THE MIDDLE PATH FOR THE FUTURE OF THAILAND:

Technology in Harmony with Culture and Environment

with the methodological and editorial collaboration of

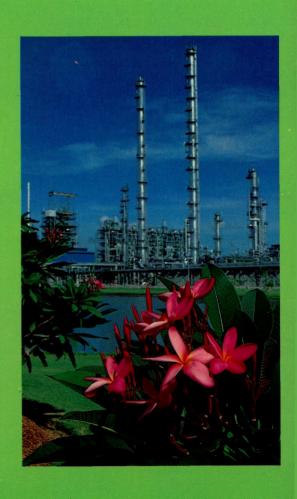
ROBERT B. TEXTOR

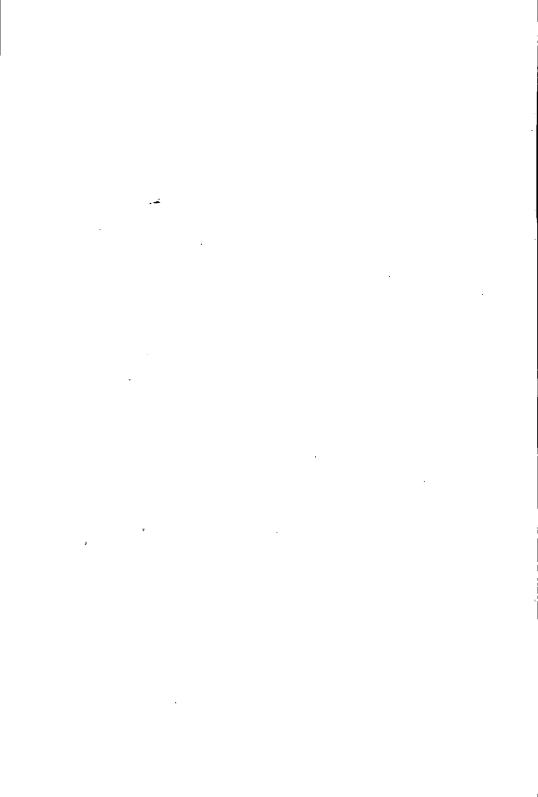
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THE MIDDLE PATH FOR THE FUTURE OF THAILAND:

TECHNOLOGY IN HARMONY WITH CULTURE AND ENVIRONMENT

By

SIPPANONDHA KETUDAT

with the methodological and editorial collaboration of

ROBERT B. TEXTOR

and the consultation of

William J. Klausner

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> Faculty of Social Sciences Chiang Mai University Chiang Mai, Thailand

> > 1990

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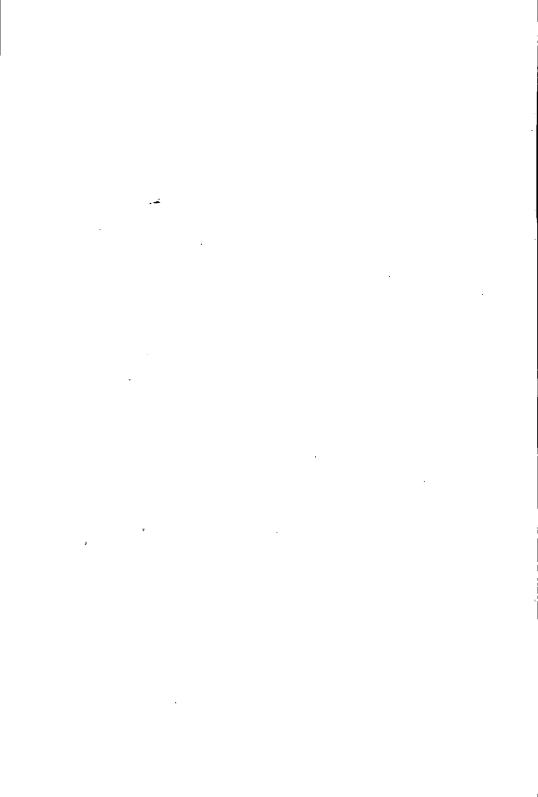
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Prepare as best you can for the future,

AND DO NOT LET YOUR ARRANGEMENTS CONSTRAIN YOU,

When the time for action arrives.

SUTTANTAPITAKE No. 27, KUTTHANIKAYASSA CHATAKUNG PATHAMO, PARAGRAPH 1636, PAGE 338.



DEDICATION

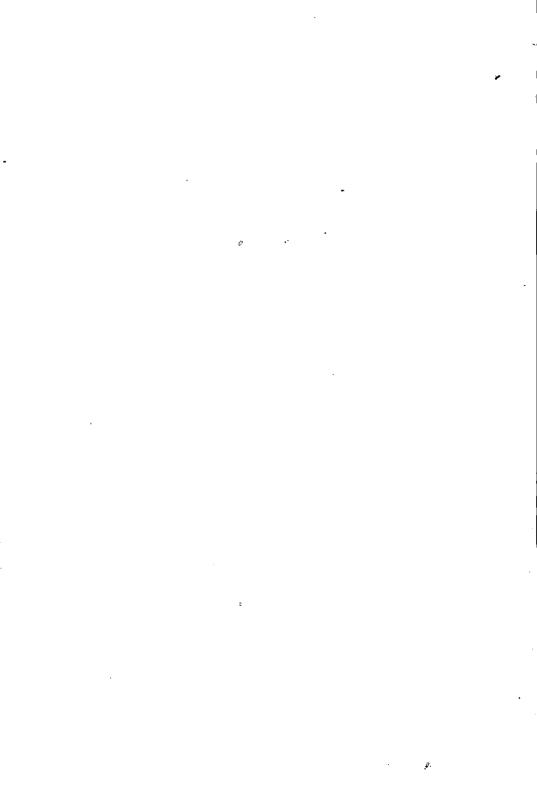
This monograph is respectfully

dedicated to

my father and first teacher,

GROUP CAPTAIN PHYA DHAYARNBHIKART

(TIP KETUDAT)



This monograph is intended to

stimulate democratic

discussion about Thailand's future.

We encourage its widest possible

dissemination.

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PREFACE

DR. GODWIN C. CHU INSTITUTE OF CULTURE AND COMMUNICATION THE EAST-WEST CENTER

Dramatic events in Asia since the end of World War II can be characterized in one phrase: rapid and fundamental change.

China emerged from the ruins of the war with its economy in shambles and its traditional social fabric torn apart. The Communist revolution broadened and accelerated the process of change by enforcing a series of radical social and economic transformations from which the country is still barely recovering.

Japan, defeated and devastated by two atomic bombs, survived the bleak post-war years of hunger and poverty and, in part due to social and economic reforms encouraged by the U.S. occupation forces, has risen from the ashes of war to become one of the world's most vibrant economic powers.

Elsewhere in Asia, a wave of independence movements put an end to more than a century of Western colonization in this vast continent. Newly independent countries in the region, including Indonesia, Malaysia, the Philippines and Singapore, have each gone through the growing pains that inevitably accompany the transition from colonial rule to indigenous sovereignty.

In some countries political independence has been followed by phenomenal economic growth. In other countries, the initial promise has given way to political discord and economic degeneration. Whatever the path toward economic development, most of these countries share common experiences that are characterized by the infusion of modern technologies, the outreach of mass communication, expanding urbanization, and rising aspirations, compounded by a growing population and a deteriorating environment. These forces of social and economic change realign the traditional structures of incentives and constraints that are deeply embedded in most of these Asian societies. They have the potential of redefining and redrawing the contours of traditional cultures. They also provide a unique opportunity for observing and studying the processes of cultural change in a fast moving context that is rarely available in history.

The East-West Center in Honolulu, through its Institute of Culture and Communication, has been undertaking a series of empirical studies of cultural change in Asian countries since 1986. Initially begun in Thailand, these studies now cover China, Indonesia, Japan, Korea, and Taiwan. The United States has recently been included in the enlarged scope of these studies. In each country, we have planned longitudinal social surveys of values and beliefs for before-and-after comparative analysis of cultural change.

The Thai project stands out in our research design because, in addition to a longitudinal survey, we are conducting four companion studies: a retrospective snapshot of traditional rural Thai culture in the northeastern province of Ubol Rachathani some thirty years ago; an in-depth study of on-going cultural change in rural communities in the northern province of Chiang Mai; an analysis of values and value conflicts reflected in modern Thai short stories; and the present study, a look into the future of Thai culture.

This monograph, presenting the findings on a range of future scenarios of Thai culture, both optimistic and pessimistic, is the joint product of two outstanding scholars who are intimately knowledgeable about the people of Thailand. The combined credentials of Professors Sippanondha Ketudat and Robert Textor are hard to match. Their work has been undertaken in consultation with three other scholars, Professors William J. Klausner, M.L. Bhansoon Ladavalya, and Sidthinat Prabudhanitisarn, all of whom specialize in Thai culture.

In terms of its contribution to knowledge, this monograph pulls together decades of personal research experience and offers to policymakers and scholars in Thailand, and concerned scholars elsewhere, an imaginative yet well grounded perspective on what might happen to the culture of the Thai people if its present course of change is left unattended by a guiding hand.

Funding for this study has come primarily from a generous personal grant by Mr. and Mrs. Laurance Rockefeller administered by the East-West Center. The Center has provided matching support through its research and administrative staff.

Godwin C. Chu, Ph.D. Coordinator Culture Change Project East-West Center

September 1990 Honolulu, Hawaii, U.S.A.

FOREWORD

DR. SNOH UNAKUL
CHAIRMAN OF THE COUNCIL OF TRUSTEES AND
BOARD OF DIRECTORS
AND

DR. M.R. AKIN RABIBHADANA
ADVISOR IN SOCIAL DEVELOPMENT
THAILAND DEVELOPMENT RESEARCH INSTITUTE

This book appears at the right time, when Thai society is seeking for a direction for her future. The last eight decades have been a period of rapidly accelerating change in Thailand. The rate of change has increased substantially within the last 25 years, and a process of profound social and economic transformation has begun. The most obvious manifestations of the change have been in economic activity, but there is a growing realization that cultural and psychological phenomena have been affected as well. On the one hand, there has been a steady growth of the Thai economy with recent rapid growth of industry and unprecedented expansion of exports. On the other hand, we are facing increasing income disparities, depletion of natural resources, and conflicting values. At this critical period of fundamental change, there is an urgent need for policy direction which will enable the Society to cope with these changes and make possible sustainable development. This book, The Middle Path for the Future of Thailand: Technology in Harmony with Culture and Environment, is more than welcomed in providing valuable advice and warnings to policy-makers.

This book is a product of Ethnographic Futures Research (EFR), which has been developed by Robert B. Textor. It is the fourth in a series which aims to understand how to deal with the Thai future.

