

## Preface

World federation is a large and fascinating topic: but how does a theoretical physicist come to be writing about it?

Physicists are quite used to discussing large and hypothetical concepts, as a matter of fact. They will happily speculate on what happened during the first three minutes of the Universe, for instance. More to the point, many of them have felt a special sense of responsibility for the problem of nuclear weapons, ever since the Trinity test at Alamogordo and the dropping of atomic bombs on Hiroshima and Nagasaki. This was vividly expressed in a famous statement by Robert Oppenheimer: "In some sort of crude sense which no vulgarity, no humour, no over-statement can quite extinguish, the physicists have known sin; and this is a knowledge which they cannot lose."

After the Second World War had ended, many physicists threw themselves wholeheartedly into the search for peace and disarmament, and for control of the atomic weapons which they had created. World federation was seen as the ultimate answer to this problem, as it still is today. Albert Einstein himself was among the leaders of the movement, and campaigned energetically on these issues until his death. He was supported by other distinguished members of the Emergency Committee of Atomic Scientists, such as Harold Urey, Hans Bethe, Philip Morse, Linus Pauling, Leo Szilard and Victor Weisskopf. The scientists' campaign against nuclear weapons was continued in later years through the Pugwash Committee, whose work was recognized by the award of the 1995 Nobel Peace Prize to Joseph Rotblat. Other physicists to write on the issues of peace and world federation have included the 'father of the Soviet H-bomb', Andrei Sakharov, and the great theoretical physicist Freeman Dyson.

These issues form the basis of an interdisciplinary general studies course which I have convened at the University of New South Wales for the last ten years, which is entitled *Nuclear Arms and the New World Order*. The course is taken by students from all disciplines, and is taught jointly by the Schools of Physics and Political Science. This book is an outgrowth of that course, and my hope is that it will make a worthwhile contribution to the debate on these great themes.

Our generation has been lucky enough, or clever enough, to avoid the twin catastrophes of world war and nuclear holocaust. Our responsibility is all the greater, I believe, to continue the struggle towards a better and a safer world, so that our children and our grandchildren will no longer have a nuclear sword of Damocles hanging over their heads, or be slaughtered by millions for the sake of some dubious political cause. The path to this end is clear: it lies in the direction of greater international trust and understanding, more co-operation between nations, and ultimately, in a process which may take decades or centuries to complete, their integration into some sort of loose world federation. The threat of nuclear war has receded somewhat in recent years, but this only means that we should redouble our efforts to eliminate the threat entirely. There are plenty of other global problems looming over us which also demand a co-ordinated global response.

The book is pitched at about the level of our general studies course, and is aimed at the interested man (or woman) in the street, rather than an expert political scientist. It is particularly aimed at members of the peace, social justice, and church-based social movements. It should be useful as a reference in courses on peace studies, or civics courses in schools. It may also be useful as a reference in political science courses on federalism, international relations, or international security, although of course I am not a professional political scientist. There is a considerable amount of background material in Chapters 2 to 4, covering the history of the world federalist movement, the nuclear arms race, the United

Nations, and the European Union. Some readers may not be interested in these details, and may feel inclined to skip to the conclusions of these chapters. Others, I hope, may find the material interesting and informative.

I would like to thank those members of the University who have helped in teaching our Nuclear Arms course over the years: Tony Palfreeman, Richard Lucy, David Neilson, Michael Box, John Smith, Joe Wolfe, Gail Box, Michael Burton and Mary Cawte. The comments and discussions of the many students who have taken the course have been very useful. A surprisingly large number of them seem to accept that a world federation is likely, even within their own lifetimes, but only about a third of them seem convinced that this is a good thing! Much of the book was written while I was on study leave in the pleasant surroundings of the Peace Research Centre at the University of Sydney: I would like to thank Prof. Jaan Oitmaa and the University of NSW for granting me this opportunity, and Dr. Keith Suter and Prof. Stuart Rees for their hospitality at the Centre. I am very grateful to Lynda-ann Blanchard, Wendy Lambourne, Michael Morison, Jeanne Leppard and other members of the Centre for their help and companionship during my stay. Most especially, I owe especial thanks to Stuart Rees and Tony Palfreeman for their invaluable help and advice, and for reading and commenting on the manuscript. Stuart did his best to improve my stuttering English, while Tony Palfreeman added the perspective of a political scientist, and demanded clearer definitions of terms like “federation” and “integration”. For the most part, I have preferred the philosophy of the Red Queen. Last but not least, I would like to thank my wife and family for their patience and forbearance while the book was being written.