



Science for Peace

UNIVERSITY COLLEGE, UNIVERSITY OF TORONTO, TORONTO, ONT. M5S 1A1 (416) 978-6928

Bulletin

Vol. 6, No. 7, September, 1986

President's Corner

PEACE AT EXPO '86

THE QUEST for peace takes on various shapes and symbols. I even found peace alive and well in some aspects of Vancouver's EXPO. Former Premier Bill Bennett claimed EXPO had been intended to send out a message of peace and better understanding among nations. Was he right?

My first superficial impression of EXPO gave me a different message. Sleazy commercialism seemed to have run riot in a setting that nature had intended for the enjoyment of beauty.

A more carefully planned second visit brought me to the UN pavilion - the most impressive audio-visual presentation of what the UN does that I have seen anywhere. The message was clear: all life on Earth exists in symbiotic relationship which must not be upset if we are to survive the nuclear age. The GM and CPR exhibits responded imaginatively with rather similar themes. The GM pavilion dwelt on the concept of communication with the spiritual world held by the Haida. The CPR pavilion poked fun at the supposed benefits of machines and commercialism which are apt to dwarf real men and women and offered a rather unsophisticated attack on Star Wars and a slick Hollywood feature on the confrontation of the "empires" in the heavens.

The Haida and Tlingit peoples and their legends dominate the northern Pacific coast, right up to Alaska. A totem I saw at Juneau has a nice "peacemongering" story attached to it:

A man built a fish trap and caught many salmon. Black bears discovered it and began taking the fish. Catching the bears in the act, the man shouted such awful insults they were offended. The bears captured the man, but he escaped in a canoe. Having lost their chief, the black bears gathered to make war on humans. Warned of their attack, the people built ten stockades, one within the other. In the fighting, the bears threw down all but the innermost stockade. Since so many died, they lost the war. Then the people had more bear meat than they could eat.

It seems to me a pity that no equivalent totem exists to represent the madder world of nuclear brinkmanship between Canada's superpower neighbours - the "bears" and the "eagles" - and their confrontation with nuclear overkill of layered defences and escalating offensive triads, a brinkmanship which risks pushing us all over the brink.

- George Ignatieff

WHILE HE WAS IN BRITISH COLUMBIA George Ignatieff spoke at Castlegar and at Simon Fraser University in Burnaby. July found him in Quebec; his topic there: Strategy for Survival. He is off now to the Pugwash meetings in Budapest. From there he goes to Moscow as guest of the Academy of Sciences. End of the month finds him back in Canada for Consultative Group meetings in Ottawa and conferences across the country.



The City of Hiroshima

PEACE DECLARATION

August 6, 1986

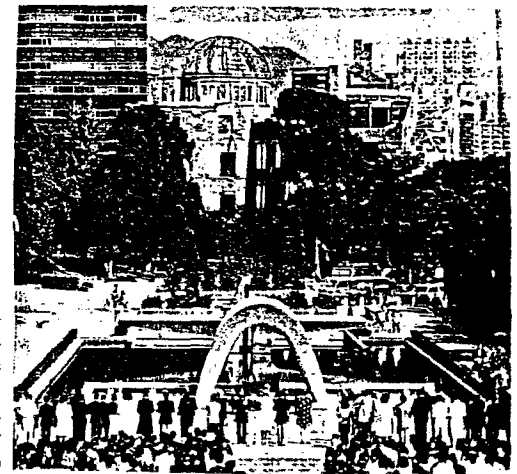
FORTY-ONE YEARS AGO, on August 6, 1945, Hiroshima was devastated by a scorching flash of light and an earth shaking explosion. The streets were massed with people, many of them dead almost instantly, and many of the rest wondering if death was not the kinder fate. It was truly an earthly inferno surpassing imagination.

Risen from its ruins like the mythical phoenix, Hiroshima has repeatedly appealed for the total abolition of nuclear weapons and the creation of lasting world peace so that the evil not be repeated.

This year has been designated the International Year of Peace.

Calling for the total abolition of all nuclear weapons and the attainment of world peace, the voice of Hiroshima is today the voice of all peoples everywhere.

We are holding this Peace Summit in Hiroshima today to mobilize the world's conscience for the total abolition of nuclear weapons and the attainment of lasting world peace.

