WORLD CITIZENSHIP: ALLEGIANCE TO HUMANITY

Also by Joseph Rotblat

ATOMS AND THE UNIVERSE (*with G. O. Jones and G. J. Whitrow*)

RADIOACTIVITY AND RADIOACTIVE SUBSTANCES (*with J. Chadwick*)

SCIENTISTS IN THE QUEST FOR PEACE

NUCLEAR RADIATION IN WARFARE

* STRATEGIC DEFENCES AND THE FUTURE OF THE ARMS
RACE (*co-editor with J. Holdren*)

* COEXISTENCE, COOPERATION AND COMMON SECURITY:
Annals of Pugwash 1986 (*co-editor with L. Valki*)

VERIFICATION OF ARMS REDUCTIONS (*co-editor with J. Altmann*)

GLOBAL PROBLEMS AND COMMON SECURITY: Annals of
Pugwash 1988 (*co-editor with V. I. Goldanskii*)

BUILDING GLOBAL SECURITY THROUGH COOPERATION:
Annals of Pugwash 1989 (*co-editor with J. Holdren*)

TOWARDS A SECURE WORLD IN THE 21st CENTURY: Annals of
Pugwash 1990 (*co-editor with F. Blackaby*)

STRIVING FOR PEACE, SECURITY AND DEVELOPMENT IN
THE WORLD: Annals of Pugwash 1991 (*editor*)

A NUCLEAR-WEAPON-FREE WORLD: Desirable? Feasible? (*co-
editor with J. Steinberger and B. Udgaonkar*)

A WORLD AT THE CROSSROADS: NEW CONFLICTS, NEW
SOLUTIONS: Annals of Pugwash 1993 (*co-editor with S. Hellman*)

TOWARDS A WAR-FREE WORLD: Annals of Pugwash 1994
(*editor*)

* *Also published by Macmillan*

World Citizenship: Allegiance to Humanity

Edited by

Joseph Rotblat, FRS

Winner of 1995 Nobel Peace Prize

Emeritus Professor of Physics, University of London

President, Pugwash Conferences on Science and World Affairs

Executive Editor: Tom Milne

St. Martin's Press
New York

WORLD CITIZENSHIP: ALLEGIANCE TO HUMANITY

Copyright © 1997 by Pugwash Conferences on Science and World Affairs

All rights reserved. No part of this book may be used or reproduced in any manner whatsoever without written permission except in the case of brief quotations embodied in critical articles or reviews.

For information, address:

St. Martin's Press, Scholarly and Reference Division,
175 Fifth Avenue, New York, N.Y. 10010

First published in the United States of America in 1997

This book is printed on paper suitable for recycling and
made from fully managed and sustained forest sources.

ISBN 978-0-333-66999-0 ISBN 978-1-349-25428-6(eBook)
DOI 10.1007/978-1-349-25428-6

Library of Congress Cataloging-in-Publication Data

World citizenship : allegiance to humanity / edited by Joseph Rotblat.
p. cm.

"Pugwash Conferences on Science and World Affairs"—T.p. verso.

Includes bibliographical references and index.

ISBN 978-0-312-17359-3 (cloth) — ISBN 978-0-312-17361-6 (paper)

1. Citizenship—Congresses. 2. Internationalism—Congresses.

3. Citizenship (International law)—Congresses. 4. International
organization—Congresses. I. Rotblat, Joseph, 1908—

II. Pugwash Conferences on Science & World Affairs.

JX4215.W67 1997

327.1'7—dc21

96-50106
CIP

Contents

<i>Preface</i>	vii
<i>Notes on the Contributors</i>	xvii
<i>Abbreviations and Acronyms</i>	xxi

World Citizenship: Allegiance to Humanity	
<i>Executive Overview</i>	1

Part I Rationale for World Citizenship

1	Effect of Modern Science and Technology on Relations Between Nations <i>M.G.K. Menon</i>	21
2	Worldwide Interdependence in Ecological Matters <i>Anne H. Ehrlich</i>	38
3	The Threat and Promise of Globalization: Can it be Made to Work for a Brighter Future? <i>Morris Miller</i>	54
4	The Dual Role of the Nation State in the Evolution of World Citizenship <i>Anatol Rapoport</i>	91
5	‘Quasi-Nations’: The Scientific Community as a Component of a New World Order <i>Francesco Calogero</i>	126
6	Expanding Human Loyalties <i>Douglas Roche</i>	134

