



## Themes for a World Academy *by Harlan Cleveland*

During the autumn of 1995, I had a chance to visit with a good many Fellows of the World Academy in Asia and in Europe, as well as in Canada and the U.S. These consultations helped clarify some themes of wide interest and global import. Some are already on our agenda; some might well be.

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The five themes outlined below are of course related to each other. They are all mutants of the dynamic charge the World Academy's founders proposed as our continuous mandate, when they met in Paris and started the Academy 35 years ago, in 1960. Their mandate was for the World Academy to focus on "the social consequences and policy implications of knowledge."

Many of the technologies of knowledge spread -- including much faster computers, and orbiting satellites for communication, resource sensing and weather forecasting -- were already on inventors' drawing boards. But no one was then predicting, let alone celebrating, how fundamental and pervasive would be the global fallout of knowledge spread -- the collapse of dictators and of "central planning," the "bubble-up" ambitions for freedom, the chances for escape from poverty, the worldwide information markets such as Internet and the trillion-dollar-a-day system for currency exchange, the emergence of pluralistic societies in a world politics where nobody is in charge.

The fallout falls out most heavily on "leaders." Big organizations don't turn out to be better. More and more

often, "the people" get to new ideas ahead of their leaders, whose well-knownness so often produces "hardening of the categories." Political leaders in developing countries face a new quandary, says Worldpaper in its November 1995 issue: Should they "ban [information] technology and lose ground economically, or open the door and risk being bypassed by those they govern?"

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The five interrelated themes do not exhaust either the "social consequences" or the "policy implications" of the spread of knowledge. But they may suffice to illustrate the breadth of the World Academy's mandate to keep them under review.

1. **Diversity:** Cultural, political, economic, demographic, and biological diversity, and the need for their thoughtful "governance," formed the central themes of World Academy activity in 1993 and 1994. Academy Fellows explored them in four serious workshops (at Buffalo, NY; Paris; Bolinas, CA; and Mangalia, Romania), leading up to our engrossing Assembly at Minneapolis in September, 1994. Preventing diversity from spilling over into conflict continues to be a major preoccupation in art, science, and world politics. For Fellows of the World Academy, finding ways to enable, and persuade, peoples to remain "different, yet together" will keep diversity on our minds and the Academy's agenda.

(Anyone who did not receive our Report from the 1994 Assembly and the summaries of the four preliminary workshops -- or who cannot now lay hands on them -- is welcome to

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## Needed: Better Worldwide Bio-Information Systems

*by Walter Truett Anderson*

Recent decades have seen the growth of sophisticated global information systems such as those dedicated to measuring the evidence of climate change. Yet the consensus of participants in the WAAS Lisbon workshop on "biological globalization" was that new and better ones are urgently needed to enable people around the world to cope with the biological changes currently taking place.

One such proposal was advanced by Harold Mooney, co-editor of the definitive study *Biological Invasions: A Global Perspective*, a project of the Scientific Committee on Problems of the Environment (SCOPE) of the International Council of Scientific Unions. Prof. Mooney suggested a sort of "early warning system" capable of alerting people to the probability that their regions would be invaded by new weeds, insects or other biological threats, providing them with information about the characteristics of the species and ways of dealing with it. Often ample information exists, but is not available. Often people ignore a threat, respond too late, or -- equally serious -- overreact by attempting to exterminate a pest entirely when a lower level of control is practical and possible.

A very similar proposal -- from a very different perspective -- was offered by **Paul Silverman** of the University of California at Irvine. Drawing attention to the problems created by global epidemics such as AIDS and by the globalization of antibiotic-resistant bacteria, he stated that "we must globalize medical

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**Themes** (from pg.1)

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2. **Globalization:** The spread of knowledge powered by new information technologies hastens the globalization of ideas (about democracy, fairness, development, and human rights) and the globalization of markets for goods, services, money, music, and information. The paradoxical consequences -- at once more sameness around the world and more variety in every region, country and neighborhood -- are crammed with "policy implications" for governance and business, for art and science, for culture and communication.