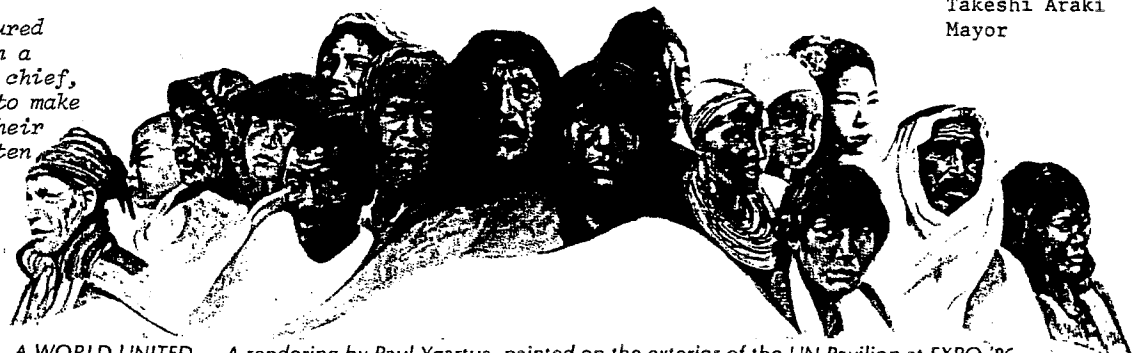


It is essential that all cities and citizens of the world join together in expanding the circle of solidarity transcending national boundaries, partisan ideologies, and religious creeds to strengthen the bonds of human friendship and solidarity.

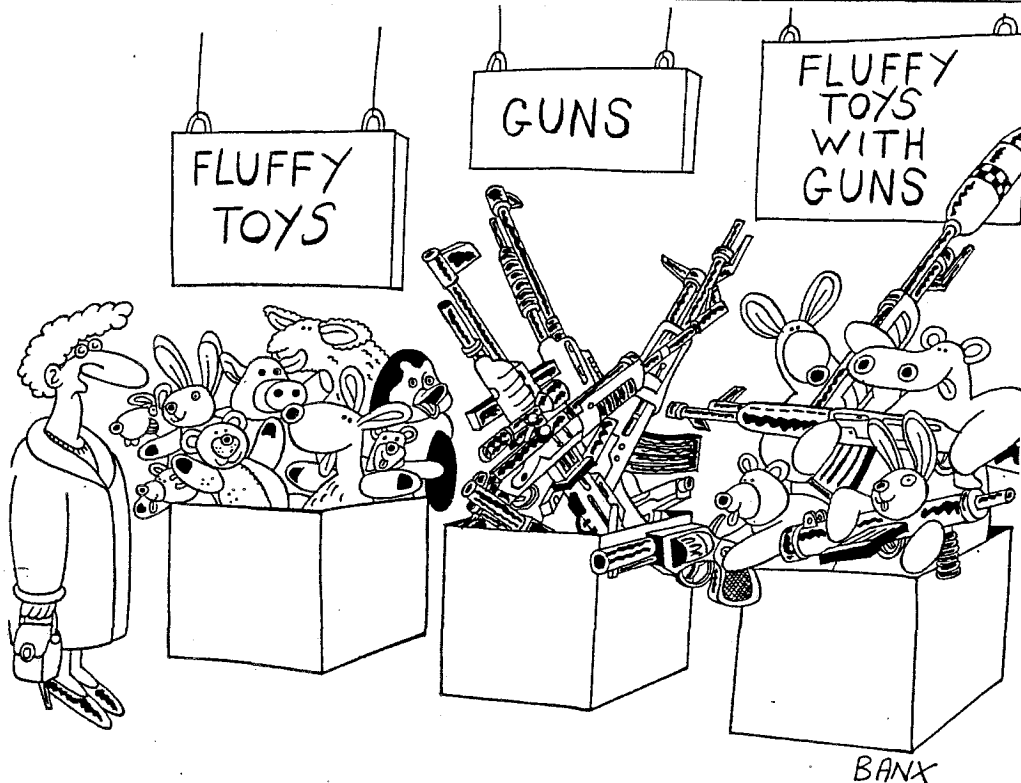
Today, on the occasion of this ceremony marking the forty-first anniversary of the atomic bombing of Hiroshima, we offer our prayer for the repose of the victims' souls and rededicate ourselves anew to the cause of peace.

