THE USE OF RESOURCES AND TECHNOLOGY IN THE INTEREST OF MANKIND







The Use of Resources and Technology in the Interest of Mankind



Discoveries International Symposia

- 1. Tokyo, Japan
- 2. Rome, Italy
- 3. Paris, France
- 4. Stockholm, Sweden
- 5. Columbus, Ohio, USA
- 6. London, England
- 7. Melbourne, Australia







The Use of Resources and Technology in the Interest of Mankind

with special reference to the Western Pacific

7th Discoveries International Symposium 31st August-2nd September 1984

Edited by J. T. Woodcock

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Foreword

The Australian Academy of Technological Sciences was greatly honoured to be invited to host the 1984 Honda Foundation Seventh Discoveries International Symposium in Melbourne from 31 August to 2 September 1984.

This volume places on record the notable contributions made to that symposium and worthily maintains the standards of the volumes reporting the six previous Honda Symposia held respectively in Tokyo, Rome, Paris, Stockholm, Columbus (Ohio, USA), and London.

Each of the symposia has addressed some facet of the important field of ecotechnology, a concept of achieving overall harmony in human activities as the populations of widely differing nations experience the impact of technological change, the momentum of which continues apace.

The theme of the Melbourne symposium was the "Use of resources and technology in the interest of mankind, with particular reference to the western Pacific". The languages of the Symposium were Japanese and English, and this involved some translation into English for this volume.

The volume generally follows the pattern of the symposium itself and takes us successively through

- 1. the lessons of history,
- 2. present problems in the use of resources for mankind,
- 3. the uses of high technology in the highly disparate countries of the western Pacific.
- the importance of technology and its effect on culture and employment, and
- 5. post-industrial society with an insight into the effect of technological changes on human happiness and freedom.

I should like to place on record my own appreciation and that of the Academy to every contributor and also to thank most sincerely the Academy's Executive Officer, Miss B. E. Jacka, AM, MBE, and her staff, and the Honorary Editor, Mr J. T. Woodcock, for their sterling contributions which have made this valuable record possible.

Sir David Zeidler President Australian Academy of Technological Sciences

Committees, Officers, and Staff

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Sir David Zeidler, CBE President, Australian Academy of Technological Sciences

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Mr Shigeru Shinomiya Director of Honda Foundation; Adviser to Honda Motor Co., Ltd.

Programme

3.30 p.m.

4.00 p.m.

5.00 p.m.

6.00 p.m.

Close

Close

Refreshments

The technical programme was held in the Regent Hotel, Melbourne, Australia.

Friday 31st August 1984

10.00 a.m.	Opening session Chairman: Sir David Zeidler, CBE			
11.00 a.m.	Session 1: Keynote addresses Chairman: Sir Ian McLennan, KCMG, KBE			
12.30 p.m.	Lunch			
2.00 p.m.	Session 2: The roles of academia, industry, and government Chairman Dr L. W. Davies, AO, FAA			
5.00 p.m.	Close			
5.30 p.m.	Reception at Government House			
7.00 p.m.	Dinner at Lakeside Reception Centre, Zoological Garden, Royal Park			
Saturday 1st September 1984				
9.30 a.m.	Session 3: The west Pacific technological competition, complementation, and cooperation Chairman: Sir Frank Espie, OBE			
12.30 p.m.	Lunch			
2.00 p.m.	Session 4: Technological and cultural needs and obligations of the less-developed countries Chairman: Mr J. E. Kolm, AO			
5.00 p.m.	Close			
7.00 p.m.	Cocktail reception hosted by Mr and Mrs S. Honda			
Sunday 2nd	September			
9.30 a.m.	Session 5: Highly developed countries especially Europe, the Americas, and Japan Chairman: Dr Edgar M. Cortright			
12.30 p.m.	Lunch			
2.00 p.m.	Session 6: Panel discussion Chairman: Lord Caldecote			

Summing up, and closing addresses Chairman: Sir David Zeidler, CBE

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OPENING SESSION

Opening addresses, messages of greetings, and presentation of Honorary Fellowship

Chairman

Sir David Zeidler, CBE President, Australian Academy of Technological Sciences

Addresses

Sir David Zeidler, CBE H.E. Rear Admiral Sir Brian Murray, KCMG, AO

Greetings

H.R.H. The Prince Philip Duke of Edinburgh, KG, KT, OM, GBE, PC (read by Sir Ian McLennan, KCMG, KBE)