A current World Academy project is exploring the least familiar kind of globalization: more and more kinds of life -- people, animals, insects, viruses, and countless microorganisms -- are migrating ever faster around our restless globe. Elsewhere in this Newsletter you will find news of a recent Lisbon workshop on "biological globalization." A **Walt Anderson** comment begins on page 1.

3. "**Civil Society.**" A newly popular phrase is now in use, with almost as many meanings as users. "Civil society" seems to refer to whatever organizations or functions are not handled by "public servants" -- every aspect of "governance" except "government."

At one of the many "UN 50" programs in San Francisco last summer, **Lincoln Bloomfield** put it this way: "Civil society is what occupies the space between government at the top and the atomized mass of individuals at the bottom. An essential characteristic for democracy is a skein and network of private voluntary groupings, associations, and coalitions

that occupy that space."

As one current example, **Jack Fobes** organized a civil-society delegation that traveled to Paris in November 1995 to "represent" the U.S.A. at UNESCO's 50th birthday party because the U.S. government participation in that international organization is still frozen in amber. (President Clinton did send an eloquent supportive letter to the Director General, **Federico Mayor**.)

**Andrzej Sicinski** is planning a 1996 World Academy workshop on "Civil Society" in Warsaw. Clarifying this concept will be useful work as more and more aspects of "governance," both inside and among countries, seemingly have to depend on nongovernments (business firms, academies, associations, private voluntary organizations, and the like) for initiative, leadership, and funding.

4. **The Future of "Work."** All around the world, the arts and sciences and technology of information are raising productivity while reducing employment. It's also true around the world that the traditional linkage between working and living -- expressed in the phrase "working for a living" -- is increasingly dysfunctional.

The need is now acute for fresh general theory about working and living that takes into account three first-time-ever conditions: that humankind can readily produce everyone's basic human needs (but hasn't yet figured out how to distribute that product equitably); that those needs can be fulfilled with a smaller "labor force" (healthy educated men and women, able to "work" for longer spans of years than ever before) than will be available; and that no human society or "system" yet knows how to put all its "workers" to work while guaranteeing a decent "living" for all its citizens.

The report of the International Com-

mission on Peace and Food -- released at the World Academy's 1994 Assembly when we presented a Special Award to its chairman, Dr. **M.S. Swaminathan** -- proposed a strategy for generating 100 million jobs in India alone over the next ten years. A comprehensive approach to employment generation worldwide, the commissioners said, can generate one billion new jobs in developing countries over the next decade, sufficient to provide "opportunities for all."

The primary author of that report was **Garry Jacobs**, a newly elected Fellow of the World Academy. He is already organizing, for the World Academy, a pilot project in India to test the Commission's idea that, in a period of ten years, India could generate 100 million jobs.

5. **Religion in Politics:** Shortly before he died, author **André Malraux** (then France's Minister of Culture) guessed aloud that "the 21st Century will be the century of religion." It is already clear in the politics of dozens of countries that religious overtones and undertones are inherently part of the harmony, or dissonance, of national governance. What's not clear is how the differing ways the great religious teachings are interpreted will play out in world affairs.

The scholarly Theraradin Buddhism of Sri Lanka is not easily reconciled with the militant activism of Aum Shinriko, the Buddhist sect whose members spread poison gas in a Tokyo subway. It is equally hard to match the comparative quiescence of Islam in Indonesia, the nation with the world's largest Muslim population, with the political activism of Islamic fundamentalists in Algeria, Egypt, Iran, and elsewhere in the Middle East. The Jewish militant who assassinated Yitzhak Rabin in Jerusalem last November likewise contrasts sharply with those Israelis who supported Rabin as a successful general, a political moderate, and a dogged peacemaker. Comparable

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**Themes** (from pg.2 )

puzzlements are evident in varying Roman Catholic attitudes about contraception, and conflicting political faiths among American Protestants.