Takeshi Araki

Takeshi Araki
Mayor



A WORLD UNITED — A rendering by Paul Ygartua, painted on the exterior of the UN Pavilion at EXPO '86.



Dear Colleagues,

This summer took me to four scientific meetings in Europe where I found very great and widespread concern about current trends in world affairs, especially the ever-growing arms race and the failure to make real progress in reducing tensions between the great powers. Strong criticisms of the Reagan government's policies came even from scientists whose livelihood depended on US defence contracts. Some of those who were most strongly condemnatory of the danger to world peace posed by SDI still felt that they could accept SDI funding for basic research provided that the results were unlikely to be used for offensive purposes and would be published. Of course, accepting such funds sends a message to one's co-workers and makes it harder to criticize the system.

My attempts to discuss these matters with scientists from Eastern Europe met with little success. At two of the four meetings, expected Soviet participants did not arrive, and at the third they came late and were not very communicative. Only at one place did they arrive as expected and then two of the three Soviets (at a meeting with participants from 24 countries) apparently spoke only Russian. The third was not an active scientist and, while he was able to interpret for the others, one could not have a discussion through him on any sensitive subject. A highly respected Soviet scientist in my field was reported banned from international travel.

The need for scientists to group together to make their collective voices heard has never been greater. In Darmstadt it was encouraging to meet with Gunther Schwarz who, by publicizing our activities through the "Darmstädter Blätter" is trying to promote the formation in West Germany of an organization similar to Science for Peace. But in the same country it was deeply disturbing to hear that the name of an old friend, professor of physical chemistry at one of Germany's oldest universities, and certainly no warmonger, was on the death list of the "Rote Armee Fraktion" who recently murdered the research director of Siemens and his driver. The well-publicized activities of such radical fringe groups are only too easily used to discredit other activists, including those working for peace, and to justify excesses of other kinds.

- John Dove

AVAILABLE: A report of the Canadian participants Eric Fawcett, Arthur Forer and Derek Paul, in the International Forum of Scientists to Stop Nuclear Tests, a meeting held in Moscow 1 - 13 July, hosted by the Academy of Sciences of the USSR.

Bookshelf

THE COMPLETE TEXT of the television address of Mikhail Gorbachyov, Aug. 18, explaining the reasons for the extension of the Soviet Union's unilateral test ban to January 1 is available from the Press Office of the USSR Embassy, 400 Stewart St., Apt. 1108, Ottawa K1N 6L2. If you wish, the BULLETIN will duplicate it for you. From the text:

"The Soviet Union has sufficient reasons for resuming its nuclear testing, and yet we are convinced that the ending of nuclear testing not only by the Soviet Union but also by the United States would be a real break - through to arresting the nuclear arms race, would speed up the elimination of nuclear arms."

Simon Dalby, guest editor, ISSUES IN EDUCATION AND CULTURE: ON TEACHING PEACE. Order from the Institute for Humanities, c/o S. Duguid, Continuing Studies, Simon Fraser University, Burnaby, B.C. V5A 1S6; \$2, payable to Simon Fraser University.

"This issue speaks to two aspects of the nuclear cold war. On the one hand we focus on the ways of thinking and acting about the nuclear tensions which might undercut the cynical forms of reason which perpetuate the militarization of our lives. On the other hand, we show the effects of this cold war in order to unfreeze the hermetic memory hole into which this century of war has been lodged."

William Epstein, A complete bibliography of books and articles - a number available from SFP.

RECOMMENDED READING:

G. Kh. Shakhnazarov, The Logic of Political Thinking in the Nuclear Age. From Soviet Studies in Philosophy, A Journal of Translations. Summer 1986, Vol. XXV, No 1. M.E. Sharpe, Inc., 80 Business Park Drive, Armonk, NY 10504. If the Journal is not in your library, we can make an offprint for you.

Carl Sagan, USA and USSR: Let's Go to Mars - Together. Free from Council for a Livable World Education Fund, Twenty Park Plaza, Boston, Mass. 02116. For more than 25 copies, 25¢ each plus postage and handling.

Lewis H. Lapham, editor, Harper's Magazine, "Nuclear Warriors Are Living in a Dream", offprinted from The Globe and Mail, 11 Aug. 1986, by the SFP BULLETIN.

Walter Dorn has completed his CIIPS - sponsored project to prepare a DIRECTORY OF CANADIAN SCIENTIFIC EXPERTISE: PEACE AND SECURITY ASPECTS. Copies can be made by the national office.