According to the method of EFR, the author is asked to construct three scenarios of the society in the future, in this particular case, those of Thailand in the year 2020. These scenarios are the "optimistic," the "pessimistic," and the "most probable." Unlike a forecast or prediction, the first two scenarios need to be merely possible in the judgement of the author. The last one, however, is the one which is judged to have the highest probability of occurring.

Different from conventional prediction, EFR is not performed with respect to how just a few variables will behave over a relatively short time span, and within narrowly circumscribed and explicitly stated scope conditions. EFR looks at a whole sociocultural system over a time span of a generation. Thus, rather than prediction, "anticipation" (defined as the building of reasonable, plausible, conditional visions of the future) is practised. Anticipation involves assumptions about the causal roles of events, things, and human endeavours in generating the future. It has to depend on value judgements, which need not be mere expressions of emotions or exhortations to better behavior, but ones that can be subjected to logical examination.

This book is an ethnography, although of a future scene, and shares many features with traditional ethnography. The EFR method is cultural, holistic, comparative, macrotemporal, and emically-etically balanced. It uses informants for the study of a society just as traditional ethnography does. The selection of informants is one of the most important factors contributing to accurate description of the society. It would seem to be even more important in the case of EFR. This is because the "probability" of scenarios would depend upon the informants' knowledge and understanding of the society, the extent and broadness of their vision, and their sensitivity and objectivity.

The selection of Dr. Sippanondha Ketudat as the informant and author of this book was an excellent one. Very few people have had such wide and varied experiences. With an excellent background in physics, both teaching and research, he later switched to a direct and active involvement in Thailand's educational and development policies and programs. He has occupied such influential positions as Deputy Director of the Southeast Asian Ministers of Education Secretariat, Secretary-General of the National Education Commission, Deputy Minister, and Minister of Education. He has initiated a number of needed educational reforms. His involvement with national development policy has been intense and of long duration. He has served in numerous positions of public trust, and various consultative bodies, including the Executive Committee of the National Economic and Social Development Board. Recently, within the last decade, he has been appointed first President of the National Petrochemical Corporation, Ltd. In this capacity, he is also involved with private sector activities, and will be helping to influence Thailand's development for decades to come.

His messages in this book will undoubtedly contribute much to the formulation of national policy in this critical period. Policy-makers will certainly gain from his visions, recommendations, and cautions, as appearing in the three different scenarios. Being a policy-maker himself, Dr. Sippanondha has also added specific advice to policy-makers in Chapter Six, "Three Top Policy Priorities." We are certain that the study will attain the EFR objective, which is to help produce more prudent public policy.

During this critical period, amid confusion arising from rapid and enveloping change, a new direction is sought for by most concerned people. The Thailand Development Research Institute is also involved in a major research project on "Thailand Towards the Year 2010." One of its modules deals with Socio-Cultural Change and Political Development in Thailand, 1950-1990. It will examine the underlying patterns of socio-cultural change and development, and attempt to determine the course which cultural change may take in the next years. Although the approach of TDRI project is different from EFR, we are certain that the information and visions provided by Dr. Sippanondha will be very useful as a framework, and in

providing clues for seeking data, for TDRI research. Similarly, being the first description of the future of Thailand by such a prominent intellectual, well grounded in several fields, well versed in development theory, and well experienced in its practice, the book, The Middle Path for the Future of Thailand: Technology in Harmony with Culture and Environment, will benefit greatly those who are planning for the future of Thailand, and those who are seeking for a direction for Thai Society towards sustainable development, stability, prosperity, and a better quality of life for all.

S. U. A. R.

Bangkok, Thailand October, 1990

INTRODUCTION

ROBERT B. TEXTOR

This book was conceived in 1987 at a meeting at the Institute for Culture and Communication of the East-West Center in Honolulu, Hawaii, chaired by Dr. Godwin C. Chu, Assistant Director of the Institute. It is one of a series of studies of culture change in Asia, as described by Dr. Chu in his Preface.

I.1. THE PURPOSE OF THIS BOOK

The purpose of this book is to present a set of carefully thoughtout images of alternative middle-range sociocultural futures for Thailand, in order to stimulate informed discussion of crucial issues of public policy. We hope that this study will have a positive effect on the overall future of Thailand over the next few decades. Unlike most works in the field of futures or planning, this work is not a specialized study of the Thai economy, demography, or technology. Rather, it is a study of alternative futures for the Thai way of life as a whole, and for Thai well-being in a total sense.

The basis of the monograph is a set of broad sociocultural scenarios depicting different ways in which Thailand's future might emerge into reality, either positively or negatively. These scenarios were elicited by means of interviewing the author, Dr. Sippanondha Ketudat, in accordance with a method called "Ethnographic Futures Research" (Section I.6 below). These interviews were conducted by myself as ethnographic collaborator, with help from three consultants to be introduced below (I.3). After each interviewing session, I drafted summaries of Dr. Sippanondha's scenarios, using a computer. He then edited these drafts. Most portions of the manuscript went through a number of discussions and editings in order to achieve

a reasonable degree of clarity, comprehensiveness, contextualization, and coherence.

My daily contact with Dr. Sippanondha took place during five weeks in Thailand in 1988, and again during a few days in the United States in 1989. Our interviews, conducted in many sittings, consumed a total of 25 to 30 hours of joint working time.¹

Except for this Introduction and the Appendix, the author of this entire work is Dr. Sippanondha. The ideas in this monograph are his, and the purpose of the monograph is to provide as clear, accurate, comprehensive, and integrated a statement as possible, of his images and preferences concerning alternative sociocultural futures for the Thai people.

Neither Dr. Sippanondha nor I expect that all readers will agree fully with his² choices of particular domains of Thai life to cover in his scenarios. Probably, not a few readers will disagree with some of the images and preferences he articulates. Almost certainly, some will consider certain aspects of his optimism to be unfounded.

Such disagreement is natural enough, given the enormous complexity of the sociocultural change processes he has chosen to cover. Not only would complete agreement on such matters be impossible, but we would not even regard it as desirable—for it is our hope that this publication will help bring about clear, comprehensive, informed, and reasoned public discussion about alternative futures for Thailand. It is in the nature of the political process that people will disagree about such alternatives—and about the public policy deci-

¹Final re-writing and publication of this monograph were delayed by my decision in the autumn of 1989 to take early retirement as Professor of Anthropology at Stanford University, and to move to Portland, Oregon in order to pursue full-time research. This move demanded much of my time, and forced me to postpone work on the manuscript for several months.

²In this Introduction and in the Appendix, the following pronouns have the following references, unless another reference is clear from context. "I" refers to Textor; "we" to Sippanondha and Textor jointly; and "you" to the reader. In the main body of the book—Chapters One through Six—"I" refers to Sippanondha.

sions that could be, and ought to be, made in the **near** future, so as to make it more likely that when the middle-range future eventually becomes the present, that present will constitute a reality that the Thai people will find welcome, satisfying, and fulfilling.³

The reason for publishing an English version of this book, in addition to a Thai version—is to make Dr. Sippanondha's ideas available to non-Thai scholars, writers, administrators, diplomats, and others interested in Thailand—or interested in gaining knowledge that can be applied, mutatis mutandis, in other nations. It is important, I feel, that Dr. Sippanondha's seminal ideas about technology, culture change, and development be made accessible to a world audience.

I.2. THE AUTHOR

In 1987 when Dr. Chu asked me to serve as ethnographer/collaborator for this study, one of the first tasks I faced was to decide who ought to be invited to become the author. It was clear to Dr. Chu and me that whoever the choice was, he or she would need to be a "renaissance" type of person, well grounded in several fields, well versed in development theory, and well experienced in its practice.

Unhesitatingly, I decided to invite Dr. Sippanondha Ketudat, and was truly pleased when he accepted. His objective qualifications for this role are outstanding, and it is important that they be briefly stated here.

Dr. Sippanondha was born in Bangkok in 1931, and as an adolescent became a Thai Government Scholar by national competi-

³I, too, did not invariably or totally agree with Dr. Sippanondha, either with respect to the degree of coverage of various domains of the Thai way of life, or with respect to actual positions taken. My guess is that the same was true of the three consultants. All this is unsurprising and unimportant. What is important is that we approached the process of interviewing Dr. Sippanondha as honestly as we could, respecting the principle that the content of the book was to be what he wanted it to be.

tive examination. This enabled him to study at the University of California at Los Angeles (B.S. 1953), and at Harvard University (A.M. 1954; Ph.D. 1957 in Physics). Since then he has held post-doctoral research appointments in nuclear physics at the Mas sachusetts Institute of Technology, the Argonne National Laboratory in Illinois, and the Technische Hochschule Darmstadt in Germany.

Dr. Sippanondha taught at Chulalongkorn University from 1958 to 1972 and again briefly during the Eighties. In 1984, by Royal Proclamation, he was appointed Professor Emeritus of Physics.

Even as a young lecturer at Chulalongkorn, Dr. Sippanondha took a deep interest in development problems, and would spend weeks of his vacation time in remote upcountry villages, offering inservice training in science education to provincial school teachers, as well as familiarizing himself with village culture and problems.

As a young man Dr. Sippanondha also fulfilled the Thai Buddhist cultural ideal and became ordained as a monk, opting to do so at a temple with a strong intellectual tradition. He became a serious scholar of the Dharma, and remains so to this day, long after leaving the order. He is deeply concerned to find ways to bring the essence of the Lord Buddha's teachings more effectively to bear upon modern problems and challenges.

In the late Sixties Dr. Sippanondha's interest in development led him to a mid-career switch from teaching and research in theoretical and experimental physics, to a direct and active involvement in Thailand's educational and development policies and programs. He served as the Secretary of the Graduate School at Chulalongkorn University. Shortly thereafter he became Director of Thailand's University Development Commission, with responsibility to coordinate the establishment of appropriate graduate schools throughout the growing national university system. For a while he served as Deputy Director of the Southeast Asian Ministers of Education Secretariat, an experience that gave him an unusual knowledge of other Southeast Asian nations and their problems, and

a well-grounded comparative perspective. He then became Secretary-General of the National Education Commission, in which capacity he provided leadership in identifying and planning a variety of needed educational reforms at all levels of schooling. In the early Eighties Dr. Sippanondha was made Deputy Minister, and then Minister of Education, and in these capacities was able actually to implement most of the reforms earlier identified. By general consensus, Dr. Sippanondha Ketudat has earned a prominent and permanent place in the history of Thai education.

Dr. Sippanondha's credentials for international and comparative analysis are also rich. During the Seventies and early Eighties he served as short-term consultant on education and development to the Ford Foundation, the Rockefeller Foundation, the Canadian International Development Agency, the World Bank, and UNESCO.

Within Thailand, Dr. Sippanondha's background covers the entire gamut of national development policy. Throughout the Seventies and Eighties he has served in numerous positions of public trust, notably on various university councils and boards of trustees. He has also served on various consultative bodies, including the Executive Committee, within the structure of Thailand's leading economic and social planning agency, namely the National Economic and Social Development Board. In addition, he has twice been appointed a Senator.