What moral principles and ethical norms does each of the Great Religious Traditions have to contribute to conflict resolution, military security, economic development, social equity, ethical behavior, and political congruence, in the "world affairs" of the 21st Century? Something like that question was debated for several years in the late 1950s by the Conference on Science, Philosophy, and Religion. The World Academy might usefully reopen such an inquiry -- in global perspective, in the garish light of recent experience.



**Bio-Information** (from pg.1)

diagnostic efforts" to enable people around the world to understand, anticipate and manage new health crises. "For individual countries to deal with such problems is hopeless," he said, and added that the present activities of the World Health Organization fall far short of the present need.

What might such global bio-information systems look like in practice? What combination of public and private organizations might be involved in them? How could they make the most effective use of modern information and communication technology? What issues of global governance are raised?

In future activities, the World Academy will be exploring these and other questions relating to biological globalization. Suggestions from interested Fellows are warmly welcomed, and may be sent to me at One Sansome Street, Suite 2100, San Francisco CA 94104 USA.



**Buffalo Workshop on Who is Designing the 21st Century?**

**Participants:**

**From the School of Architecture and Planning:** Prof. Magda Cordell McHale (WAAS, US), Dean Bruno Freschi, Professors John Bis, Sam Cole, Kate Foster, Himi Jammal, William Page (Chair - Planning), David Perry, Al Price, John Sheffer, and Ernie Sternberg.

**Invitees:** Harlan Cleveland (President of the World Academy of Art and Science), Walter Truett Anderson (WAAS, US), James Dator (WAAS, US), Anthony Judge (WAAS, Belgium), Hirotohi Komoda (Assoc. WAAS, Japan) Walter Kroner (US), Horacio Menano (WAAS, Portugal), Ruben Nelson (Canada), and Andrzej Sicinski (WAAS, Poland).

The Center for Integrative Studies at the State University of New York, Buffalo, cosponsored with the World Academy of Art and Science a workshop on "Who is Designing/Planning/Thinking about the 21st Century?" It was organized by Prof. Magda McHale with the help of WAAS Associate Fellow Donna Hutchison Cicero, and held in Buffalo September 7 - 9, 1995.

This workshop, conceived as a free-wheeling interdisciplinary discussion on the future of designing and planning -- with special emphasis on the problems of cities -- brought together a group of colleagues from the School of Architecture and Planning, and nine invited generalists from the United States, Canada, Europe and Japan.

The discussion began with the propositions that the whole world is becoming more urbanized -- and, as a result, more subject to deliberate design and planning.

Over the course of the workshop, participants explored various dimensions of this emerging new world. Among the themes raised:

**Globalization:** Several kinds of globalizing forces were mentioned -- among them cultural, political and biological -- but the strongest agree-

ment among participants was on economic globalization. International capitalism was seen as, at the very least, one of the main forces of globalization and, in the view of some, the only one that really amounts to much just now.

**Power:** Who actually holds power to plan and design? Who imposes their visions and perceptions and agendas on others? Are we increasingly in a more diversified world in which more decision making is done from the bottom up, or is it still essentially controlled by top-down, hierarchical structures?

**Language:** What's the role of language as a function of design, as an element of power? To put it in another way, who is describing the 21st century and what power is conferred by the ability to describe and define? What is the importance of metaphors? What metaphors are effective? How intentionally can they be used?

**Stability:** What kind of roots do we need, what stable touchstones of identity or place? Are we indeed moving into a world that's demanding people to be more flexible, migratory, changeable, multi-dimensional and global? How many people actually have developed the

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## Lisbon Workshop on Biological Globalization

### Participants:

**Walter Truett Anderson, Fellow, Meridian Institute**  
**Harlan Cleveland, President, WAAS**  
**Jeffrey McNeely, Chief Scientist, International Union for the Conservation of Nature**  
**Horacio Menano, Director, Gulbenkian Institute of Science, Lisbon**  
**Harold Mooney, Professor of Biology, Stanford University**  
**Alexandre Quintanilha, Dean, Biomedical Institute, University of Oporto**  
**Paul Silverman, Associate Chancellor and Adjunct Professor of Medicine, University of California, Irvine**  
**Phyllis Windle, former project director, U.S. Office of Technology Assessment**

The international movement of plants, animals and microorganisms -- and the corresponding globalization of biologically-related problems and problem-solving activities -- was the subject of a workshop held in Lisbon over the weekend of November 17-19. The workshop was organized by the American and European Divisions of WAAS, and hosted by the Gulbenkian Institute of Science.