Part II Education for World Citizenship

7	Introduction of Courses on World Citizenship into the Curricula of Schools and Universities <i>Ana Maria Cetto</i>	145
8	Promotion of Exchanges Between Young People <i>Jeffrey Porten</i>	155
9	Making Information Widely Available: The Media and World Affairs <i>Nigel Calder</i>	167
10	Exposing and Eradicating Misleading Information <i>Shalheveth Freier and Carin Atterling Wedar</i>	181
11	A Global Community Through Electronic Communications <i>Mark Esdale</i>	193
12	Communication and Community: Promoting World Citizenship Through Electronic Communications <i>David V.J. Bell and Robert Logan</i>	209
	<i>Index</i>	231

Preface

Since their inception, in 1957, the Pugwash Conferences on Science and World Affairs – recipients of the Nobel Peace Prize for 1995 – have been mainly concerned with the nuclear issue: halting the nuclear arms race and avoiding a nuclear war. After the end of the Cold War, Pugwash initiated a project with a specific objective: creating a nuclear-weapon-free world. At the time of writing this objective is still far from being achieved, but a nuclear-weapon-free world is no longer considered a fanciful idea; it is the subject of serious studies, and endorsed by many political and military leaders. The elimination of nuclear weapons is the explicit task mandated to a high-powered Commission set up by the Australian Government.

The removal of nuclear arsenals would remove an immediate threat, but it will not provide permanent security. Nuclear weapons cannot be disinvented; the knowledge of how to make them cannot be erased. Should there occur, some time in the future, a serious conflict between major powers involving them in a military confrontation, they might be tempted to build up nuclear arsenals again, and mankind would once more be in mortal danger.

This mortal danger stems from the development of nuclear weapons. With their invention, Man has, for the first time in the history of civilization, acquired the technical means to destroy the whole of civilization in a single act. Indeed, the whole human species is threatened with extinction. We must also bear in mind that further advances in science and technology may result in the discovery of yet other means of wholesale destruction. The human species is now an endangered species.

This danger had already been recognized in 1955, in the Russell-Einstein Manifesto, which is considered to be the credo of the Pugwash Movement:

We are speaking on this occasion, not as members of this or that nation, continent or creed, but as human beings, members of the species Man, whose continued existence is in doubt.

The Manifesto went on to state clearly the choice facing the world community:

Here, then, is the problem which we present to you, stark and dreadful, and inescapable: Shall we put an end to the human race; or shall mankind renounce war?

Forty years after this question was posed, Pugwash began its quest for a world without war; this book presents the basic thinking, as well as initial practical steps towards the creation of a war-free world.

The end of the Cold War has greatly reduced the threat of global nuclear war, but regional conflicts fought with conventional weapons are still going on, with the ever present threat of a conventional war escalating into a nuclear war. The break up of the Soviet Union saw the emergence of three new states with substantial nuclear arsenals. In the Middle East, the perceived possession of nuclear weapons by Israel is a strong incentive for other states in the region to acquire, by some means or other, a nuclear capability. More generally, the drive to achieve independence by constituents of former empires, has resulted in the outbreak of regional wars, in the former Soviet Union, in Yugoslavia, as well as in the Middle East.

Conscious about possible escalations of military conflicts, and anxious to find ways to avoid the terrible carnage that results from the use of even conventional weapons, Pugwash has set up Study Groups to debate regional conflicts. One of these Study Groups is seeking a comprehensive regional security system in the Middle East. Another Study Group, with the title: 'Social Tensions and Armed Conflict: Ethnic and other Aspects', looked into the various ethnic disputes that resulted, or threaten to result, in military confrontations. In two Workshops, held in Canada and Ukraine, the unstable situation in a number of countries, specifically in Bosnia, Estonia, Ukraine and parts of Africa, was

debated. We were unable to come up with a general solution, and the conclusion reached was that the only way to avoid regional and other types of war is to create a political climate in which disputes are settled by means other than military confrontations. War must cease to be an admissible social institution.