In 1984 Dr. Sippanondha was chosen to be first President of the National Petrochemical Corporation, Ltd. (NPC), an innovative billion-dollar venture created to develop Thailand's petrochemical wealth equitably and efficiently, for the benefit of all the Thai people! This firm is unusual in that it is owned partly by a government agency (to insure equity), and partly by private investors (to insure entrepreneurial creativity and efficiency). The NPC is a crucial part of the pioneering Eastern Seaboard Development Program for the creation of a new industrial zone. In his present position Dr. Sippanondha is helping to influence Thailand's development for decades to come, by

leading in the development of the entire chain of the petrochemical industry, using natural gas fractions as feedstocks, essential to the nation's industrialization. (For details, see Chapter 2, Section 2.3.1).

Throughout all these experiences Dr. Sippanondha has found time to remain a scholar and social thinker. A few of his more recent publications and public lectures are listed in the Bibliography.

The above presentation should be sufficient to demonstrate that Dr. Sippanondha brought to the present project an unusually broad intellectual background, the scientific rigor of training in physics, a rich theoretical grounding in education and development processes, and the practical experience of having successfully managed an enormous government ministry and one of the most dynamic industrial firms in Southeast Asia.

I.3. THE CONSULTANTS

In addition to myself as ethnographic and editorial collaborator, three consultants participated in the initial two days of interviewing, and later made suggestions on various drafts of the manuscript. These three scholars were, like the author, rich in relevant credentials, which may be briefly summarized as follows.

- Professor William J. Klausner holds a bachelors, masters, and law degree from Yale University. He is a foundation official, writer, and expert on Thai culture who has resided in Thailand for 35 years and dedicated an entire career to understanding and facilitating development programs designed to meet Thai needs as Thais define those needs. He serves as Adjunct Professor, special class, in the Chulalongkorn University Faculty of Political Science, and also teaches in that institution's Faculty of Law.
- Professor M.L. Bhansoon Ladavalya holds a PhD in Political Science from Northern Illinois University and is a member of the professoriate of Chiang Mai University. He is richly experienced in qualitative research on public policy problems.

Recently he completed a term as Director of his university's multidisciplinary Social Research Institute, where he exercised leadership in planning and executing development-oriented research projects.

• Professor Sidhinat Prabudhanitisarn, a sociologist with a PhD from Stanford University, is also a member of the professoriate of Chiang Mai University. He is deeply experienced in both quantitative and qualitative research on development in both the urban and rural sectors of Thai society. Currently he is conducting indepth research on the development process in two Northern Thai villages.

Both Dr. Bhansoon and Dr. Sidhinat were co-authors of the first study in the present "Ethnographic Futures Research" genre to be published on the basis of fieldwork in Thailand (Appendix, Section A.2.). Hence, both were well prepared to become immediately and productively involved in the present project. The two of them have kindly offered to draft the Thai language version of this monograph, with final editing by Dr. Sippanondha. Publication will occur in early 1991.

Though our three consultants provided valuable help, it bears repeating that Dr. Sippanondha is the sole **author** of this work. While the **scope** of this monograph may to some degree reflect the questions asked by the collaborator and consultants, the actual **positions** taken are those of Dr. Sippanondha alone.

I.4. FACING ALTERNATIVE POTENTIAL FUTURES FOR THE THAI PEOPLE

Inevitably, there will be a Thai future. But what kind of a future it turns out to be will depend in part on how squarely Thais today face their future potentials, and how imaginatively and intelligently they proceed to invent and design the kind of future they want. The ethical intent of this monograph is to help Thai citizens assert their claim to the Thai future by facing their future opportunities, dangers, and problems as squarely as possible.

We believe that Thais can maximize chances for a desirable future, and minimize chances for an undesirable one, if today they take the trouble to develop reasonably clear and concrete images, or anticipations, of the major sociocultural futures for Thailand that could occur, and, within that range, of the futures that they judge to be relatively more desirable. A people without a clear image of what it wants to realize in the future, is hardly likely to end up liking what does become its reality as the future becomes the present.

All this is especially true in the present era of world history, in which the pace of change is ever more rapid, the effects of change ever more inter-connected, and the scope of change ever more pervasive. Indeed, our era is unique in the sense that the experience of the past is often **not** useful, and sometimes downright useless, as a precise or confident guide to the future—which fact only underlines the vital importance of cultivating the art of systematic anticipation (I.6).

We hasten to add, though, that we are under no illusions about Thailand's being fully free to pursue its own invented, anticipated, or preferred future. There are, of course, many constraints upon the nation's freedom, such as the complex processes of military, political, and economic competition among the great powers—which obviously set limits on the freedom of the one percent of humankind who are Thai to realize the kind of future they want. Moreover, it would be naive to ignore the fact that the Thai polity, like most, is far from perfectly responsive to the desires of its citizenry.

On the other hand, we argue that many Thais tend to see the Thai polity as having less capacity to shape the future of Thailand as a sociocultural system than we believe is in fact the case. Though Thailand's international political and economic options are circumscribed, that should not be allowed to obscure another vital fact, namely that within fairly wide limits the Thai polity is free to pursue its own preferences in a number of domains, some of which are of crucial importance—for example, education. Thai leaders may, if

they wish, decide in total detail what shall be taught in the nation's schools. Considerable freedoms also exist in other areas, such as demographic, economic, and environmental policy—and in all these areas we believe that Thais should assume that they can deal effectively with their own sociocultural future, and should make every effort to do so.

1.5. THE PROBLEM OF TEMPOCENTRISM

We come now to the concept of "tempocentrism." This concept is crucial to the logic undergirding the entire Ethnographic Futures Research methodology used in preparing this book. Tempocentrism has to do with our paying too little attention to the future, or paying attention but in the wrong way.

In introducing this concept, we may start by asking a straightforward question: If paying systematic, careful attention to possible, probable, and preferable alternative futures is so important, why don't more people practice it more of the time? We shall provide two answers to this question.

Our first answer is that many people do in fact pay attention to, or imagine, alternative futures, much of the time. The human organism is unique in the animal kingdom in its capacity for elaborated futures consciousness. It is probably true that the great majority of human beings in the great majority of extant cultures of the world do attend to the future, including the more distant future, at least from time to time. Indeed, it is no exaggeration to say that one of the basic functions of human culture is to equip the individual or group to conceptualize future opportunities and dangers, and lay plans to deal with them.

I.5.1. Tempocentrism Defined

Our second answer to the above question is that when human beings do engage in anticipation, they often do so in inappropriate ways—that is, tempocentric ways. Tempocentrism refers to a complex psychocultural state in which we become "centered" in the wrong temporal frame, as it were. In this state, we are, first of all, typically unaware of the very inappropriateness of the time frame we are using, or why it is inappropriate. We lack the clarity of awareness, sense of salience, and strength of motivation necessary to attend to, and reach adequately informed policy judgments about, longer-range phenomena or issues of broader scope. However bright or educated we might be, we become so wrapped up in matters such as running a government, meeting a payroll, getting promoted, winning a spouse, beating the cost of living, or surviving until the next harvest—that we do not attend to problems such as:

- Is there a true AIDS epidemic impending in Thailand? A cancer epidemic in Bangkok?
- Can Thailand tolerate an 8% loss of forest cover each year, with consequent effects not only on the timber industry itself, but on climate, drainage, and agriculture as well?
- Is it wise to let foreign firms, or Thai firms, "externalize" their waste disposal costs by dumping poisons into the nation's waterways? Do the benefits exceed the costs? For whom?
- Because a particular robotic technology is available, and potentially commercially profitable, is this sufficient reason for the Thai polity to allow it to be used in a society with considerable underemployment?
- Can the nation afford to continue overproducing university graduates with limited employability without experiencing serious political instability?
- Is the current unprecedentedly heavy private foreign investment in Thai industries likely to result in the Thai polity

becoming less able than before to take charge of the Thai sociocultural future? During the Eighties the nation accepted, and indeed invited, prodigious infusions of foreign capital and technology, which helps explain why GNP growth in 1988 reached an astonishing 11%. If such powerful techno-economic trends persist, what will happen to Thailand's long-standing and cherished cultural heritage—to the Buddhist religious values that are central to Thai culture, to gentleness of manner, to respect for individual autonomy?

The phenomenon of tempocentrism is considerably more complex, however, than mere failure to attend to crucial aspects of a nation's more distant sociocultural future. Tempocentrism is also present when people do attend to the more distant future, but in doing so fail to allow for possible or probable changes in the context of life as of a particular future point in time. Examples come easily to mind.

- There is the Italian worker who purchased an annuity arrangement twenty-five years ago guaranteeing him a monthly retirement income for life of what, at that time, seemed like a princely sum—only now to find that he had failed to allow for inflation, and hence must spend his declining years in deprivation and misery.
- There is the American automobile salesman who almost religiously believes, contrary to all objective evidence, that the world will never run out of abundant oil.
- There were the French generals between the two World Wars who held devoutly to the doctrine that the Maginot Line would keep the Germans out—only to watch helplessly in 1940 as the latter's military forces did the obvious, and moved easily over and around those magically anointed fortifications.

People of this sort are futures-oriented, yes—but tempocentric at the same time. It would be inappropriate to look upon them as stupid; many such people are highly intelligent and otherwise professionally competent. But they are tempocentric.

In a sense, tempocentrism is the temporal analog of the spacial notion of ethnocentrism. In the case of ethnocentrism, people

are cognitively and emotionally unable to deal with another, quite different, sociocultural system that exists contemporaneously with, though often spacially separate from, their own. In the case of tempocentrism, the isolation is temporal rather than spacial, and people are similarly unable to deal with their own sociocultural system as it could or might become different through time.

Tempocentrism, like ethnocentrism, involves a whole complex of attitudes, values, and habits. Just as ethnocentrism is much more than an occasional or isolated "prejudice," so tempocentrism is much more than an occasional or isolated "lack of foresight." Rather, tempocentrism is a whole system of attitudes or tendencies that is quite deeply rooted in the personality and/ or the culture. In most cases, people's tempocentrism is not likely to change very much unless they experience trauma, followed by appropriate learning.

All of this is not to deny that tempocentrism and ethnocentrism in fact do provide a certain psychological comfort: they help us reduce anxiety, and so make it easier to get on with the immediate tasks of daily personal life. Worrying about the long-range effects of dumping detergents into Thailand's waterways hardly helps get today's laundry done. For just such reasons, most of us are tempocentric most of the time, just as we are ethnocentric most of the time.