The basic premise of the workshop was that biological globalization, although well-documented in a large and growing body of scientific literature, is, to the general public, the least-noticed and least-understood of the major forces that are currently transforming the world. All the world's ecosystems, like all the world's cities, are becoming more pluralistic -- hosts to exotic newcomers from distant lands -- and once-localized viruses swiftly become international epidemics. But, although many isolated aspects of biological globalization are widely publicized, the phenomenon as a whole is rarely discussed. An important aspect of contemporary reality is thus absent from the actions and thoughts of environmental activists, farmers, business people, political decision-makers.

In this -- the first of several events

in which WAAS fellows and others will explore the subject in its political, economic, psychological and even religious dimensions -- the discussion was structured as a dialogue between ecologists and medical scientists. The former presented some stunning documentation of the extent to which plants and animals of all types and sizes move across national boundaries, and identified some of the impacts of such movement. The latter presented equally impressive information on the escalating global movement of people, diseases and disease vectors.

A theme running through the conversation was that, although biological globalization presents many problems, the overall phenomenon cannot be reduced to the status of a problem to which there might be a solution, or a process that might be halted. It is one of the fundamental conditions of life in our time.

This is essentially an educational project, and the long-range goal is to carry the findings of workshops such as this to the general public. One specific product being considered is a book-length report, tentatively entitled *A World on the Move*.

**Buffalo Workshop** (from pg. 3)  
psychological skills to cope with the situations we think are emerging?

**Geography:** Is "place" becoming irrelevant? Are the new conditions of cyberspace and information technology creating opportunities for working in different ways -- a need for more frequent personal mobility, for multiple "career changes" in a single lifetime, for inventing your own job rather than "looking for a job"? Are they creating different kinds of social networks and linkages that either render place less relevant, or dramatically change its importance?

**Personal responsibility:** How do the new conditions of life affect our responsibilities as members of communities, as citizens of sovereign states, as global citizens? To whom are we responsible? In many ways, said one participant, "we are responsible not only to our children but to their children and their children's children, and through future generations to all humanity and all life."

**Designing and planning:** What will be the new roles for planning and architecture and design, in relation to the larger global and historical issues confronting us? Are these professions relevant to the times, or is the whole enterprise obsolete, as some people seem to think? Are they changing rapidly enough to match the mutations in the urban environment? What actually are the guiding principles in planning and architecture today? How should people be trained?

**Change:** Although discussants differed on many issues, there seemed to be a general consensus that we are in a period of dramatic change -- not merely transitional, but transformational. A favorite metaphor, introduced early in the meeting, was "tsunamis of change."



## The World Academy Around the World

In recent months, President **Harlan Cleveland** has traveled twice to Europe, twice to Canada, and once around the world -- representing the World Academy at international gatherings, visiting and consulting with World Academy Fellows.

**Toronto, Canada:** In August he spoke at a youth conference on the United Nations. This led to a "Youth Leadership Training Summit," organized by the Canadian UN/50 programme and held at the U.N. in New York. Of the more than 200 young people invited from all U.N. member countries, thirteen were nominated by World Academy colleagues, and ten of those were able to find travel funds to get to New York. Harlan Cleveland spoke at two plenary sessions, and held two special seminars with the young people nominated by World Academy Fellows.

At the end of November, he visited Toronto again, to participate with Club of Rome colleagues -- including **Ricardo Diez Hochleitner**, **Yehezkel Dror**, **Arthur Cordell**, **Ran Ide**, and **Don Michael** in another "intergenerational" exercise with students at Victoria University.

**Croatia:** At the end of September, a conference on "Tolerance, Science, and the Modern World" was organized by **Ivo Slaus** of the Croatian Academy of Sciences and Arts. It was sponsored by UNESCO, cosponsored by the World Academy and by seven science academies in central Europe.