The Prime Minister of Japan (read by Ambassador Kensuke Yanagiya)
The Prime Minister of Australia (read by Sir Frank Espie, OBE)

Address

Mr Takeso Shimoda

Presentation of Honorary Fellowship

Mr Soichiro Honda

The Australian-Japanese relationship and mutual interdependence in the new Pacific era Mineo Nakajima



Professor Mineo Nakajima

Professor Mineo Nakajima is Professor of International Relations and Contemporary China Studies in Tokyo University of Foreign Studies. A graduate in Chinese Studies and International Relations of the University of Tokyo, Professor Nakajima occupied several positions in the Tokyo University of Foreign Studies, becoming full Professor in 1977. He is Managing Director of the Japan Association for Asian Political and Economic Studies, is Director of The Japan Association of International Relations, and is a Councillor of the Honda Foundation. He was awarded the Suntory Prize in 1981. He has published many books on Asian affairs; his latest volume being entitled *Politics and Civilization of Contemporary China*.

The Australian-Japanese relationship and mutual interdependence in the new Pacific era

Mineo Nakajima

Professor of International Relations and Contemporary China Studies Tokyo University of Foreign Studies¹ Tokyo, Japan

I am very honoured to have been given an opportunity to address the distinguished participants in this symposium. Personally, I feel a very nostalgic sentiment in Australia because I have returned here after six years abroad. I spent a year in Canberra at the Australian National University, and at that time I had a very good opportunity to observe Western Pacific international relations as seen from the Southern Hemisphere when Australia was just seeking a new identity as an Asian Pacific State.

I would like to talk about our joint concern for mutual interdependence in the new Pacific theatre, and to focus mainly on the implications of the Pacific international environment and Australian-Japanese relations.

With the passing of the uncertain 1970s, characterised by high oil prices, and the arrival of the 1980s, a new concept in international relations termed 'Pacific Basin co-operation', was suggested. This concept has aroused substantial interest in both Australia and Japan, and some other countries, among those who believe that a new idea for the Asian Pacific region has been created. Giving a name to a concept, however, is not a sufficient basis for substantial international co-operation, as a new concept supported only by a name often evaporates after discussion. The issue of Pacific Basin co-operation was a Pacific Basin concept. It is something which must be further developed with clear objectives and our policy target must be more clearly defined. In line with this trend another new phase appeared in 1984, that is the 'new Pacific theatre'. President Reagan, who envisions the future vitality of the United States, centred on the western sunbelts, including California, has stressed this concept. It was also introduced at the ASEAN Foreign Minister's meeting as a projection for the region.

In this situation we must note the group of rapidly industrializing nations, including Hong Kong, Taiwan, South Korea, and Singapore, known as the 'Asian NICS' (newly industrializing countries), because they left the average third world countries far behind in the 1970s and have created a very lively economic zone in the proximity of both Australia and Japan.

USE OF RESOURCES AND TECHNOLOGY FOR MANKIND

In the case of Hong Kong, the result of the Sino-British diplomatic negotiations will be released this coming September, but there will still be some uncertainty in the future of Hong Kong. If life in Hong Kong became very difficult, socially and economically, many young people from Hong Kong might go to other Western Pacific regions. This may accelerate the increase in economic activity of the region, but for the present, Hong Kong still maintains a very dynamic economic activity of which the per capita GNP is already US\$5 000.

In the case of Taiwan, some politically unstable situations may be expected, but perhaps Taiwan will become a much stronger economic entity. Over the last twelve years Taiwan has been excluded completely by the wide international community. If a political or social uncertainty or disturbance took place in Taiwan, not only Japan, but also many other Western Pacific countries would become very seriously embarrassed. But thanks to economic success. Taiwan is now playing a very important role in this region.

Others have already mentioned the cases of South Korea and Singapore. so there is no need for me to do so.

It is interesting to contemplate how those nations belonging to the Confucius culture zone-all the Asian NICS I have mentioned belong to the Confucius culture zone-would achieve complete modernization, and to study how they would relate to the development of the People's Republic of China, which has just started to liberalize part of her economic system.

As far as the recent development of the People's Republic of China is concerned, both of our keynote speakers, Sir David Zeidler and Mr Moeen Oureshi, mentioned vesterday the importance of China. So as a specialist on Chinese affairs, I would like to express briefly my basic view on China.

