The Passing of Remoteness?

INFORMATION REVOLUTION IN THE ASIA-PACIFIC

The **Asian Mass Communication Research and Information Centre** (Amic) was established on 18 February 1971 as a non-profit regional organization. It is jointly sponsored by the Government of Singapore and the Friedrich-Ebert-Stiftung, an independent foundation in the Federal Republic of Germany. Amic began as one of several regional documentation centres around the world which, with the encouragement of Unesco, have sought to disseminate information pertaining to mass communication. Amic's principal activities have expanded to include publication, research, training and consultancies. Its area of coverage extends from the Far East to West Asia. In 1980, Amic was accorded NGO (non-governmental organization) status with Unesco.

The **Hubert H. Humphrey Institute of Public Affairs** at the University of Minnesota was founded in 1977 as a tribute to Vice-President and Senator Hubert H. Humphrey. The Institute combines the functions of a graduate school and a policy research institute.

The **Institute of Culture and Communication** was established in 1984, uniting the East-West Center's former Culture Learning Institute and Communication Institute. The new Institute is dedicated to implementing the Center's mission of fostering better understanding and relations among peoples of the East and West through programs and research activities related to culture and communication.

The **Institute of Southeast Asian Studies** was established as an autonomous organization in May 1968. It is a regional research centre for scholars and other specialists concerned with modern Southeast Asia. The Institute's research interest is focused on the many-faceted problems of development and modernization, and political and social change in Southeast Asia.

The Institute is governed by a twenty-two-member Board of Trustees on which are represented the National University of Singapore, appointees from the government, as well as representatives from a broad range of professional and civic organizations and groups. A ten-man Executive Committee oversees day-to-day operations; it is chaired by the Director, the Institute's chief academic and administrative officer.

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Foreword

In 1980, the Aspen Institute for Humanistic Studies, New York and Washington, D.C. and the University of Minnesota's Hubert H. Humphrey Institute of Public Affairs formed a joint non-governmental venture to study the functional needs for consultation, co-operation and common action among and between the nations of the Pacific Basin. When the Aspen group had to withdraw, Dr Roger Benjamin, Provost of the University of Pittsburg became a co-sponsor.

The project as a whole was developed under the leadership of Dr Harlan Cleveland, a political scientist, sometime diplomat and author, whose experience with United Nations relief operations in China and later as President of the University of Hawaii reinforced a lifetime interest in the Pacific region. He was assisted by Mr Michael Hirschfeld of New Zealand, a successful businessman and practitioner of public affairs.

The project started on the premise that it would be a mistake to begin by attempting to design political institutions. Instead, there should be an exploring of functional issues of region-wide significance. Accordingly, four workshops were identified to examine the marine resources of the Pacific, the changing industrial structure, food and develonment, and the impact of the Information Revolution. Following the completion of these, there was to be a fifth and final workshop to review progress made and to decide on the necessary follow-up. These workshops had six main objectives:

— To identify the actors, interests and potential in the development of Pacific resources;
— To suggest possibilities for "positive sum" bargains through conscious co-operation and the sharing of benefits from the oceanic and atmospheric commons;
— To identify different points of national resistance to the carrying out of internationally desirable co-operation on particular functions;
— To suggest new institutions or adaptations of existing institutions and the role that might be played in regional institutions by non-governmental agencies;
— To put some flesh on the still skeletal concept of the Pacific as a region, and
— To spread this regional thinking back to wider discussions in the countries from which workshop participants are chosen.

To derive maximum benefit from these workshops, a nine-member core group, comprising individuals drawn from a number of the Pacific

Basin countries and with in-depth experience and expertise, was formed, and invited to each of the workshops to interact with a number of other experts and scholars.

This same format was followed for the workshop on "The Information Revolution in Asia-Pacific", held in Singapore, on 10-12 December 1984. This workshop was co-sponsored by four institutions: Asian Mass Communication Research and Information Centre, East-West Communication Institute (East-West Center), Hubert H. Humphrey Institute of Public Affairs (University of Minnesota) and the Institute of Southeast Asian Studies. The topics covered ranged from the economic aspects of the Information Revolution, through to its varied technical nuances, and the social and cultural effects. In addition to the core group, the participants included scholars and practitioners from all the ASEAN (Association of Southeast Asian Nations) countries, Japan, Korea, Hong Kong, Taiwan and USA.

The papers prepared stimulated considerable discussion. These papers and the discussion thereon comprise the volume that follows.