The keynote address -- titled "Different, Yet Together" -- was delivered by Harlan Cleveland. A "Declaration of Opatija" was adopted at the final session. (Copies of these documents, and of Professor Slaus's summary statement, are available from Ivo Slaus in Zagreb or from the World Academy's Minneapolis office.)

**Sri Lanka:** The President visited Sri Lanka at the invitation of Prime Minister Sirimavo Bandaranaike, to speak at the Bandaranaike Center for International Studies on "Leadership in an Information Society." His visit began with a long dinner conversation with **Arthur C. Clarke**, the scientist and science novelist who first proposed, in 1945, the idea of communication satellites in geosynchronous orbit -- and found him working on five new books at once.

In Colombo, Professor Cleveland called on the Prime Minister, talked with a number of government officials and advisors, visited with the leader of the opposition in Parliament, and met with a group of Hubert H. Humphrey Fellows who had each spent a year (funded by the USIA) in the United States.

During a weekend visit outside the capital city, he visited in Kandy the Venerable Bhikkhu Bodhi, a Buddhist scholar and translator of major scriptures from the ancient Pali, president of the Buddhist Publication Society, and successor to the late Venerable **Nyanaponika Mahathera**, a Fellow of the World Academy.

He also visited the headquarters of Dr. A.T. Ariyaratne, President of the Sarvodaya Movement which has spread to thousands of Sri Lankan villages a philosophy of self-governing development. (Harlan Cleveland found it intriguingly comparable to the Rural Reconstruction philosophy conceived by the late Jimmy Yen, by which he had been guided in developing a U.S. aid program for Taiwan in 1948-1950.)

Advance arrangements for this very full visit in Sri Lanka were made by Dr. **Patrick Mendis**, an Associate Fellow of the World Academy.

**Indonesia:** In Indonesia, Harlan Cleveland was hosted by

**Mochtar Lubis**, a member of the World Academy's Executive Committee, and the U.S Information Service, which had gathered an audience for a talk ("The Confidence Game") on the international monetary system. The visit with Mochtar Lubis and others in Djakarta provided an opportunity to explore in a predominantly Muslim country the idea, discussed in an accompanying article, of a World Academy project on Religion and Politics.

**Singapore:** In Singapore **Kishore Mahbubani** (former Ambassador to the U.N., now Permanent Secretary of the Foreign Office) had arranged for interviews with university officials. Harlan Cleveland had long talks with Professor Lim Pin, a physician who has been Vice Chancellor of the National University of Singapore for more than a decade, and Dr. Cham Tao Soon, President of Nanyang Technological University. At a dinner hosted by the Mahbubanis, he had an opportunity to meet several influential Singaporeans and to renew a long friendship with **T.T.B. (Tommy) Koh**, former Ambassador to the U.N. and the United States, who chaired and drove to completion the lengthy and complex multilateral negotiation (UNCLOS III) leading to the current Law of the Sea Treaty. Tommy Koh is now Ambassador-at-Large at the Foreign Office and head of a new Singapore-based international think-tank, the Institute of Policy Studies.

In Singapore, Harlan Cleveland also had an opportunity to discuss the world economy and national economic policies with Dr. Lal Jayawardene, now the Sri Lankan government's chief economic adviser, who was returning from the meetings in Washington of the World Bank and the International Monetary Fund.

**Japan:** Several days were spent in Ishikawa Prefecture on the Sea of  
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### Around the World (from pg.5)

Japan, where Harlan Cleveland had been asked by the International Resort Conference to be a keynote speaker, together with former U.S. Secretary of State James A. Baker, III, at two large public meetings. The themes he stressed were (a) the impact of the information revolution on local governance, (b) the inevitability of cultural diversity, (c) the dwindling relevance of geography, and (d) the dilemmas for Japan in an irreversibly international market.