However, the critically important point is that neither ethnocentrism nor tempocentrism is appropriate as a conscious or unconscious stance for a leader, planner, or educator, or indeed for a socially conscious citizen—especially in a world in which the pace of socio-cultural change is constantly accelerating. A hundred years ago, the great King Chulalongkorn was expediting modernizational change in Thailand at what was then an unprecedented rate. Indeed, he moved far faster and more radically and effectively than many have perhaps suspected, as Wyatt (1969) explains. However, the rate of change today is many tens of times more rapid—so rapid that unless there is deliberate and systematic anticipation of possible consequences and side-effects of this or that policy or process, these consequences are

likely to become established facts, and indeed serious problems, before leaders and citizens are even adequately aware of their existence—let alone prepared to deal with such problems through appropriate policies and programs.

I.5.2. Bangkok as an Example of Yesteryear's Tempocentrism

A telling example of tempocentrism in action is not hard to find: Bangkok today. While one easily finds much to admire about the educational, intellectual, and cultural achievements evident in today's Bangkok, it nonetheless remains a fact that, to more and more Thais at all socio-educational levels, Bangkok has come to be perceived as unlivable. More and more Thais who have the opportunity to leave Bangkok are in fact doing so—citing polluted air and water, congested traffic, and crowded living arrangements as their reasons, along with such emergent phenomena as exacerbated exploitation, crime, social delinquency, and cultural decay.

It is not for us here to judge these charges against Bangkok. It is sufficient to point out that when Thais themselves, in ever-increasing numbers, render these judgments about their capital city, this strongly suggests that some leaders, planners, and intellectuals in the past were possibly tempocentric with respect to some policy decisions that were then being made. They failed adequately to foresee what some of the major consequences and side-effects of those policies would be.

A slight digression at this point might be helpful. The present study projects forward about 30 years—from 1990 to 2020. We may better appreciate what this means if we take a moment to look backward about the same length of time—to the Fifties. In 1955 I was a graduate student from Cornell University conducting a UNESCO-sponsored field study on urbanization in Thailand (Textor 1961). In this connection, I had occasion to interview a number of the national leaders of the time, as well as experts and technocrats who

had access to those leaders. While it would be inappropriate for an outsider either to defend or criticize those leaders, it would not be amiss to record here my impression that, contrary to what some critics today might contend, a number of those leaders did seem, on the whole, to be quite genuinely concerned about the welfare of the Thai people, and especially of those who dwelt in Bangkok. Within the limits of political realities as they perceived those limits, a number of these leaders seemed genuinely prepared to work hard, and even to take some risks, to promote this well-being. Above all, these leaders were determined to bring "progress" (khwaamcaroen) to the Thai people—a term implicitly defined as embodying a process toward greater physical ease and material comfort attained through the use of technology involving increased use of inanimate energy.

Most of those leaders are now dead. If they were able to return and observe the realities of **their** future Bangkok—the Bangkok of today—many of them would certainly be shocked by the numerous unintended negative consequences of their policies.

Why bother to make this point? Certainly not to suggest airily that if only the leaders of Thailand in 1955, and the technocrats and intellectuals who had some influence over them, had somehow been purged of their tempocentrism, everything would be delightful and pleasant in the Bangkok of today. Such a proposition would be patently absurd. Clearly, the policy decisionmaking and -executing process is more complex than that, and involves numerous other inputs besides informed awareness or imaginative anticipation such as, for example, those stemming from the sheer competition among political and economic interest groups. Nor would it be fair to brand all leaders or all planners in the Bangkok of 1955 as tempocentric. However, I do contend that (within limits imposed by structures of political and economic competition and advantagetaking) a greater capacity to visualize alternative sociocultural futures for the Thailand of 1990, which some leaders of the Thailand of 1955 conceivably could have possessed and acted upon, could have had some influence, and perhaps very considerable influence, in shaping a Bangkok which Thais today would find appreciably more to their liking. Tempocentrism was indeed a problem then, just as it is today, and the course of prudence today is to cultivate anticipatory skills to deal with the problem.⁴

I.6. CULTIVATING THE ART OF ANTICIPATION THROUGH ETHNOGRAPHIC FUTURES RESEARCH

It is our conviction that the sort of tempocentrism outlined above can best be counteracted if the leaders of a nation cultivate the "art of anticipation." This term was invented by a team of scholars at the University of Sussex in Great Britain, who have published an excellent book on this subject (Encel et al.: 1975). The art of anticipation, vigorously and carefully practiced, can be extremely helpful to a community or nation attempting to maximize the opportunities and benefits, and minimize the dangers and costs, inherent in the current era of rapid demographic, technological, economic, and ecological change. While the art of anticipation is certainly no panacea, it is surely a valuable skill for use in overcoming tempocentrism and facing alternative futures affirmatively and creatively.

I.6.1. Anticipation Distinguished From Conventional Prediction

Research that involves the art of anticipation must be clearly distinguished from research that involves "prediction" in a more

Tempocentrism was hardly absent, either, among certain foreign consultants who were active in Thailand a generation ago. For example, in the early 1960s the Sarit Government engaged an American consulting firm, the Litchfield Group, which recommended that Bangkok become an "automobile city" (Fry and Thurber 1989: 28). If the consulting group had come instead from some other Western nation—Austria, for example—one wonders if such a preposterous recommendation would have been forthcoming. For a related comment, see 2.5:

conventional social science sense. While disciplined prediction is one of the hallmarks of good social science, such prediction is usually performed:

- with respect to how just a few variables will behave,
- over a relatively short time span, and
- within narrowly circumscribed and explicitly stated scope conditions.

Examples of such conventional predictions are seen in the case of the social psychologist predicting which of his subjects in a small group experiment will turn out to be the "sociometric star"; or the economist predicting next season's barley prices.

All this is as it should be. The focus of this monograph, however, is different. We are looking at a whole sociocultural system over a time span of a generation. When the number of variables is so great, the time span so long, and the scope conditions so difficult to specify, we believe that "prediction" in the conventional social science sense is impossible—at least with currently available methodologies, and perhaps forever. We do not even attempt it.⁵

Instead of attempting prediction, then, we choose to engage in anticipation, defined as the building of reasonable, plausible, conditional visions of the future. These take the form of projections, forecasts, and scenarios, plus the identification of key policy questions that must be faced in the near future if chances are to be maximized in the farther future, for the achievement of valued ends, and minimized for disvalued consequences. For a technical discussion, see the Appendix, Section A.3.

For an introduction to the notion of anticipation as I use it, let us now return to the Sussex group. In their book, The Art of Anticipation, these scholars observe:

⁵For a carefully reasoned argument on complexity and the limits of predictability, see Kline 1990.

[Anticipation] is not, and cannot be, a purely objective exercise. The future does not exist; [anticipators] try to invent it. In doing so, our presuppositions about what ought to happen are intertwined with assumptions about what will and what can happen. [Anticipating] is an attempt to gain what Baier calls "meliorative knowledge"; hence it involves assumptions about the causal roles of events, things, and human endeavours in generating the future. Such knowledge depends on value judgments, which are not merely expressions of the emotions or exhortations to better behaviour, but are susceptible to logical examination.... (Encel et al. 1975:14; emphasis in original).

The present monograph has been created in just this anticipatory spirit, using the methodology of Ethnographic Futures Research (EFR). The consultants and I have interviewed a highly informed, concerned Thai leader in considerable depth, in the EFR mode. We have elicited from him his expectations and preferences as to the middle-range Thai future. We have, in short, used EFR as a catalytic device to help Dr. Sippanondha create "meliorative knowledge."

I.6.2. Evaluating an Anticipatory Effort

Given that this book does not render predictions in the conventional social science sense, the question arises as to what criteria are appropriate to use in evaluating the materials Dr. Sippanondha has created. Clearly, each of you will employ the criteria you see as most appropriate. In my view, though, it is clear that the appropriate criteria are **not** those of the more tightly predictive social sciences, much less those of Dr. Sippanondha's discipline of physics.

Rather, I recommend that this book be judged by the criteria set forth above by the Sussex group. I suggest that as you read this book, you ask yourself questions like the following. Has Dr. Sippanondha:

• provided appropriate statements as to what, by his values, "ought to happen"?

- provided plausible "assumptions about what will and what can happen"?
- made useful and valid assumptions about "the causal roles of events, things, and human endeavours in generating the future"?
- Given expression to value judgments which, far from being "merely expressions of the emotions or exhortations to better behaviour, ... are susceptible to logical examination"?
 - in short, created useful "meliorative knowledge."?6

To put it even more briefly, I believe that Dr. Sippanondha's ideas can and should be judged by whether they are plausible⁷, and by whether they are likely to help produce more prudent public policy.

⁶In this connection, a word should be said about the matter of factuality. Given my epistemological position that there are no future facts, I contend that Chapters One through Six should be judged as to factuality only in that Dr. Sippanondha contends that they:

- are grounded in social facts about Thailand in the past and present; and
- factually represent his currently-held cognitive and evaluative "positions" with respect to alternative futures for Thailand.

⁷The question of the plausibility of Dr. Sippanondha's projections suggests the related question of the "validity" of those projections. If we construe the concept of validity in its conventional social science sense, then it would appear that the only way to assess the validity of Dr. Sippanondha's projections would be to wait patiently until the future becomes the present, i.e., until about A.D. 2020. This is hardly a practical procedure.

However, even this definition of the concept of validity requires qualification, because it leaves out of consideration the phenomena of the so-called self-fulfilling and self-negating prophecies. For example, it is quite possible (and, we hope, probable!) that this monograph, or other studies like it, might themselves alter the course of future history by helping to bring about policy changes in the short run which would not otherwise have been made—with the result that longer-run change processes will then emerge in ways different than might otherwise have been the case.

I.7. ESSENTIAL ELEMENTS OF AN ETHNOGRAPHIC FUTURES RESEARCH INTERVIEW

It is appropriate here to introduce, as briefly as possible, the essential elements of an Ethnographic Futures Research interview of the type I administered to Dr. Sippanondha. If you are not interested in methodology, please proceed to the next section.

An EFR interview is a private, one-on-one, interactive, semistructured, open-ended inquiry process. In our case it lasted many hours in a number of sittings. All interviews and editorial commentaries were tape-recorded, and we ended up with more than a dozen tapes of material.

Stated as briefly as possible, the goal of my EFR interview with Dr. Sippanondha was to:

ELICIT SCENARIOS from him that would make clear his IMAGES and PREFERENCES with respect to POSSIBLE or PROBABLE future CULTURES for Thailand, as of an approximate time horizon in the MIDDLE range future.

The term **ELICIT** means that I turned as much of the structure and content of the interview over to Dr. Sippanondha as possible. My task was to assist him in insuring that his interview summaries (protocols) were reasonably clear, comprehensive, contextualized, and coherent (A.4.3). The interview "belonged" to him, and the protocol was his intellectual creation. My role was to try to insure that he was as free as possible to move in directions of his own choice, and to construct scenarios in terms of his own categories. In my judgment, this is precisely what he did.

Despite this emphasis on elicitation, the EFR interview, like all interviews, does have some structure. At the beginning, Dr. Sippanondha and I agreed upon certain "domains" that he wanted to cover (Section I.8.3 below), and from time to time I would probe to insure that he covered them as thoroughly as he thought necessary.