What will become of China tomorrow? After a quarter of century of turbulence and faced with various difficulties today, the country may look forward to eventually developing a unique socialist society, but that is not easy to achieve for many reasons. What is the goal of the present modernization plan in China? In a word it is to increase China's per capita gross national product from the present level of about US\$250 or US\$300 to US\$1000 by the end of this century. It is a modest target when one realises that Japan's economy grew fortyfold in the last twenty years, but given China's massive economic goal it will be a difficult one to achieve. Even if full modernization is successfully achieved and the goal of US\$1000 per capita GNP is attained. China will probably be further behind its neighbours than it is now. The surrounding countries such as Hong Kong, South Korea, and Singapore,

and many other Asian countries, not to mention Japan, already have GNPs ten to twenty times larger than China's. That gap will probably more than double by the end of the century. For this very reason it is certain that China's economic stagnation will continue to pose a problem for mankind. perhaps the most serious of such issues for this century.

What are China's options, now that the experiment of achieving economic development with western assistance has clearly reached a limit?

The country does not have many options left.

In the case of Japan, our relations with the People's Republic of China have become very strong. In Australia, recently, your relationship with China has become very close, and direct flights between Sydney and Peking and Melbourne and Shanghai have commenced. Even with such a close kind of relationship, western financial assistance to China has already reached a limit. In the case of Japan, we already aid China with about \$US10billion in long term credit, but we cannot assist only China. In the case of the United States of America and other western countries there may be capacity to assist China, but even transfer of important western technology for management systems of highly industrialized societies must also reach a limit.

We Japanese concluded an agreement of long term economic assistance to China. Based on this agreement Japanese business recently constructed the famous Baoshan mill in the suburbs of Shanghai which had not produced iron and steel since 1978. Faced with this situation it seems likely that Chinese dealers will become aware of the importance of a relationship with the Soviet Union and other eastern nations whose systems are more in tune with its own. Needless to say, we shouldn't expect that the political and social conflict inherent in China today could become so great that the country is likely to go through another process of political turbulence. It seems impossible to divert the pragmatic trend against the system's politics, although some political conflict and resistance against the present Deng Xiao Ping's regime still exists there. In this situation, in my assessment, a Sino-Soviet reconciliation will be inevitable, although the society of China is very different in some basic respects from that of the Soviet Union. In the future. China's new leaders will restore the need of the two countries to unite together to cope with what they call the crisis of socialism exemplified by the recent case of Poland. This is my basic understanding on China's recent development and Sino-Soviet relations.

Now I will proceed to discuss Japan's goal in the new Pacific theatre. We have to admit the fact that the myth of Japan's industrialization being unique in Asia has now been completely destroyed, and Japan today is merely a model for the industrialization of other Asian countries. Even Malaysia, a semi-Islamic State, has set Japan as a model for industrialization. Under the circumstances a strong bond between Australia and Japan, especially as a complementary relationship of mutual dependence, is very important, not only for the sake of diplomacy between the two nations but as the axis for the development of our related vision of the new Pacific theatre. For this to be realisable, many problems between the two must be solved. For example, in regard to trade co-operation and expansion, Japan must overcome domestic political difficulties to create a freer trade environment for such commodities as farm products and it must also accelerate the transfer of technology abroad, without causing the so-called boomerang effects provided by newly industrializing countries. Although the argument still treats the matter in general terms, it may be a very important proposal in view of the conservative nature of our country, Japan, as a cultural policy.

Then in regard to the problem of resources exploitation, which demands close attention, a Pacific basin country should consider the problem of resources such as energy and food, in a co-operative manner, rather than be forced to deal with north-south issues within the region. There must be co-operation, not only at government level, but also between private sectors. The mutual dependence required is not limited to economics; what we need is closer relations in every sphere including technology, science, culture, and especially academic co-operation.

For Japan the relationship with Australia is one of special importance as it is one of the two fundamental friendships in the Pacific, the other being with the United States. On this basis, Japan's contribution to the Western Pacific region through economic and other non-military forms of cooperation, will become more promising. In this context, strengthened relations with Australia are all the more essential today when new governments have been elected in Australia and New Zealand, and traditional diplomatic policies with ANZUS nations are going to be reviewed. On this point I would like to learn from you.

Technological advances and issues of justice in allocation of ocean resources

Thomas B. Sheridan and Paul R. Sheridan