His subsequent visit to Tokyo featured a World Academy seminar at the International House of Japan. The chairman of I-House, Dr. **Michio Nagai**, was regrettably out of town; the seminar was co-chaired by Prof. **Kinhide Mushakoji** and Harlan Cleveland. A reception followed, hosted by the World Academy. Among the participants in the seminar were Dr. **Kenneth Ruddle**, a human ecologist long resident in Japan; and two Japanese Associate Fellows, **Hirotohi Komoda** and **Masato Homma**.

A visit to the handsome new United Nations University headquarters in downtown Tokyo included a long discussion with Prof. **Heitor Gurgulino de Souza**, the Brazilian Rector of UNU, and with Vice Rector Tarcisio della Senta, who is organizing a new Institute of Advanced Studies for which the government of Japan has already built a new building alongside the UNU. Dr. de Souza has invited Harlan Cleveland to be among the first visiting scholars at the new Institute. Such a visit is now foreseen for the autumn of 1996, and may be helpful in generating further World Academy activity in East Asia.

Advance arrangements in Tokyo were made by Associate Fellow **Keith Vargo** of Minneapolis, who had three years of his education in Japan.

### A New Tax for the New Wealth of Nations

by A.J. Cordell and T.R. Ide

*Arthur Cordell is an economist based in Ottawa. Ran Ide is a communications executive and consultant in Toronto. The New Wealth of Nations, a major paper by these two Canadian Fellows, was presented at the annual meeting of the Club of Rome, in Buenos Aires, Argentina, in December 1994.*

More than two hundred years ago, Adam Smith wrote about *The Wealth of Nations*. He concluded that wealth was based on the division of labour and the extent of the market.

In today's New Economy, the new sources of wealth, the new factors of production, are to be found in knowledge, information technologies and communications.

The New Economy is best represented by the trillions of digital bits of information pulsing through global networks. These are the physical/electronic manifestations of the many transactions, conversations, voice and video messages and programs that, taken together, record the process of production, distribution and consumption in the new economy. The new wealth can be in the form of entertainment such as movies and video games; in financial management such as electronic data interchange systems for businesses and automatic tellers for the average citizen; in systems designed to control aircraft traffic in the skies and baggage distribution on the ground below; or, in managing the maze of telephone calls, faxes, e-mail and charge card accounts that characterize life in this latter part of the twentieth century.

Viewing the new productive power through the prism of the old economy, it is hard to see just how wealthy and productive our system has truly become. Outdated mindsets have led us to neglect the new wealth and the productive capacity created by and carried on global net-

works. The digital information that is providing so much of the new wealth also provides a way for us, through our governments, to get at some of the productive potential of a knowledge-based economy. It is important that this new wealth, this new productivity, be accessible by governments so that they can perform their traditional functions, so that the advanced countries can maintain hard-won standards of living and the less-developed countries can advance and grow.

A new tax base is important if we are to avoid the insolvency of democratic governments -- particularly in a time of growing needs. A portion of the new productivity that is being created must be captured if the public is to share in the bounty of a knowledge society.

While there are few kudos for proposing a new tax, the time is ripe to suggest positive and constructive ways of dealing with serious economic conditions. The move to a new economy should be matched by consideration of a new tax base that is growing, is at the heart of the new economy, can be easily identified, is difficult to avoid and readily collectible.

How is this to be done? If the new wealth of nations is to be found in networks, then why not a tariff on digital traffic -- similar to a gasoline tax, a toll on using a bridge or highway, or paying for a license plate on a car? We propose a "bit tax" on each digital bit of information carried on the 'information highway'.

Whether the digital bit is part of a foreign exchange transaction, a business teleconference, an Internet e-mail or file transfer, an electronic check clearance or an ATM transaction, each bit is a physical manifestation of the new economy at work.

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### A New Tax (from pg. 6)

We have chosen 'bit tax' because the bit is the symbol of the digitized world in which we now live. Whether the tax is levied on the traffic carried by the fibre cable and the micro-wave paths or whether it is levied on interactive satellite traffic, the bit tax is the major gateway to the wealth being generated in this age of information. The bit tax is one way to begin to distribute the prosperity from an economy characterized by increasing productivity and declining employment.