The term MIDDLE-range future in our case referred to the period between the present and a "horizon date" approximately thirty years into the future. The horizon date is the year by when, the interviewee projects, certain changes can, might, or will have occurred; certain existing practices can, might, or will have died out; and so on.⁸

The term POSSIBLE means that Dr. Sippanondha's scenarios were judged to be realistic rather than utopian or dystopian. However, he, not I, did the judging as to what lay within, and what beyond, the bounds of realism.

The term IMAGE refers to Dr. Sippanondha's mental picture—percept or concept—as to what a given domain or aspect of the Thai future would or could be like.

The term **PREFERENCE** means that, within the range of realism as defined by Dr. Sippanondha, I sought to learn the kind of sociocultural system that he, on balance, preferred. Unlike some futures research methods, EFR places as much emphasis upon what the interviewee wants, as upon what he expects.

The term PROBABLE refers to the fact that, after I had of elicited Dr. Sippanondha's Optimistic and Pessimistic Scenarios, I sought his Most Probable Scenario—which indicates which future culture, out of a wide range of possibilities, he judged to be relatively most likely—quite apart from the question of desirability. The gap that typically emerges between the Most Probable Scenario on the

*While EFR can be used with a wide variety of horizon dates, depending on one's research purposes, I have found the middle-range horizon date to be most useful for most purposes, because:

- it is far **enough** into the future that the interviewee's imagination is freed from the tempocentric limitations of over-attention to the real or perceived constraints of the present; but
- it is not so far into the future as to destroy the interviewee's motivation. It is near enough so that he takes the interview seriously, since he, or at least his children, can reasonably expect to live that long, and hence stand to gain or lose from the sociocultural arrangements that become reality by that time.

one hand, and the Optimistic or Pessimistic Scenario on the other, can often throw strong and useful light on current issues of public policy—on the need for wise policy decisions in the short range, that can make the optimistic middle-range goals more likely to occur, and the pessimistic consequences less likely.

The term **CULTURES** means that I encouraged Dr. Sippanondha to build his scenarios in terms of the whole Thai sociocultural system, and in terms of his premises concerning how such systems change.

The term SCENARIO means that I sought to learn both:

- Dr. Sippanondha's perceptions of the nature of the hypothesized Thai sociocultural system as of the approximate horizon date; and
- his assumptions or models as to how the projected changes in cultural arrangements are likely to come about, i.e., as a consequence of what driving forces, what causal linkages, what public policies, etc. In other words, I asked him, when necessary, how he would "ground" his projections.

This summary of the EFR approach is extremely brief, but perhaps adequate for the general reader. Further details are given in the Appendix and Textor (1980a, 1991).

I.S. THE BASIC STRUCTURE OF THIS RESEARCH PROJECT

Every EFR project is characterized by five basic elements. In the present case these elements are as follows.

I.8.1. Population and Culture

The population whose future is being discussed is that of Thailand, currently around 55 million, and likely to be around 75 to 90 million by the horizon date. The culture whose future is being discussed is the largely Buddhist Thai culture, although we take into

account the fact that the population of Thailand also includes a number of non-Buddhist Thai minorities, as well as ethnically non-Thai minorities.

I.8.2. Horizon Date

In this study, the approximate date by when various changes are projected to occur is roughly one generation into the future. This is defined as Buddhist Era (B.E.) 2563, or Christian Era 2020.9

I.8.3. Domains of Culture

The domains of culture that Dr. Sippanondha decided to include in his Optimistic Scenario are: Demography; Technology and Economy; Energy; Environment and Ecology; Transportation; Tourism; Information and Communication; Politics, Law, and Government; Social Structure; Education; Buddhism and Other Bélief Systems; and Thai Identity. As a glance at the Table of Contents makes clear, a number of these domains embrace two or more sub-domains. In Chapters Three and Four, the Pessimistic and Most Probable Scenarios, Dr. Sippanondha found it suitable to collapse these domains into a smaller number of broader categories.

I.8.4. Technology as a Driving Force

Around the world today technology is unquestionably one of the most important forces driving broad sociocultural change. For this reason, and because Dr. Sippanondha has long been involved in planning and employing technology in order to promote modernization and development in Thailand, it is not surprising that he has devoted much attention to it in his scenarios.

The Buddhist Era dates from the death of the Lord Buddha, 543 years before the birth of Christ.

I.8.5. Underlying Assumptions

Every discussion of the future, whether in the EFR mode or any other, must proceed from certain assumptions, and it is useful to make some of these explicit. Among those underlying the present study are the following:

- As of the horizon date there will still be an independent Thai political, social, and cultural entity occupying the same territory as today.
- There will be no thermonuclear holocaust, or major use of chemical weapons, which would destroy so much of the world system as to render the anticipation exercise meaningless.
 - There will be no world-wide ecological collapse.

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My primary acknowledgement is to Dr. Sippanondha, for the great care and responsibility he has invested in this effort, despite the unrelenting daily pressures of running one of the largest corporations in Southeast Asia. It has been a genuine privilege to collaborate with a person of his broad knowledge, deep understanding, and humane values. He and his highly knowledgeable and ever-helpful wife, Emilie Clevenger Ketudat, have been an inspiration from beginning to end.

It remains to express our joint appreciation to many who helped make this book possible.

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Since I began my specialization in the Thai language and culture during the 1950s, I can truthfully say that the Thai people have enriched my life greatly. My part in producing this monograph represents an effort to give something in return. In my entire career as a Thailand specialist, no research undertaking has given me more satisfaction than this one. If this book succeeds even slightly in enhancing the awareness of Thai leaders and citizens, as part of a process in which they take firmer charge of their national and cultural future, I shall feel amply rewarded.

Robert B. Textor
Professor of Anthropology,
Emeritus
Stanford University

Portland, Oregon August 6, 1990

CHAPTER ONE:

BASIC WORKING PHILOSOPHY

This chapter lays the groundwork for the three "scenario" chapters that follow. It outlines the basic working philosophy I will use in viewing the future of my country optimistically, pessimistically, and most probably, in Chapters Two, Three, and Four, respectively.

1.1. THE ADAPTIVENESS OF THAI CULTURE THROUGH OPENNESS, FREEDOM, TOLERANCE, AND SELECTIVE BORROWING

The Thai people have a long history of openness toward other cultures, tolerance of cultural differences, and willingness to learn from the outside world. Historically, we have shown a readiness to borrow elements from other cultures, elements that will fit our culture and help meet human needs. In our pre-modern period we adopted, adapted, and integrated a variety of cultural elements from the Indians, Chinese, Khmers, Mons, Burmans, Indonesians, and Malays—and various features of our present Thai culture clearly reflect these borrowing processes.

This tendency to borrow increased markedly with the coming of Western political and military hegemony to Southeast Asia during the Nineteenth Century, and we adopted many elements of Western science, technology, law, management, commerce, education, and politics. Indeed, if we had not, we probably could not have succeeded in preserving our independence from European colonialism.

Historically, our pattern of cultural borrowing has shown a marked "both-and" rather than "either-or" proclivity. Our tendency is toward harmony rather than dichotomy, toward keeping much of the old and blending it with much of the new—rather than toward anything like blanket rejection of the old in favor of total acceptance of the new.

Of course, one might argue that this tendency toward harmony and integration is not peculiar to Thailand, but it is true of cultures in general. One might argue that, around the world, when Culture A borrows elements or emphases from Culture B, it is usually like this. Even if one were to grant this point, however, I would still argue that this harmonizing pattern is more pronounced in the case of Thai culture than is generally true among cultures around the world.

It must be quickly added, though, that the Thai cultural propensity to synthesize and harmonize does have its limits. Thais do not doggedly seek to preserve everything in their tradition just because it is traditional, nor do they seek to adopt every new cultural element presented to them by other cultures just because it is novel. The process of cultural borrowing and integration is much more selective than that.

In my view, this overall Thai emphasis on harmony is traceable, in part, to the particular and peculiar way in which Theravada Buddhism has become integrated into our culture. Buddhism is, unlike Christianity or Islam, a non-exclusivist religion. In Thailand, one can be a good Buddhist without the necessity of renouncing all other faiths. Indeed, there actually are Thais who espouse both Christianity and Buddhism, yet are accepted as Buddhists by other Thais who espouse only Buddhism. For members of some of the world's other major faiths, such a degree of non-exclusivism would be intolerable.

Related to this non-exclusivist pattern is an emphasis on the Thai Buddhist way of "knowing" (ruu). This way is broader than what most Westerners have in mind when they use this word. It means cognizing, yes, but it also means emotionally apprehending and intuitively understanding: heart to heart, heart to society, heart to

nature—as well as sensing in a psychomotor way. Thai "knowing" is, then, more of a "both-and" synthesizing and empathizing process, and less of an "either-or" analyzing and self-detaching process—than is Western "knowing."

A handmaiden of this "both-and," non-exclusivist orientation, and of Thai empathy, is tolerance. When a Thai individual, X, begins to borrow patterns of taste or behavior from an outside culture, there is a marked tendency for other Thais, even though they themselves do not borrow these patterns, to tolerate X's act of borrowing. This tolerance is part of the strong and broad Thai cultural emphasis on freedom, autonomy, and individuality. Often, of course, X's borrowing will turn out to be short-lived. In other cases, it will become permanent, but remain idiosyncratic. In still other cases, such borrowing becomes more widespread, sometimes sufficiently so that, in due course, the borrowed pattern may properly be regarded as having become part of Thai culture.

This psychological tendency to empathize and tolerate is clearly related to the above-mentioned Thai cultural tendency to synthesize, harmonize, and integrate the old and the new, the inherited and the borrowed. The result is that, in many respects, the Thai people are quite freely enabled both to continue to enjoy old richness resulting from past culture-building efforts, and also to add new richness borrowed from the culture-building efforts of outsiders.

For all these reasons, it is in a sense true to say that, "to be Thai is to be open to change." And one reason Thais are relatively unafraid

'This way of knowing has been influenced, for example, by the attitude found in Buddhist scriptures toward believing, and deciding what to believe. The Lord Buddha taught his followers never to accept an idea, even if preached by a charismatic religious personage, on blind faith—never to accept an idea unless they truly understood that idea, and unless it made good sense to them on the basis of their own experience. Faith must be rooted in reason. In Thailand today there is no essential dichotomy or serious conflict between religious belief and scientific commitment. A modern Thai, such as myself, can, without strain, be both a scientist and a Buddhist.

of change is that they expect that whatever change may result will **not** be abrupt or precipitous, but rather, harmonious. Indeed, one could argue that a high degree of openness **without** a cultural proclivity toward gradualness and harmony would substantially increase the risk of sociocultural collapse—especially in the current Information Age in which ideas pour across cultural boundaries in exponentially accelerating fashion.