Brydon Gombay, AN OVERVIEW OF THE PAST AND PRESENT STATUS OF THE NON - PROLIFERATION TREATY, COMPREHENSIVE TEST BAN AND FREEZE MOVEMENT. Includes the SFP position paper.

Two of Gregory Baum's books are listed in a catalogue of "Thought - Provoking Books" from James Lorimer & Co., Publishers, 35 Britain St., Toronto. ETHICS AND ECONOMICS, with Duncan Cameron, and CATHOLICS AND CANADIAN SOCIALISM

New SFP brochures are now available.

Derek Paul, "To Stop Or Not To Stop the Nuclear Arms Race"- Comments on a comprehensive nuclear test ban.

Myriam Fernandez responds to William J. Broad's article in the NY TIMES of May 27: "Ultimate Survival".

Simon Dalby, "The Technological-Fix Syndrome and the Arms Race", a paper presented at the J.S.Woodsworth Institute on Peace and War at Simon Fraser University, July 15.

Ross Smyth, "Challenging the Legality of Nuclear Weapons and Strengthening International Law", summary of address to World Federalists, Montreal, June 25.

Derek Paul, 30 April CBC Commentary on Chernobyl:

"Sweden has shown that a monitoring system of sufficient sensitivity can provide a timely warning of danger to the public. Despite the monitoring which is already done by provincial health authorities, Canada does not possess a continuously operated nation-wide system, and has no monitors of sensitivity comparable to the Swedish ones. Perhaps it is time now for a Canadian pilot project. After all, the 3-mile Island accident was not so far from our borders. The next one, wherever it is, might be as serious as the accident in unlucky Chernobyl.

Eric Fawcett will act as coordinator of activities in Canada for Scientists' International Peace Week 10 - 16 November. The idea of a world-wide outreach effort on the part of concerned scientists has been brewing for almost a year and has already garnered supporters from some 19 countries, both East and West Block and non-aligned. For more information, contact Eric Fawcett, Dept. of Physics, University of Toronto, Toronto M5S 1A1.

Alan Weatherley, Univ. of Toronto, has taken on the job of being information and press coordinator of the national executive.

HOO-BOY! MY FUTURE IS BEING DECIDED IN THERE NOW...



AND I WASN'T EVEN INVITED-



Research Report

Social traps are situations in which individual rationality dictates one course of action, collective rationality another. If all participants are guided by individual rationality, all are worse off than if they had acted in a collectively rational manner. These situations can be simulated by very simple games. The way people play these games reflects the relative weights of individual or collective rationality in their behaviour.

In the two-year research project (funded by SSHRC at the U of Toronto) just concluded, the subjects were of different backgrounds: professionals, business people, employees, students. Interesting differences were noted in their behaviour in social trap games. Among the games used was "Tragedy of the Commons", illustrating the disastrous consequences of unrestrained exploitation of limited resources. The results indicated that even when the nature of a social trap is explained, collectively rational behaviour in the Tragedy of the Commons is rarely observed.

- Anatol Rapoport
Principal Investigator

IN RECOGNITION OF his many contributions to many disciplines, past-president of SFP Anatol Rapoport was awarded the honorary degree of Doctor of Law, honoris causa, at the spring convocation of the University of Toronto June 9. A copy of his acceptance address "The Two Cultures" is available at the national office.

At the 9th annual scientific meeting of the Int'l Society of Political Psychology in Amsterdam on June 29, Anatol Rapoport received the Harold D. Lasswell Award for Distinguished Scientific Contribution to Political Psychology. A paper delivered at this meeting, "The Subjective Aspects of Risk" is also available from the national office.

A Festschrift for his 75th birthday, *Paradoxical Effects of Social Behavior, Essays in Honor of Anatol Rapoport*, was presented in Munich by co-editor Andreas Dieckmann in July. This book (in English) can be ordered through the BULLETIN. A lecture delivered in Munich at the Ludwig - Maximilians Universität, "Experimental Studies in Social Traps", is available only in German from the national office. An English version is in preparation.

CHRISTIAN BAY chaired a panel on Perspectives on Left and Right at the annual scientific meeting of the International Society of Political Psychology in Amsterdam this summer. He opened the panel's discussion with his paper, "On the Contest Between Politics and Pseudopolitics".