There is much research to be done before the proposed 'bit tax' will be able to answer all the questions that those committed to the status quo are bound to raise. Then there is the question of harmonization and tax treaties. Although it would not be necessary to obtain agreement from all the nation-states, no one country could adopt such a major policy by itself. It stands to reason that agreement from the major trading partners would have to be reached; reasonably common rates of taxation would have to apply.

There is a particular urgency to embracing fiscal reform. North American economies are experiencing overall growth while the average household faces a decline in income. This is a far from healthy phenomenon in a democracy. Inevitably, if current trends continue, drastic solutions will become attractive and electorates may opt for charlatans who promise to right wrongs real or imagined.

The solution to us seems clear. Get rid of antiquated taxes that no longer relate to the new wealth of nations and bring in innovative tariffs that will take the load off already overburdened individuals and place it on the much more impersonal robot-like shoulders of networks, the engines of wealth that have brought the end of the old millennium and the beginning of the new.

### Awards

At the closing ceremony of the 15th World Congress of Fertility and Sterility, in Montpellier, France, September 17-22, 1995, the World Academy of Art and Science Mastroianni-Segal Award was presented to Professor **Mahmoud Fathalla** of Assuit, Egypt. This award recognizes outstanding contributions to women's health through family planning and population research. Professor Fathalla was cited for his leadership role as the Director of the World Health Organization's Human Reproduction Program and for his efforts at the recent United Nations International Conference on Population and Development in Cairo. Professor Fathalla played a pivotal role at the Cairo conference in establishing policies with respect to women's health and contraception. On receiving the award, presented by Dr. **Luigi Mastroianni**, (representing Dr. **Horácio Menano**). Dr. Fathalla addressed the assemblage providing a comprehensive review of population concerns in the next century, placing emphasis throughout on the importance of women's health issues.

The Mastroianni-Segal Award recognizes outstanding contributions to the broad fields of population, contraceptive development, and women's health. This year's recipient was selected by an advisory committee consisting of William C. Andrews, President of the American College of Obstetricians and Gynecologists, Shan S. Ratnam, Professor of Obstetrics and Gynecology at the National University of Singapore and Past President of the International Federation of Fertility Societies, and Robert F. Harrison, Secretary General of the International Federation of Fertility Societies. The award consisted of a monetary prize along with a plaque designed by Horácio Menano, Chairman of the World Academy of Art and Science Award Committee.

On the same occasion, a special recognition citation of the World Academy of Art and Science was presented to **Egon Diczfalusy**, Professor Emeritus at the Karolinska Institute in Stockholm, Sweden, by Dr. **Sheldon Segal**. This acknowledged Professor Diczfalusy's life-long contributions to the broad field of population research as well as his numerous contributions to the field and his humanitarian principles. Professor Diczfalusy addressed the group re-emphasizing the tremendous world importance of this field and of continued support of research leading to better understanding of population dynamics as well as better methods of pregnancy prevention.

Following the formal ceremony, Professors Fathalla and Diczfalusy were honored at a reception hosted by Organon International.

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A recommendation to establish an Award in Architecture (as a fusion of Art and Science) has been discussed at the Executive Committee level in recent years and was unanimously approved at the last Executive Meeting held in New York on October 7. It was also recommended that this new Award should follow the very successful format of the Stuart Mudd Award (Microbiology) and of the Mastroianni-Segal Award and be given at regularly scheduled prestigious international meetings.

With the purpose of defining the objectives of this new Award, contacts have been made with university departments and with well-recognized professional Associations, including the International Union of Architects.

Suggestions and comments from World Academy Fellows will be greatly appreciated.



**Executive Committee Actions**

The Executive Committee of the World Academy, meeting in New York City on October 7, 1995, heard reports of activities covered elsewhere in this Newsletter, and of the Biofocus Foundation's active participation in the worldwide "zero emissions" campaign sparked by the U.N. University in Tokyo.