Thus, to summarize, while some non-industrial nations have been undermined by openness to outside influence, we, on balance, have been enriched. This thought undergirds much of the working philosophy I present in this chapter, and explains why it was natural for me to sub-title this monograph "Technology in Harmony with Culture and Environment."

1.2. THE THAI POLITY AS AN AUTOMATICALLY SELF-CORRECTING MECHANISM

The type of resiliency suggested above is also reflected in a number of features that the Thai polity has developed over more than 700 years of history to insure survival, stability, continuity, and independence. With me, it is simply an article of **both** working philosophy and taken-for-granted faith, that these features will remain effective as our nation moves into a highly modernized and technologized future.

A brief digression is in order. In sharing my thoughts on these features of the Thai polity with the non-Thai reader, I must stress the importance of suspending ethnocentric value judgments based on the standards of some other culture. What I am about to say is best understood in terms of the totality of Thai culture—not some foreign culture.

The ultimate essence of our polity is "nationhood, religion, and monarchy" (chaad, saadsanaa, phramahaakasad). Loyalty to these three symbols is of the highest order. The Thai people are held

together by an intense loyalty to the monarchy, a loyalty supported by a strong cultural propensity toward tolerance, harmony, and compromise. The king is, among other things, the guardian of our Buddhist faith, and this serves symbolically to link polity and faith.

Our present king has reigned longer than any other sovereign in our entire history: at this writing, forty-five years. He is indefatigable, travels constantly among his people, and knows our country better than anyone. He is deeply committed to development and to sufficiency for all. He cares about his people, and they know that he cares. Thais of all social classes love and revere him. He is the symbol par excellence of the national identity of our people, the continuity of our tradition, the stability of our polity, and the hopes we hold for our national future.

Our polity has also been preserved by its civil and military servants (khaaraadchakaan). For centuries, both civilian and military officials have been bulwarks of the stability and continuity of our nation. In our long history we have never observed the sort of strict separation between military and civil officialdom that has characterized many other polities. Indeed, in numerous historical situations—especially those involving the subjugation or control of border areas—the same official often served in both civil and military capacities, depending on the needs and exigencies of the moment.

Up until the replacement of the absolute monarchy by a constitutional one in 1932, it was this tripartite cooperation among the monarchy, the civil administration, and the military officer corps that insured our independence from foreign powers. Since 1932, the formal power of the monarch has decreased, although his influence has remained strong. In addition, the tripartite arrangement has been broadened by the addition of a fourth element, namely the intellectuals, including especially those educated in the West. The influence of this newer group has grown rapidly since the regime of Prime Minister Field Marshal Sarit Thanarat in the early 1960s, when the government turned toward a decidedly more development-oriented

stance, and hence felt an ever greater need for scientific and technical expertise. After the change of government instigated by university students in 1973, student intellectuals tended to share in some of the influence of this overall intellectual group.

Throughout our history, the outstanding feature of our polity has been its tendency toward equilibrium. Whenever the system has gotten out of balance, there has been a gyroscopic tendency toward achieving a new equilibrium and harmony. Each new equilibrium will incorporate the effects of the perturbation that caused it—but the vital point to understand is that it will be a genuine equilibrium.

Since the mid-1980s there appears to have emerged a fifth constitutive group in the Thai polity, namely that of wealthy businessmen overtly and directly involved in elective politics. My assumption is that this element is in the process of becoming part of the Thai equilibrating process.

The Thai military deserve further comment here. Today, they constitute a large reservoir of development-relevant personnel. They are relevant in part because they are educated and skilled, and in part because they are more disciplined than the other constitutive groups. When I look at the military, therefore, I see them as an asset to our continuing national independence and stability, yes, but also to our continuing national development—and not as a necessary evil somehow to be tolerated. In taking this position, I definitely part company with many Western observers and some Thai popular writers.

It is a mistake, I believe, to regard the Thai military leadership as being exclusively narrow in an intellectual sense. Many senior military officers are quite the opposite. Nor should one regard them as being exclusively rightist in political orientation. Many, especially those who have served in the poverty-stricken Northeastern countryside, are much more keenly alert to the plight of the nation's villagers than is the average Bangkok civilian intellectual. Many military officers are, indeed, pro-poor and pro-reform.

But above everything else, the Thai military are pro-independence, -stability, and -continuity. In our history they have been a key force for equilibrium, whenever the balance of power has leaned either too far left or too far right. True, this balancing role has been carried out, in part, by means of coups d'etat. True, too, such behavior by the Thai military has not always appeared, to the Western democratic eye, to be very democratic or constitutional. However, given that Thai freedom is best understood in terms of the totality of Thai cultural reality, and that written constitutions are not well established in Thailand, this balancing role of the military has, in my judgment, generally served the best interests of the nation.

For reasons such as these, in my working philosophy I tend simply to assume that there will be continued involvement of educated, disciplined military personnel—not just in preserving national stability and independence, but also in promoting overall development.

Having said this, let me add that I do see as a more ultimate possibility the gradual withdrawal of the military from politics. This process will not be completed, however, until long after the end of the projection period used in this monograph, and only after some other set of institutions—political, educational, religious, or whatever—has matured to the point where it can provide the discipline and moral leadership needed to preserve stability and continuity.

There is in the Thai mythology a supernatural entity named "Phra Sajaam Theewaathiraad," who is a sort of guardian angel for our entire nation. This supernatural figure is a mystical symbol fusing the elements of nationhood, religion, and monarchy. People of more traditional outlook believe in him as a living supernatural being. Others, including myself, tend to regard him allegorically, as a symbol of our shared faith that stability, continuity, and independence, through continuing processes of equilibration, will characterize our national future.

1.3. Emphasizing Technology in Harmony with Culture and Environment

A fundamental guideline in my working philosophy is that the technology we use in Thailand should be planned in such a way as to do the minimum possible damage to the natural environment. To the extent that damage might occur, it should be possible for the environment to recover, and for technology and environment to come to a new, sustainable balance.

The same guideline applies to culture, which, like the environment, is a resource that has evolved over a long period in such a way as to achieve a certain equilibrium and to meet mankind's needs in an effective, satisfying manner. If a new technology is introduced which upsets the culture of Thailand, these upheavals should be minimized, and it should be possible for the new technology, as it becomes **part** of Thai culture, to come into balance with the rest of the culture—that is, with Thai values, religion, standards of aesthetic taste, notions of propriety, norms of social organization, etc. (A.3.2).

I can exemplify my thinking on this matter by relating it to the important current debate as to whether Thailand could become, should become, or should want to become, the fifth Asian "Newly Industrialized Country" (NIC)—after the four so-called "tiger" NICs: South Korea, Taiwan, Hong Kong, and Singapore.

Let me start by stating that I consider much of this debate to be highly misleading, because various people clearly have quite different things in mind when they employ this simple label of "NIC." Such a shorthand term cannot possibly characterize all the salient features of the kind of Thailand one would want to see in the future, in sufficient detail to be meaningful. For one thing, the Thai resource base and population distribution are generally different from those found in the four existing NICs. With the partial exception of South Korea and Taiwan, the NICs have agricultural resource bases that are extremely limited. California-sized Thailand, by contrast, has an

immense and rich agricultural base—as well as "hinterland problems" of rural underemployment that are virtually unknown in, say, Singapore. For many such reasons as these, if one is to use this label at all, one must do so with much greater care and specificity than has so far usually been the case.

Dr. Amnuay Virawan (1988) has offered a minimal definition of a NIC that I find useful for the time being, namely that it is:

a country with \$2,000 or more Gross Domestic Product per capita in monetary terms and [in which] the manufacturing sector generates more income than any other sector.

As soon as one goes beyond such basic economic parameters, however, one confronts serious complexities. For example, all four of the "tiger" countries have accomplished their growth through the exercise of governmental power that is far more authoritarian than that which would be appropriate to Thai culture. If such political methods are what proponents of NIC status for Thailand have in mind, then NIC status is part of my **Pessimistic**, not Optimistic, Scenario. If such proponents do not have such authoritarian methods in mind, they must still assume a rather heavy burden of proof in showing how Thailand could manage such rapid economic growth without resorting to such methods, and in a manner that would be otherwise reasonably consistent with our overall cultural value system.²

²I acknowledge that for some time a commonly held position among political scientists has been that economic growth often leads to the development of an infrastructure conducive to democracy in the longer run. This phenomenon is currently observable in Taiwan, for example, where people today enjoy considerably more freedom than ten years ago. Since we Thais would prefer to continue enjoying the degree of freedom we have already achieved, however, as compared to the lesser degree so far achieved by Taiwan, my question remains valid.

1.4. Emphasizing Technology For Sufficiency, Not Luxury or Greed

On an individual scale in everyday life, it is possible for a person either to live as an abstemious hermit, or to lead a luxurious lifestyle. A hermit's life is only possible if one detaches oneself from society, while the extravagantly material life overutilizes a society's natural resources in an unjustifiable way. Neither life path is in harmony with the interdependent nature of our present and future world.

In thinking about our global natural resources, I hold to the philosophy espoused by Mahatma Ghandi, who once said, "The world has enough resources to satisfy everyone's needs but not his greed." I find it helpful to express the essence of this Ghandian notion, in shortened form, as the principle of "eat sufficiently, live sufficiently" (kin phau dii, juu phau dii)—and use it as a fundamental ethical yardstick for the measurement of true and just developmental change. The principle applies, I feel, at both individual and societal levels everywhere, both now and in the future.

1.5. REDUCING THE EXISTING GAP OF INEQUITY

Thailand during the 1980s has been a society in which the notion of "sufficiency for all" has in fact not been practiced, especially by some of those in a position to influence public policy. There are many influential people in Thailand who uncritically accept as natural the current reality in which one Thai may enjoy enormous luxury while another, despite hard work, cannot earn enough to provide adequate basic nutrition for his or her children. Indeed, in 1986 approximately 25 percent of our people were living below the poverty line, defined in terms of norms established by a United Nations agency.

True, one may take heart that this percentage had decreased

from about 42 percent in 1968 (Sippanondha 1988b, Snoh 1989). However, the satisfaction one takes in this accomplishment must be tempered by due regard for another stubborn fact of life, namely that the development process in recent decades has rendered Thailand's overall income distribution **more** skewed than before—not less. That is, while the development process to date has lifted some Thais above the level of abject poverty, this gain has occurred simultaneously with an exacerbation of the already highly skewed income distribution in which a small number of Thais received very high incomes. (For details, see Medhi 1988, and Sukanya and Somchai 1988.)

I regard this problem of equity as fundamental to my Optimistic Scenario. I take the position that, all else equal, every major decision made by the Thai government ought somehow to promote more equity—or at the very least ought not to make existing inequity worse. I readily grant that all this is more easily said than done, but this tenet nonetheless remains basic in my working philosophy.