Thus, out of the study of ethnic conflicts, Pugwash has arrived at the same conclusion drawn in the Russell-Einstein Manifesto in relation to the threat to humanity posed by the invention of nuclear weapons. Our objective must be a war-free world.

To most people the concept of a war-free world is a Utopian dream, a desirable but unrealizable goal. In a society governed for two millennia by the Roman dictum '*si vis pacem para bellum*' (if you want peace prepare for war), and which, in consequence, has always been ravaged by war (because if one prepares for war one will get war), it is difficult to imagine the complete elimination of war. However, as Samuel Johnson pointed out, the knowledge that one is going to be hanged in a fortnight concentrates the mind wonderfully! We have now arrived at the stage when we all have to learn to live altogether, because otherwise we shall all die together. This compels us to think the unthinkable.

Actually, the realization that another world war is likely to bring catastrophe is gradually sinking in. It has already taken hold in relation to the use of weapons of mass destruction. The great majority of nations (80–90 per cent) have renounced the use of biological and chemical weapons. By signing the Non-Proliferation Treaty, 175 non-nuclear states have also renounced the right to possess nuclear weapons. Gradually, the same attitude is beginning to take hold in relation to wars with conventional weapons. In Europe, the continent where war has been endemic throughout history, the majority of states now belong to the European Union, and a military solution to a conflict between them has become inconceivable. In the whole

world there is a growing realization of the futility of war; a genuine desire is emerging to avoid military confrontation.

All the same, for the concept of a war-free world to become generally accepted will require a new mindset, the adoption of thinking in global terms. At a time when the continuing existence of the human species is threatened we must think seriously about ways to remove that threat. Just as we have concerns about the safety of our family, and the security of our nation, we must now begin to be consciously concerned about the protection of humankind. Just as in the course of history we have acquired a loyalty to our family, and then to our nation, we must now take the next step and develop an allegiance to humanity.

The problem is that the concept of humanity seems nebulous and remote. It is difficult to develop any feeling towards an entity consisting of six billion units. Actually, size alone does not seem to matter. The United States has a population of about 265 million, comprising a huge diversity of ethnic and racial origins, yet its citizens have a stronger feeling of national belonging than many a state with a population of less than ten million. More important than size is sharing values, a common interest in economic, social and cultural matters. In this respect, the prospects for developing a loyalty to humankind are becoming brighter because of the growing interdependence between nations, an interdependence not only in the realm of economics but also in social and cultural areas; an interdependence brought about by the advances in science and technology.

It is a remarkable fact that the same human activities that have created the potential to destroy the human species have also provided the means for its salvation.

The fantastic progress in communication and transportation has transformed the world into an intimately interconnected community, in which all members depend on one another for their well-being. We are now able to observe instantly what is going on in any part of the globe and provide help where necessary. By means of the various electronic networks we are able to talk to each other, wherever we may be. Language is still

a barrier, but this will no doubt be overcome by further improvements in computer technology.

Of course, interdependence is not always a blessing; indeed, some of its negative aspects are quite serious obstacles to peace and security in the world. In the economic sphere, globalization has resulted in the setting up of huge multinational enterprises, operated from the industrialized countries for their own profits; often this is detrimental to the standard of living of people in the developing countries, and thus constitutes a perpetual cause of strife. There are also adverse problems in relation to the environment; certain human activities in the industrialized countries threaten to disrupt global life-supporting processes, the developing countries being the main sufferers. The depletion of natural resources, particularly water, coupled with the continuous increase in the world population is also a perpetual threat to the security of the world.

These threats are an additional incentive to safeguard humankind, by accelerating the positive aspects of globalization, made possible by the progress of science.

We have to build on the achievements of science to get people to know each other better. Access to full information will help to remove prejudices and mistrust which stems mostly from ignorance. We must utilize the new tools for intellectual intercourse to overcome chauvinism and xenophobia, those malevolent fomenters of strife and war. We must exploit the many new channels of communication to bring us together and form a truly global community. We must become world citizens, and, as a first step, educate the people for world citizenship.