The Committee approved the nominations of **Francisco Sagasti**, **Lynn Margulis**, and **Garry Jacobs** (listed among other new Fellows on this page); and decided to establish a new category of Junior Fellows (selection procedures, special program activities, and funding are still to be worked out). The Committee also took several actions on executive personnel:

With Past President **Carl-Göran Hedén** in the chair, the Executive Committee unanimously elected Professor **Harlan Cleveland** to a second five-year term as President, beginning January 1, 1996. Prof. Cleveland agreed to continue in this capacity, "on the understanding that this does not necessarily signify another five-year commitment" to the office. A Search Committee, consisting of Fellows **Mahomed Kassas**, **Mochtar Lubis**, **Mircea Malitza**, **James Dator**, **Horácio Menano**, with **Magda McHale** as chairman, had earlier recommended this outcome. The Search Committee was disbanded with thanks for its members' service.

**Richard W Palmer**, Esq., was appointed to a new term as Treasurer. Prof. **Magda Cordell McHale** was reappointed as Admissions Chairman. Both reappointments were for five-year terms; they agreed to serve for as long as the President does.

The full Minutes of the October 7 Executive Committee meeting are available to Fellows on request to the World Academy's Minneapolis office.

**New Fellows**

The following Fellows were elected by the Executive Committee since its April 1995 meeting:

Dr. Ian Oakely Angell  
Information systems  
London, United Kingdom

Margarita Marino de Botero  
Environmentalist, Educator  
Bogata, Columbia

Dr. Rafael Echeverria  
Sociologist and Educational consultant  
San Francisco, California USA

Eng-Leong Foo  
Microbiology and biotechnology  
Stockholm, Sweden

Maestro Evgene Goncharenko  
Composer, Conductor  
Moscow, Russia

Garry Jacobs  
International Commission on  
Peace and Food  
Pondicherry, India

Prof. Manfredo Maciotti  
Lawyer, Engineer  
Brussels, Belgium

Dr. Lynn Margulis  
Biologist  
Amherst, Massachusetts, USA

John A. Rollwagen  
Information systems  
St. Paul, Minnesota, USA

Dr. Francisco Sagasti  
International governance  
and development  
Lima, Peru

**Deceased Fellows**

Reported deaths of Fellows since the December 1994 Newsletter:

Prof. Gerard K. Boon  
Technology Scientific Foundation  
Noordwijk, The Netherlands

Professor Adolf Butenandt  
Biochemistry, Physiological Chemistry  
Munchen, Germany

The Venerable Nyanaponika Mahathera  
Forest Hermitage, Kandy, Sri Lanka

Dr. Cyril Ponnampereuma  
Chemistry, Chemical Evolution  
College Park, Maryland, USA

Professor Dr. Gershon Weiler  
Philosophy  
Rehovot, Israel

**A Very Wise Man**

When he died last year, **Jonas Salk** was justly celebrated as having contributed, through the polio vaccine bearing his name, one of this century's most widespread and enduring benefits to humanity. But this first-rate scientist was also one of his generation's genuinely wise men.

Fellow Jonas Salk was an active participant in the World Academy's 1994 Assembly in Minneapolis. His theme in several comments was that people achieve wisdom by *metabolizing the experience that life represents*. And he spoke of "the need not only to immunize children but to humanize children."

"I have an impression," he said during a discussion of information technology, "that those who have wisdom know more than they know, and that we all know more than we know if we simply observe how the human organism itself functions." Modern information systems, he added, provide power without precedent: "We as products of the process of evolution have now taken over that process by these means."

As one of its earliest Fellows, he spoke of the World Academy in a very personal way. "I like the idea of 'art and science'. For me, art comes before science," said this well-known scientist. "We *feel* things before we *know* what we feel. That's what I think the World Academy of Art and Science represents, even though we may not have known that was what was happening when it was formed and named. Nevertheless that was what was expressed, and after all these years it has resulted in the coming together of like-minded people -- people who metabolize experience in such a way, those for whom art is whatever they do. Whether it's science, or painting, or poetry, or politics, or anything else, they have a *feeling* for what they do."