Whenever a new technology is introduced from the outside, or developed within Thailand, the first question one must ask is: How can one be sure that this new tool will be used for the benefit of the society as a whole? Of course, people in Thailand, as elsewhere, do naturally enough tend to seize a new tool for the purpose of serving their own interests and those of their immediate group. The results of this are often very positive. However, depending on circumstances, the results can also be unfortunate—particularly in cases where the new technology is "high," since high technology is typically capital-intensive. And, in a nation such as ours, where wealth is already very unevenly distributed, too often the result will simply be that the few who are rich enough to gain access to the new tool more quickly, will proceed to use it to further enrich themselves—so that income and wealth become even more inequitably distributed, at least over the short and middle term.

Suppose, for example, that a new type of microelectronic remote sensing device were to be introduced, which could be used by

the Forestry Department to identify trees in our hardwood forests that could be cut without sacrificing sustainability and without causing undue environmental damage. Quite probably, it would not be just the Forestry Department that would get hold of the new tool. It is quite conceivable that certain "mafia" groups would also gain access to it, and proceed to use it to improve the accuracy of their calculations as to how to profit maximally from forest cutting—even if unsound from a forestry management or ecological standpoint, and even if illegal.

The same principle might apply also to technology that is not "high," and to various kinds of infrastructural innovation. For example, there are certain parts of Thailand that are laced with more roads per area than many American states. While it is true that these roads were initially built, at great expense, primarily for purposes of national security, they were also intended to encourage general development by providing farmers with access to markets and social services. However, one of their unforeseen consequences has been that, once built, they have been used for anti-social purposes as well—for example, by illegal timber cutters to gain access to valuable timber and move it out to markets much more efficiently and profitably than would otherwise have been possible. With the benefit of hindsight, it is now clear that, from a purely ecological standpoint, it would have been better if fewer of these roads had ever been built in the first place.

The ultimate moral is simple. Somehow or other, Thai society must seek deliberately to find ways to insure that technology will be used to provide sufficiency for all, as a higher priority than providing greater riches for the already wealthy. This suggests that the higher the technology, the greater the potential for social harm, and hence the more likely the need for some kind of moderating intervention by government. Such intervention might often simply take the form of some kind of action to insure access to a given type of technology for less privileged Thais, so that they may have a more nearly equal

opportunity to grow into the new social arrangements that will follow, and eventually to share in the overall benefits of these arrangements. Yet, in considering what kind of intervention would be optimal, it is essential that we bear continually in mind that such interventions, if too strong, can sometimes induce inefficiency and corruption by government officials. This whole matter will be discussed further in the scenarios that appear in Chapters Two, Three, and Four.

1.6. Emphasizing Technology for Production, Using Local Resources

In general, I believe that investment in technology that raises people's **productivity** should be more strongly encouraged than investment in technology that raises their consumption levels—especially of luxury items. For example, biotechnology that helps an ordinary farmer become more productive should be favored over computer technology that allows middle class urban people to play computer games.

All else equal, investment in technology that will take advantage of our natural and human resources is to be preferred over investment in technology that simply takes advantage of our relatively low labor costs. Thus, a factory which employs local people in canning lynchees, longans, or other tropical fruits that grow well in Thailand, might contribute more to the nation in the long run, than a microelectronic assembly plant where all the materials and parts are imported, and the only Thai contribution is cheap semi-skilled labor.

However, in the latter example, if a foreign computer firm agrees to train Thais in scientific, technical, and managerial skills, and if that agreement is actually enforced, then the assembly plant might still serve Thailand's development needs quite well, because many Thais would learn useful modern skills that would almost certainly promote general technological modernization. Such skills

might well be adaptable to a wide variety of emerging work-roles, not just in microelectronic assembly itself, but also in a host of other productive operations where microelectronics are used, or will in the future be used—such as in canning vegetables, manufacturing durable goods, or managing a commercial firm.

Some of the same considerations apply to the so-called "import substitution" strategies that Thailand has pursued in the past—often quite successfully, though sometimes with the necessity of paying heavy prices for access to foreign technology. While import substitution is important because it permits the nation to save on foreign exchange, the **kind** of import substitution that is most worthy of encouragement, all else equal, is that which utilizes our natural and human resources to the fullest. For example, the current plan to use some of our natural gas to provide feedstocks for the development of the domestic plastics industry will help to reduce the current heavy foreign exchange burden for imported plastic materials, currently running at some eight billion baht per year (2.3.1).

In short; in planning our national development we must optimize across several key criteria, including technology that will:

- utilize our natural and human resources;
- enhance production by the least privileged members of our society; and
- impart skills that will in turn contribute to general processes of modernization and development.

1.7. KEEPING IN TOUCH WITH WORLD DEVELOPMENTS IN TECHNOLOGY

Thailand has some excellent scientists, but in most organizations they are too few in number to form the sort of "critical mass" that would be needed to make basic contributions to world science. Moreover, the nation also generally lacks a suitable infrastructure to support concentrated basic scientific research. For such reasons, Thailand cannot compete internationally with such nations as Japan in most scientific areas, such as, for example, superconductor research and development. In this area alone, at the present time thousands of Japanese scientists and technologists are at work, in an openended, well-supported research and development atmosphere.

However, what Thailand can and must do, at the very least, is to insure that in its universities and other organizations there are sufficient numbers of scientists and technologists, in every major field, who will be able to **monitor** the major developments that are taking place elsewhere in the world, and to **reproduce** significant results. In this way, when a particular new technology becomes available, there will be in Thailand the requisite pool of knowledge to enable the nation quickly and adroitly to take advantage of new opportunities, and avoid whatever pitfalls might be inherent in the process of adaptation.

It should be added that, in a limited number of fields, we do have the necessary critical mass to make basic scientific contributions. In these fields, we can and should keep pushing forward, not only toward the discovery of scientific truth, but also toward findings of immediate practical benefit to Thailand. We can do this, for example, in the chemistry of natural products, linking them to pharmaceutical applications.

1.8. Understanding the World Context of Technological Potential

Thailand is a small country. We Thais must survive in a world situation over which, in most respects, we have no control and little influence. Even so, we can seek to serve our own legitimate interests by the careful monitoring of changes in the world situation, and timely adjustments of our own policies. Scientists and technologists participating in the overall planning of Thailand's economic and social development must constantly keep this world context in mind,

and must constantly remain alert to the possibility that various aspects of this context might change quite suddenly, and might take even experts by surprise.³

What is this context? I shall here attempt only to sketch a few key aspects of it in briefest outline. To begin with, it is a context in which there are two military superpowers, the U.S. and the U.S.S.R. Recently relations between the two have improved dramatically, but Thailand must be ever alert to the possibility that a reversal could occur. In similar fashion, the increasing political role of Japan in world affairs, paralleling that country's remarkable increase in economic power, requires careful monitoring—especially as related to China, with its billion-plus people and enormous economic potential. In recent years Thailand's economic relationship with Japan has been growing steadily more intensive, and this trend will probably continue for some time to come. Increased interaction between Thailand and the Eastern European bloc is a distinct possibility, as these nations develop market economies and more liberated political systems. Relations with the U.S. and the European Economic Community are already strong, and will continue—with the added complexity of a re-unified Germany. Canada and Australia are likely to become heavier trading partners, as are certain countries in Africa. At the same time, the possible geopolitical instability of the oil-rich Arab states must be closely monitored and analyzed.

Thailand will approach all these possibilities primarily by itself, but secondarily as a member of the Association of Southeast

³Three recent examples stand out: the dramatic unfolding of Eastern European liberation; the fundamental reversal of policy in the Peoples Republic of China concerning individual freedom of expression; and the invasion of Kuwait by Iraq, followed by the imposition of United Nations sanctions. All these dramatic shifts in the world context occurred during the period in which the manuscript for this monograph was being prepared. It is probably fair to say that even expert students of Eastern Europe, China, and the Middle East were largely taken by surprise by the profundity and swiftness of these changes.

Asian Nations (ASEAN). ASEAN membership offers genuine opportunities to pool the collective bargaining power of Thailand, Malaysia, Singapore, Indonesia, Brunei, and the Philippines, so as to get better deals from the outside world, and to resist multinational corporations who often play one country off against another on such matters as minimum wage rates and the export of pollution. ASEAN-sponsored joint economic ventures have not made much progress to date, but might in the future.

The notion is heard in many circles that the future of the world hinges on developments in the so-called "Pacific Basin." According to some formulations, the heart of the Pacific Basin will consist of Japan, South Korea, China, Taiwan, Hong Kong, Thailand, and our ASEAN partner nations. The periphery of the area, due in large part to the economics of bulk shipping, will consist of nations like Australia, New Zealand, Canada, and the United States. In recent years the economies of the heartland nations have been growing at a rapid rate, and some scholars project that in due course they will become a powerful trading bloc at the center of the entire world economy. Whether one takes this projection literally or not, it is clear that those seriously concerned with Thailand's economic future must remain constantly alert to both the opportunities and the risks involved in the Pacific Basin phenomenon, with its possibilities for new economic and political relationships, especially with Japan and China

Crucial to all of Thailand's development planning are three important facts of life: the balance of trade, the exchange value of the Thai baht, and the world price of oil. With respect to the first two, we are heavily subject to international vicissitudes. With respect to the third, there are some small things we can do to develop our own petroleum resources and use them wisely, both to safeguard our energy future and to stimulate our manufacturing industries. I will deal with these matters in 2.3.

1.9. Understanding the Thai Context of Technological Potential

My working philosophy distinguishes rather sharply between science and technology. Scientific knowledge is universal and therefore easily transferable from culture to culture. Technological knowledge, by contrast, is not. Technology must be nurtured indigenously in order to avoid inadvertent undesirable side-effects. If Thailand is to benefit maximally, and suffer minimally, from the introduction of new technology from abroad, it is essential that Thai scientists and technologists have a broad understanding of the actual economic, political, social and cultural context in which the introduced technology must take root. To put it another way, the Thai scientist must be prepared to bridge the gap between scientific knowledge and practical technological application.

This means, among other things, that the Thai scientist must be prepared to communicate with, and understand, the perspective of the entrepreneur who seeks to implement new technology and make money thereby. A gap exists today between the scientist who works for a university or government agency, and the businessman. Neither trusts the other. The scientist suspects the businessman of being blindly and single-mindedly greedy. The businessman suspects the scientist of being unrealistic and expert only in book learning. This gap needs to be bridged, if the Thai people as a whole are truly to benefit from new technology. Further comments on this matter appear in 5.3.

1.10. Responding to the Needs of Both Rural and Urban Thai Cultures

Thai culture has two basic variants, the urban-modern and the rural-peasant or -post peasant. A persistent problem has been that

political policy-making and planning roles have largely been in the hands of urban-modern Thais, who often have had little awareness of, or respect for, the rural subculture. For example, even though there is much that is non-scientific about the modern-urban lifestyle, it is certainly, in general, more firmly grounded in scientific rationality. The rural subculture is, on the whole, clearly more firmly committed to non-scientific beliefs (2.11.4).