World citizenship – in the context of this book – is not meant in the sense of us becoming formally subjects of a world government, with passports and the other trappings associated with a central administrative regime. Some form of global governance is very likely to evolve from the ever-growing interdependencies. It may range from a modification of the United Nations Charter to a fully-fledged World Government. There is certainly the need to redefine the concept of the nation state, involving individual nations relinquishing some of their sovereign rights. But long before any formal political structure

is established – and as a step towards it – we have to develop in ourselves the feeling of belonging to the world community, and be beholden to it as we are now to our family and to our nation. It is in this sense that world citizenship is discussed, and education for it is advocated, in this book.

The ideas outlined above were the basis for the discussions at the Pugwash Workshop held in July 1994, in the village of Pugwash, Nova Scotia, the site of the First Pugwash Conference in July 1957. Twenty-five scientists and scholars, from 13 countries, came together to present and debate the chapters of the monograph *World Citizenship: Allegiance to Humanity*.

The material in the book is divided into two parts, the first dealing with the rationale for world citizenship, and the second with ways to achieve it, through education and communication.

As befits a movement of scientists, the book begins with a review, by M.G.K. Menon, of the impact of modern science and technology on all aspects of human society. Science has become an all-permeating agent for social and political change. The Earth, as viewed by an astronaut, appears as a fragile sphere, lone in the universe; but it is the only home for humanity, and it is our duty to ensure that our actions – whether it is the use of weapons of mass destruction or the daily activities that gradually poison the environment – do not harm the life-support systems.

The environmental impact of human activities is the main theme of the chapter by Anne Ehrlich. She points out that we are squeezing the planet by the exploitation and remorseless depletion of our global endowment of resources. We live on capital. The ever growing world population is partly responsible for this, but to an even greater extent it is the *per capita* growth in the use of resources and the increasing poisoning of the environment that spell doom, unless we mend our ways. The industrialized countries are the main contributors to the pollution but it is the people in the poor countries that suffer most, because they are least able to make adjustments.

The economic plight of the developing countries is taken up in the next chapter by Morris Miller. In a detailed analysis and comprehensive review of the – generally adverse – effects of globalization, he discusses the main reasons for the widening gap between the rich and the poor, including those brought by changes in technology, as well as those due to the dominance of the multinationals. All this augurs badly for peace and stability, and calls for drastic measures. He goes on to suggest specific ways to remedy the situation, the most important being a new Bretton Woods agreement.

These three chapters, illustrating different aspects of worldwide interdependence, are followed by Anatol Rapoport's seminal paper on the role of the nation state in the evolving world community. After reviewing the historical evolution of the concept and function of the nation state up to the present day, with its emphasis on sovereignty, the author concludes that sovereignty is incompatible with the global integration necessary in the interdependent world of the future. We must find a way for states to retain a sense of individuality and yet be part of the world community. The concept of sovereignty must give way to the notion of autonomy in the global system of governance. Sovereignty and autonomy must be separated, both conceptually and materially.

Rapoport's paper includes a number of ideas put forward in papers and in the discussion by Natalie Belitser, the late Andrus Park, Rita Rogers and Robert Schaeffer.

In a continuation of the discussion on the nation state, Francesco Calogero uses the scientific community, in the discipline with which he is familiar, as an example of a quasi nation containing the desirable features of a member nation in the future world community, except for a localized territory. He emphasizes the two most important characteristics of the scientific community, universality and openness, as pointers to the direction of future developments in the formation of world governance.

The changing role of the nation state is further developed in the paper 'Expanding Human Loyalties' by Douglas Roche. He analyses the ethical problems facing the world community, in

particular, the need to safeguard human rights for everybody. We must aim at human liberation: we have to acquire the economic basis and the political freedom to develop fully our potential as human beings to keep up the common good. Loyalty to humankind will naturally follow from this.

Having elaborated the rationale for world citizenship, the second part of the book turns to two related aspects of the implementation of the objective: education for world citizenship, and enhancement of methods of communication between people.