Letters

IN CASE you have not noticed the attached clipping, you might be interested in mentioning it in the BULLETIN. The Dept. of Atmospheric Sciences at the University of Washington is one of the best in the U.S. and the signatories are very well known among research meteorologists. I am not sure about the prospects of SDI funding in Canada, too, but I admire our US colleagues for speaking out on this issue.

- Paul LeBlond

Opposition to the Strategic Defense Initiative *Bulletin American Meteorological Society*

Twenty-nine faculty, research associates, and graduate students in our department have signed a pledge which concludes "... we will neither apply for nor accept research funding from the Strategic Defense Initiative Organization. We encourage other scientists, engineers, and technical personnel to join us in this pledge. We hope, together, to persuade the public and the Congress not to support this deeply misguided, dangerous, and enormously expensive program.

R. A. BROWN, ROBERT G. FLEAGLE, PETER H. HAYNES, JAMES R. HOLTON, R. A. HOUZE, CONWAY B. LEOVY, CLIFFORD F. MASS, RICHARD J. REED, WALTER ROBINSON, AND JOHN M. WALLACE
Department of Atmospheric Sciences
University of Washington
Seattle, WA 98195

THE SENATE OF YORK UNIVERSITY has ratified the enclosed set of motions. They were adopted by three separate votes, each passing by a majority. These votes came after six months of debate throughout the University.

Enclosed:

"Be it resolved:

"1. that the Senate of York University rejects in the strongest terms possible the concepts of the Strategic Defense Initiative;

"2. that the Senate of York University urges all members of the University as an act of individual conscience not knowingly to undertake research which is funded by the Strategic Defense Initiative Office of Innovative Research;


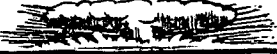
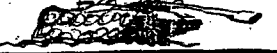


"3. that the Senate of York University urges the administration not to accept funds on behalf of York University from the Strategic Defense Initiative Office of Innovative Research."

-A.D. Stauffer
M. Lanphier

THE SCIENCE FOR PEACE display that we mounted at the Canadian Federation of Biological Societies meeting here (University of Guelph) in June was well received. All of the brochures were distributed to interested conferees who stopped to look at the other publications - in spite of the information overload that usually attends such events. Perhaps an SFP sponsored lecture or discussion would be worth while in another year,

- Janet Wood

A Short History of
Ultimate Weapons to End War Forever:

1995		STAR WARS
1945		ATOMIC BOMB
1910		ARMORED TANK
1860		MACHINE GUN
1600		MUSKET

The Cry

For a long time there was fear -
Fear of the apocalyptic flash
Sucking in and lifting up death's sustenance,
The fearful blast negating creation,
The neutering of the Seasons,
The end of species, of nurturing,
The Earth a prodigal star returned barren
To a sterile fold.

But this was not to be -
A cry arose
From countless soldiers' graves,
From unborn children longing for light,
From roses in gardens modelling beauty's raiment
A cry so powerful
That trust replaced suspicion,
Science spurned war and embraced peace,
Concern for others assumed the place of greed.
Life heard this cry,
The uplands and the valleys became radiant,
The deserts bloomed.

And fear with all her friends was vanquished.

Murray Wilton
June 12, 1986

Test ban

Canada's silence in response to the extension by the Soviets of their moratorium on atom-bomb testing is unfortunate when viewed in the perspective of Canadian initiatives to halt testing as an essential means of restraining the nuclear arms race and curbing proliferation.

This silence leaves Canada by implication as accepting the response issued from Santa Barbara by a White House spokesman that "a nuclear test ban is not in the security interests of the United States, our friends or our allies." This comment came on the same day that the leaders of Argentina, Greece, India, Mexico, Sweden and Tanzania, meeting in Mexico, called on Moscow and Washington to halt testing under a verification plan the six countries would administer.

In Canada, successive governments, Conservative and Liberal, have had a test ban at the top of their agenda in arms control and disarmament. Howard Green, who was among those who led the fight for the Partial Test Ban Treaty in 1963, and scientists from Canada have played a leading part in using seismic technology to help bridge the "confidence gap" that has been the main obstacle to a comprehensive test ban.

