergovernmental Panel on Climate Change, political leaders are still not convinced about the seriousness of climate change. In particular, they do not understand the significance of the fat tails in the temperature projections that tell us that there is a 5% probability of truly catastrophic temperature rise and more significant probabilities of extremely serious temperature rise. Scientific and public policy communities must not only be able to convince leaders of what is ahead, but must have answers ready on the changed functions of governance and on what policies should be adopted to avoid the worst prospects.