Ana Maria Cetto discusses problems associated with the introduction of courses on world citizenship in the curricula of schools and universities. These must include codes of conduct, and an understanding of the role of people as human and social beings. Education must stress self-inquiry as opposed to indoctrination; tolerance rather than sectarianism. The paper describes in some detail the requirements of scientific education at high-school level and in universities.

The need to develop awareness of social responsibility among young people is the subject of the chapter by Jeffrey Porten, the youngest of the authors, and himself active in youth movements. He describes the special problems facing youth organizations, some functional, for example lack of funds, some conceptual, for example the aversion of young people to compromise. Youth movements must be supported and nurtured to fight the greatest enemies: apathy in relation to community problems and pursuit of self-interest.

The provision of objective information is one of the most important elements in the creation of a world community. The role of the media in this task is extensively discussed by Nigel Calder. There has been an enormous increase in the volume of news-providing agencies, radio broadcasts (still the cheapest and widest spread mass medium), and television, with huge numbers of channels, some providing 24 hours world-wide news service. But more often means worse; total information is totally indigestible. A process of selection is unavoidable, and this puts a heavy responsibility on those who compose news bulletins. But the judiciousness of the news media is less important than the impact and empathy evoked when viewing directly tragic events occurring in any part of the world.

The paper by Shalheveth Freier and Carin Wedar takes up the problem of objectivity of the information provided by the media, and the need to expose and eradicate misleading information. Taking the war in Bosnia as a case study, the authors give specific examples of the use of the media by both sides as means of propaganda. They put forward concrete suggestions of ways to correct distorted information.

This chapter is an amalgam of two papers presented at the Workshop: Freier's paper on 'Exposing and Eradicating Biased and Misleading Information' and Wedar's 'Making Objective Information Widely Available via TV, Radio and Printed Material'. Regrettably, Shalheveth Freier died before reviewing the final text.

The use of the Internet for direct communication between people is the subject of the chapter by Mark Esdale, which incorporates ideas presented at the Workshop by Jeffrey Porten on cyberspace as a component of a new world order. Cyberspace can be described as the sum total of all computer-based communication and data storage. Internet, its largest manifestation, has an enormous, worldwide membership, and is growing rapidly; it has the greatest potential for becoming a parliament of mankind. Care will have to be taken, however, to prevent abuse of the Internet.

The role of the Internet in promoting world citizenship is further elaborated in the last chapter, by David Bell and Robert Logan. It emphasizes the profound effect of communication on the development of the modern state: 'the medium is the message' (Marshall McLuhan). The political implications of communication channels, such as the Internet, are equivalent to those of the introduction of print, in particular in furthering the concept of world citizenship and in dealing with ethnic conflicts. The authors conclude that the new communication techniques will play a significant role in the transformations that are bound to occur as we enter the 21st century.

Apart from the above-mentioned authors, valuable contributions to the discussion were made by Gabriel Baramki, Patrick Boyer, Giovanni Brenciaglia, Jorgen Jensen, Serguei Kapitza, Krishna Patel, Metta Spencer, Raymond Szabo and Mitja Zagar.

Tom Milne, the Executive Editor, wrote the Executive Summary, as well as carrying the main burden of the editorial work. David Rule has also helped with the editing. To all of them I extend grateful thanks, not only for the material help but also for their enthusiasm for the project.

London, March 1996

Joseph Rotblat

Notes on the Contributors

David V.J. Bell (Canada) is the Dean of Environmental Studies and the founding Director of the Centre for Applied Sustainability at York University, Toronto, Canada. He is the author of a number books and articles on political linguistics, Canadian political culture, political violence, negotiation, and sustainability.

Nigel Calder (UK) is a journalist, author and television scriptwriter on a wide range of scientific subjects.

Francesco Calogero (Italy) is Professor of Theoretical Physics (on leave) at the University of Rome, *La Sapienza*. He is Secretary-General of the Pugwash Conferences on Science and World Affairs.

Ana Maria Cetto (Mexico) is a Research Professor at the Institute of Physics at the Autonomous University of Mexico (UNAM), and lecturer in the departments of physics and biology of the Faculty of Sciences, UNAM. She is a member of the Council of Pugwash Conferences on Science and World Affairs.