Especially in this Year of Peace, Canada's voice should be raised to end testing reciprocally, lest we miss the opportunity provided by the Soviet offer to use the moratorium as a way toward a comprehensive test ban. In present circumstances, when the position of the U.S. Administration is "Mumble Mumble On Arms Control" (as the New York Times of Aug. 20 put it), Canada should be speaking out clearly on behalf of those who see a chance of finally putting a stop to nuclear proliferation.

George Ignatieff
Anatol Rapoport
John P. Valleau
John E. Dove
Science for Peace

"DOING" SCIENCE FOR PEACE

With the June issue of the BULLETIN you received a flier describing ENERGY PROBE. With this issue, you may read about POLLUTION PROBE, another organization that shares some members, board members and interests with Science for Peace.

OFFICERS FOR 1986 of the Waterloo Chapter are James Gardner, president; Cynthia Folzer, vice-president; Liviu Cananau, treasurer; Frank Thompson, speakers' bureau; and David Roulston, secretary and contact person. Serving on the national SFP board this year will be Gardner, Folzer, Roulston and Thompson.

WELCOME! to a new SFP chapter: Science for Peace Manitoba. Officers for the year are F.M. Kelly, president; J. Luik, secretary; Grant Woods, treasurer; Peter Graham, Ian Carr, A. Schafer and A. Spence, directors. A first membership drive will be launched this month.

Science for Peace

UNIVERSITY COLLEGE, UNIVERSITY OF TORONTO, TORONTO, ONT. M5S 1A1

NATIONAL EXECUTIVE

George Ignatieff, *president*
John E. Dove, *secretary*
John P. Valleau, *treasurer*

CHAPTER CONTACTS:

St. F.X. Physics Group
Prof. M.O. Steinitz, Physics Dept.
St. F.X. University, Antigonish
N.S. B2G 1C0

Science for Peace New Brunswick
Prof. G.P. Semeluk, Dept. of
Chemistry, UNB, Bag Service
#45222, Fredericton, N.B.

Science et Paix Quebec

David W. Horwood, 710 -
3475 St. Urbain, Montreal,
P.Q. H2X 2N4

Science for Peace Ottawa

Dr. A.B. Mingarelli, Dept. of
Mathematics, U. of Ottawa
Ottawa, Ont. K1N 9B4

Science for Peace Toronto

Phyllis Greighton, Dictionary
of Canadian Biography, U of
Toronto, Toronto, Ont. M5S 1A1

Science for Peace Waterloo

Prof. David Roulston, Dept. of
Electrical Engineering, U of
Waterloo, Waterloo, Ont. N2L 3G1

Science for Peace Manitoba

Prof. F.M. Kelly, Dept. of
Physics, U. of Manitoba
Winnipeg, Man. R3T 2N2

B.C. Chapter, Science for Peace

Dr. Colin Bell, Dept. of
Microbiology, UBC, Vancouver,
B.C. V6T 1W5

ACCIDENTAL NUCLEAR WAR CONFERENCE

Papers (Vancouver, May 26 - 30) are available in book form: *The Nuclear Time Bomb: Assessing Accidental Nuclear War Dangers Through the Use of Analytical Models*. Peace Research Institute, 25 Dundas Ave., Dundas, Ont. L9H 4E5. Price, \$10 US.

Michael Wallace (Conference director) is having Michael Haag's paper on 25 French nuclear weapons accidents translated into English.

Involved in attempting to establish an assessment center or institute concerned with accidental nuclear war in Canada are SFP members John Dove, Dianne DeMille, Michael Wallace, Alan Newcombe and Fred Knelman.

The International Accidental Nuclear War Prevention Newsletter is available from Nuclear Age Peace Foundation, 1187 Coast Village Rd., Suite 123, Santa Barbara CA 93108. No charge, but contributions to the foundation are appreciated.

BACK TO BACK IN *The Toronto Star*, of Aug. 22:

THE GO-AHEAD ON DARLINGTON

"Darlington represents more than anything else Ontario's final plunge into a heavily nuclear future. Soon Metro residents will be surrounded by more canned radioactivity than anywhere else in the world."

TIME TO FIND A SOLUTION TO PROBLEM OF A-WASTE

"Protecting the next 300 generations against the dangers of nuclear waste is an imposing challenge. The management of high-level waste is a classic example of proceeding full-speed-ahead with a program while relying on a futuristic technological fix for its safe implementation. The funds appropriated for reactor technologies and weapons production have always dwarfed those granted for research on waste disposal."