During the workshop and the preparation of its papers and proceedings for publications, the four organizing institutions received assistance from several individuals and organizations, from within and outside the region. They would like to record their appreciation for all the assistance and support received and to express the wish that the work that follows will circulate widely amongst all concerned with developments in the Pacific Basin generally, and the impact of the Information Revolution in particular. It is of course understood that responsibility for facts and opinions expressed in the work that follows rests exclusively with the individual authors, and their interpretations do not necessarily reflect the views or policies of the institutions involved or their supporters.

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Preface

The Information Revolution in Asia and the Pacific from which these papers come was an important and timely meeting. It drew together diverse national persectives and cultures to examine whether the passing of remoteness was, in an information sense, indeed becoming a global reality.

There was justifiable apprehension on the part of many participants from the less industrialized, less informationalized, world. Indeed, just as many of these countries are getting a handle on industrialization, the rules seem to be changing. Information as a "natural resource and a commodity" is difficult to understand once an "industrial mentality" has been established as the dominant development path. Many changes will be required as informatization takes its place in the evolving global order.

Information workers require a substantially different education base than workers in an industrial or agricultural-based society. The educational policy that is required has at least ten to fifteen year lead time before the human resources can effectively operate in the new environment. Many of the countries involved already have substantial problems in financing their current education needs, not to mention the expanding requirements. Developed countries have had little time to put these policies into place and may well experience "structural unemployment" problems. Developing countries, even "newly" industrialized countries (NICs) may experience real problems in this regard. Accelerated incrementalism, starting from the top down, seems to be the most predictable information-development path.

The shift from an industrial-based to an information- or telecommunication-based society requires substantial adjustments in almost every sector of a given society. The new era most certainly holds "structural unemployment" in many of the current sectors. For others it means a substantially different approach to what is now being done. New national policy agendas are required in the most basic of institutions. These may range from education and commerce to government and the very nature of nationalism.

For some, it is difficult to understand that "localism" and "globalism" can co-exist in the new scheme of things. Indeed, they are two sides of the same coin. Localism can be enhanced by the new telecommunication technologies (for example, rural telephone exchange or new banking services) and international trade most certainly requires appropriate telecommunication infrastructure. New information technologies and services have the potential of making even the most remote country or

rural area full partners in balanced national development. This is the transnational impact as distinct from the international. At the same time, telecommunications threaten or strengthen existing power structures, change centres of wealth, and call for early attention to the national education base. Traditional culture, while on the surface threatened by the new technologies, can be maintained or enhanced by new information flowing to and from the system. The problem centres around the processes of adoption and accommodation at the local level.

While it appears that less developed countries in one sense may be able to "technologically leap" most of the industrial era, the social, political and cultural conditions may require less radical transformation (accelerated incrementalism) into the information era. Many countries find themselves in a difficult dilemma. Some leaders realize that the rate of change in today's world is greater than ever before and to delay full entry into the new information era may mean substantial handicaps to development. Procrastination now may have even greater ramifications than lagging in industrial development. It is apparent that some adoption of information technologies must start immediately.

Information is an unique and powerful resource, perhaps more powerful than industrial raw materials, energy or land. Information is not well understood as a resource or a commodity. Information leverage is at least as powerful as financial leverage. Not to put one's country into position in this regard may have serious long-term consequences.

In addition to these problems, distributed "information wealth" carries many ramifications for political power and the control of a given society. Industrialization, centralized financial wealth, production and power are some of them. Such centralization was served well by the traditional mass media. Today's new media can decentralize these economic or political centres. They have the potential to place information wealth and power in the hands of the citizen and are, in turn, not easily controlled at the centre. Further, due to external production of hardware and software, the acquisition of information technologies and services carry with them dependence on foreign capital, expertise, maintenance, and so forth. The combination of the potential internal loss of information control, dependence on outside technology and services and increased national debt makes adopting development strategies based upon new information technologies difficult to adopt. Not to do so, however, may mean compromising one's country in the global development process. The dilemma is real and the consequences dire. Many countries seem to be building information technologies and resources into the top levels of their societies. While this does not diffuse "information wealth", it does hedge against becoming too far behind and maintains control at the

status quo. Education development policy can then be established and lower levels of the society may eventually benefit.

We have undertaken the task of putting these papers together in the belief that the technological changes in telecommunications that are rapidly sweeping across continents are bringing the world much closer than it has ever been in the past. The interface of satellites and computers and the convergence of technologies related to these innovations have made a mockery of territorial boundaries. The concept of nation, while still politically viable, is being eroded as we move from a transportation-oriented to a telecommunication-oriented world.

We are shifting to a world community which is affinity- and not vicinity-based. People from distant corners of the globe now have the need to talk to each other if only they can get the infrastructure in place to do so. Yet this is a big "if" for nations who cannot afford to take advantage of the benefits of today's telecommunication developments. Not because they are unaware of communication stimulus to growth but because they do not have the financial wherewithal to do so.