Anne H. Ehrlich (USA) is a senior research associate in the Department of Biological Sciences and Associate Director/Policy Coordinator at the Center for Conservation Biology at Stanford University. She has written extensively on the human predicament, particularly on population and environmental issues.

Mark Esdale (UK), trained in computer science and electronics, is the Director of Technology for Wicat Systems Inc., a provider of computer-based training in commercial aviation.

Shalheveth Freier (Israel), who died on November 27, 1994, was a senior associate of the Weizmann Institute of Science, Rehovot. He served as Head of Israel's Atomic Energy Commission,

Director of Defence Research at the Ministry of Defence, and Chairman of the Presidential Panel for Science Policy.

Robert Logan (Canada) is Associate Professor of Physics at the University of Toronto. He is the author of two books on communications cum linguistics: *The Alphabet Effect* (Wm. Morrow, 1986) and *The Fifth Language* (Stoddart, 1995).

M.G.K. Menon (India) is a physicist and Fellow of the Royal Society. He is also a Member of Parliament in India. He has served in the government of India in various capacities - as Secretary, Minister and Scientific Adviser - to oversee the development of science and technology in different fields of national development.

Morris Miller (Canada) is Adjunct Professor at the University of Ottawa's Faculty of Administration and an economic consultant on international development issues. He has held senior positions at the United Nations and World Bank, and in the government of Canada. He is the author of many books and articles dealing with the current global economic situation.

Tom Milne (UK) is a staff member of Pugwash Conferences on Science and World Affairs and a postgraduate student in the Department of Government at the University of Manchester.

Jeffrey Porten (USA) is an Internet consultant and activist in Washington, DC. He has founded an Internet consulting firm, and works with non-profit organizations on technological impact and international governance issues. He has recently published a book on entrepreneurship for young people.

Anatol Rapoport (Canada) is Professor of Peace and Conflict Studies at the University of Toronto. He is author of *Origins of Violence* (1989, second edition 1995) and *Peace, An Idea Whose Time Has Come* (1992).

Douglas Roche (Canada), Canada's former Ambassador for Disarmament and a former Member of Parliament, is Visiting Professor at the University of Alberta. His latest book is *An Unacceptable Risk: Nuclear Weapons in a Volatile World* (1995).

Joseph Rotblat (UK) is President of Pugwash Conferences on Science and World Affairs and Emeritus Professor of Physics at the University of London. He is the 1995 Nobel Peace Prize Laureate.

Carin Atterling Wedar (Sweden) is a teacher of history of religion, ethics and international relations. She is Secretary-General of the Swedish Initiative for Peace, Security and International Relations and a consultant to Sweden's Ministry of Education.

Abbreviations and Acronyms

AIDS	acquired immuno-deficiency syndrome
ASCII	American Standard Code for Information Interchange
BBC	British Broadcasting Corporation
CERN	<i>Centre Européen de Recherches Nucléaires</i> (European Organization for Nuclear Research)
CFC	chlorofluorocarbon
CGIAR	Consultative Group on International Agricultural Research
CGIE ² R	Consultative Group on Internatioal Energy/Environment Research
CNN	Cable News Network
FAIR	Federation for American Immigration Reform
forex	foreign exchange
FRG	Federal Republic of Germany
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GNP	gross national product
GDR	German Democratic Republic
G-7	Group of Seven industrialized countries
HIV	human immuno-deficiency virus
IATA	International Air Transport Association
IFC	International Finance Corporation
IGY	International Geophysical Year
IMF	International Monetary Fund
MIGA	Multilateral Investment Guarantee Agency
NAFTA	North American Free Trade Agreement
NEEDS	Non-linear Evolution Equations and Dynamical Systems
NGO	non-governmental organization
NIC	newly industrializing country
NPP	net primary production
NPT	(Nuclear) Non-Proliferation Treaty
ODA	official development assistance

OLR	off-line reader
SAL	structural adjustment lending
SDR	Special Drawing Right
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
VCR	video control recorder