In the area covered by the conferees who met in Singapore in December 1984, there were delegates who represented varying stages of economic and communication development. Participants had faith in the technology but not in the ability of the national or international regime to make the technology work evenly for all potential users. For example, Malaysia, in the midst of technological progress as an important host-country to many multinational firms was still searching for the appropriate philosophy of technology in order to make it relevant to its people. It was searching for answers to the problem of opportunity costs of telecommunications technology on its social and cultural mores.

On the other hand, the People's Republic of China expressed great enthusiasm regarding the future implications of telecommunication technology for its people. Despite the diversity of views, there was general consensus that these countries were not willing to be idle spectators of the Information Revolution, but were becoming active participants.

Why was this conference held in Singapore and who were the organizers and the participants? A small core group of scholars and thinkers has been actively engaged over the years to bring about greater co-operation and cohesion among the countries of the Pacific-Asia Basin. With this end in view, scholars from both the east and west have been engaged in exchanging views on relevant issues. Since 1980, the core group has engaged in thinking and writing about the implications of fundamental public political issues. The first of these conferences was held in Tokyo in 1980 to discuss the Management of the Pacific Marine Commons. This was followed in 1981, by a workshop on the "Changing

Industrial Structure", held in Seoul. Food and agricultural problems were the topic discussed in 1982 in Mexico City. The last of these meetings was organized in Singapore in December 1984 to focus attention on the impact of the Information Revolution on economic efficiency, social awareness and equity.

Singapore was considered the most appropriate location for this conference as one of the most sophisticated telecommunications nodes in Southeast Asia. The keynote address was provided by Dr Harlan Cleveland who has been the architect of these conferences and of the concept of the core group. His paper probes the very nature of the valuable new resource of information. Cleveland pointed to information as a key resource to all forms of socio-economic activity in all forms of market be they free or centralized.

In a scholarly piece entitled "The Twilight of Hierarchy", Cleveland shows how hierarchies historically based on the ownership of physical resources are being transformed into societies divided into the information rich and the information poor. In today's global context information is power for societies, or sub-sets of any given society who know how to use it. These ideas are woven into the concepts of leadership and management which are so dependent on information as a resource that the real revolution, as he sees it, is a revolution in the technology of organization.

We have then divided the papers presented at the Singapore conference into three major groupings: the economic impact, the technical infrastructure and the socio-cultural effects. In the section on economics of the Information Revolution, the overall picture of future telecommunications technology and its internationalizing effects have been amply discussed by Meheroo Jussawalla. Following this is a case study of Singapore by Chia Choon Wei. Georgette Wang has discussed in great detail the economic concerns of the informatization of Taiwan's economy and its impact on society and investment patterns in that country. Otto Tomasek presents an economic forecast of future technologies and in so doing discusses the challenges faced by the Hong Kong Telephone Company in deregulated markets.

The third part of the book is devoted to only one paper in which Dan Wedemeyer cogently and succinctly outlines the current telecommunication satellite systems in the Pacific region. In the light of major developments taking place in the region and the location of satellites for domestic and international telecommunications in countries like Indonesia, Thailand, Australia, and Papua New Guinea, the growing role of satellite communications has been well documented.

In the final section of this work, the social and cultural effects of the

Information Revolution have been exemplified in four papers. They were presented by representatives of different political and social structures, both authoritarian and democratic.

The educational impact of the information society in the Philippines is probed by William Torres who asserts that it is not enough to extol the benefits of informatization, human capital must also be invested. He believes that policymakers need to take a hard look at the educational system and devise methods to equip it to meet the challenges of new technologies.

For the People's Republic of China comes the wisdom of Joseph Wong who analyses the relationship between political and social changes in this vast country. He believes that the passing of remoteness is not as applicable to modern China as it is to other countries of East Asia. However, the country is moving rapidly on a course of "Four Modernizations" which are heralding the global interdependence in many fields of industrialization in the world's most populous market place.

Korea is one of the four members of the Asian NICs and has had a head start on modernization with its policies of export promotion and open economy. Its economic growth has put it at the forefront of these countries. Korea now seems able to penetrate the markets of the First World. Further, it is rapidly increasing its demand for the most sophisticated technology. This is being spurred by two international events which will place South Korea in the ranks of the major advanced countries of the world viz., the 1986 Asian Games and the 1988 Olympics.

All in all, this book draws together a diverse set of perspectives on a very timely subject. Indeed, the passing of remoteness is technically possible, but many, yet to be solved, problems lie is social, cultural, economic and political arenas. We hope that this work will contribute significantly to, what we see as, a most interesting decade.

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