To choose but one example of what this urban-rural gap means in practice, it is noteworthy that the role of ghosts is much more elaborated and emphasized in the rural than the urban culture. Urban, scientifically or technically trained change agents working in villages often fail to appreciate this fact in its full context. They often fail to realize that fear of ghosts, though non-scientific, does have positive social stability preservation functions—such as keeping maidens in the house after dark, which serves to restrict illicit or promiscuous sexual relations, which in turn has a positive effect on family solidarity. Similarly, fear of ghosts is effective in keeping people from stealing, poaching on their neighbor's property, or committing all sorts of other infractions.

The crucial point is that unless urban-reared change agents understand the nature and function of these rural beliefs, they can hardly expect to introduce positive change. These beliefs help give meaning to rural life. Yet they are not immutable. The same peasant who attributes disease to a ghost will also accept a modern therapeutic or preventive injection—and find ways to integrate the latter into his or her personal belief system.⁴

Members of both subcultures are, on a world-wide comparative basis, quite flexible and open to change (1.1). Rural people will be more likely to change if urban change agents treat them and their beliefs with respect. And in doing so, the urbanite will discover a way

⁴In this process of accommodation, the broad cultural propensity toward non-exclusivism (1.1) plays a positive role.

of life that, though poor in a material sense, is rich in other values.

In my working philosophy, no set of planned or induced changes can possibly be considered positive, and worthy of social support, unless it simultaneously improves the lot of the Thai people as a whole, regardless of subculture. I hold to this principle not only as an ethical value, but also as a pragmatic premise, for programs of planned change that truly take the values and world view of our rural subculture into full account are much more likely to produce successful and enduring results.

1.11. PROMOTING DEVELOPMENT GRADUALLY BUT DELIBERATELY

When a polity seeks to promote development, there are several possible ways of proceeding. Taking abrupt, strong measures may strike at root causes but will, in general, create numerous negative side-effects. Taking weak measures may seem painless at the moment but will often result only in the need to face even larger problems later on. Our Buddhist religion stresses the "middle path" (madchima patipathaa), and I find this a useful general guideline in approaching development in Thailand. Especially because of the two-culture, rural-urban nature of Thai society, my working philosophy is deliberately gradualistic. I am opposed to "great leaps forward" of the type that failed in China. I am also opposed to rapid guided change of the type that produced dramatic results in Singapore—because I think the overall social cost of such success has been too high.

Development is a process that can only be viewed broadly. It is a matter of providing stimuli so that those who wish to build a better life for themselves—"better" as judged by **their** values at that point in time—may do so. Development also implies **participation**; one does not simply "receive" betterment: one participates in the process of bettering oneself while others are also participating in order to

better themselves. For true development to take place, the political structure must allow for participation by the populace at every level, from the local to national.

It is here that the need for gradualism becomes especially evident, for if a development program or movement is to be truly participatory, it **must** allow time for people to get involved, and to change their habits at a reasonable pace. By contrast, fundamental change that occurs overnight can only be accomplished, if at all, by non-participatory, authoritarian means. And, in my lexicon, such change is simply **not** "developmental." This entire matter is discussed further in 2.8.

Development, to me, means that people will end up experiencing considerably more overall gain than loss. A gradual approach is likely to result in less overall loss, because people will be able to monitor changes in their situation through time, and to adjust their behavior and defend themselves against undue loss—for all change is bound to produce some loss along with the gain, and it is the task of an enlightened government to insure that this loss is more or less equitably shared.

The principle of fairness applies not just to classes, but to generations as well. I am utterly opposed to "sacrificing" a whole generation for the supposed benefit of later generations. I believe that every Thai ought to be able to expect improvements in his or her family situation during his or her lifetime. The development process must result in a broader array of life opportunities for all—if not in the short term, then surely in the middle term.

Gradualism does not, however, imply stagnation or indefinite delay. Nor does gradualism imply **random** change, or planless change. For a developing nation like Thailand, gradualism must be deliberate and focused. Deliberate gradual change can result in great benefit to people during the span of a single lifetime, as witness the improvement in the condition of the average Thai during the reign of King Chulalongkorn, from 1868 to 1910. This wise monarch trans-

formed life in our country and saved our independence in the process. Yet his gradualism was such that older traditional forms were not arbitrarily or unnecessarily trampled upon, and the older generation did not become estranged from the younger to any serious degree. And when one looks at the broad sweep of Thai history since the death of this great leader, one concludes that Thailand's evolutionary and gradualistic modernization and development have on the whole been quite successful—when compared with the record in most other developing countries.

1.12. Preserving Freedom of Choice for Both Present and Future Generations

Individual freedom and autonomy constitute a core value in Thai culture, and one which I deeply share. For this reason, in thinking about the Thai future I look for ways to insure that generations of Thais yet unborn will, upon reaching adulthood, be able to make their own individual and collective decisions freely. This means making decisions in accord with their values, as of that point in the future. Since their values, as of a particular point in the future, might differ from my values today, I consider it only appropriate that today's generation should do all it can to avoid imposing its values on future generations. Cultures change, and the Thai value system of A.D. 2020 will almost certainly be different, in important respects, from the Thai value system of today.

I would be less than honest, though, if I did not acknowledge that this whole matter is further complicated by the fact that I do hold certain values deeply. All else equal, it is natural enough that I should wish to see the upcoming generation share some of my most deeply held values. In a sense, that is what one's "value commitment" is all about. And that is why, as an educator, I am concerned about the sorts of values that are transmitted through the schools and media. Even

so, however, my **transcendent** value is that the young should be educated in such a way that, upon adulthood, they can wisely make their **own** value decisions.

In 1973-75 the Government of Thailand appointed a National Education Reform Commission, of which I served as Chairman. Members of the Commission included many of the nation's leading intellectuals. The Commission discussed this very problem thoroughly, and arrived at a consensus along the lines I have just outlined. We agreed that the students of today should not be indoctrinated as to what values to hold, but rather, should be educated in how to make wise decisions based upon clearly articulated values. A young person is like a fruit tree, to be fertilized and watered so that it will grow freely and naturally—rather than like a Japanese bonsai to be meticulously molded and manicured. I consider this stance to be not only consistent with the specifics of our Thai culture, but also humane and wise in a universal sense. It is a fundamental part of my working philosophy.

1.13. ATTACKING PROBLEMS RATHER THAN MERELY COPING WITH THEM

Undergirding the remainder of this monograph is my working assumption that the best way to promote a bright future for Thailand is to move away from the older orientation found among many Thai planners, and to move toward a new one. The older orientation (phaen rab), which is still dominant, emphasizes responding to "issues and problems" after they have arisen, and somehow coping with them. This approach might often succeed in reducing the symptoms of a problem, but it will seldom get at root causes.

The newer orientation (*phaen ruk*) is that of affirmatively **pursuing** opportunities and attacking risks. It is essentially an active approach designed to identify opportunities and take full and systematic advantage of them, while at the same time reducing risks as much

as possible. It aims to produce results by seeking out problems and their root causes, and by dealing with these in terms of an integrated set of prioritized goals. It seeks fundamentally to improve society's general capacity to deal with problems.

In short, the older approach tends to emphasize taking minimal risks, and coping with immediate problems, while the newer approach sees opportunities in problems, and tends to emphasize bolder, more focused and coordinated efforts toward basic solutions. An example of the older approach would be to build a few more elevated crossings at especially congested traffic intersections in Bangkok. An example of the newer approach would be to build a whole new monorail system of cheap, clean, convenient rapid public transit.

In this monograph, my discussion of this newer approach reflects my experience over the past few years as President of the National Petrochemical Corporation, Ltd., and over the past several years as a member of the Executive Committee of the National Economic and Social Development Board. In both capacities, I have been an advocate of the "Eastern Seaboard Development Scheme." This Scheme, dating from the early Eighties, is the first integrated regional development scheme to be based on this newer approach, and for this reason it has raised no little amount of controversy. I will refer to this Scheme at various points in the pages that follow, and will return to a discussion of the general "attack" strategy in Chapter Six.

1.14. Developing Leaders Who Are Both Expert and Ethical

Especially if the "attack" strategy is to be followed, but even if it is not, the pressing need for Thailand (and many other countries) is to develop and provide leaders who are both expert and ethical (thang keng thang dii). An expert is a person who has not only a worm's eye view of a particular technical area and a deep understand-

ing of the issues in this area, but also a bird's eye view of the surrounding national and international context of economic, ecological, political, social, and cultural factors.

An ancient problem in all societies is that if a person is truly expert, he or she might choose to use that expertise for personal enrichment or aggrandizement, rather than for societal benefit. On the other hand, in today's complex world, no matter how ethical and socially dedicated individuals may be, if they lack appropriate expertise, the tangible results of their selfless labors are likely to be meager indeed. It is vital, then, that our educational institutions be so shaped as to create people who are both expert and ethical—and our political institutions so shaped as to insure that such persons, once available, have a reasonable chance to move into positions of leadership.

In short, what Thailand needs is culture change, such that ordinary people will simply find a leader unacceptable unless he or she is demonstrably both expert and ethical. On the prospects for developing such culture change, and such leadership resources, hangs much of the basic rationale for my Optimistic Scenario, to which I now turn.

CHAPTER TWO:

THE OPTIMISTIC SCENARIO

This chapter and the next two present three scenarios concerning Thailand's future, namely the Optimistic, Pessimistic, and Most Probable Scenarios (I.7 and A.4.2). Of the three chapters, the present one will be by far the longest. One reason for this is that I am, in my own view of myself, very much an optimist at heart.

2.1. DEMOGRAHPY

I will deal with demography first quantitatively and then qualitatively. In the quantitative approach, I will look at the number and distribution of Thais that I consider desirable, possible, or unavoidable as of the approximate horizon date of A.D. 2020 or B.E. 2563. In the qualitative approach, I will look at the kinds of Thais that might be born into the world, and at how the quality of their lives might be affected by this or that type of public policy or cultural practice.

2.1.1. Quantitative Projections

Like most Thais today, I am "anti-natalist," in the sense that I regard it as a high national priority that our nation seek to bring its population growth rate substantially down as rapidly as is technically feasible—consistent with the values of our culture.

Optimistically, by the horizon date the population of Thailand will be as low as 75 million, and not higher than 85 million. The lower

¹Source: Ms. Mayuri Charupan, National Education Commission, personal communication, 1990.

figure assumes a population growth rate of 1.5% per annum in 1990, declining to 0.5% over 30 years. The higher figure assumes a growth rate of 1.5% per annum in 1990, declining to 1.1% over the projection period.¹

I would very much like these numbers to be lower, but that would seem to be clearly beyond the realm of possibility. True, it is **theoretically** conceivable that Thailand's population could be even lower than 75 million in A.D. 2020, but in my judgment this could only be the result of either:

- Nuclear war, major epidemics, or ecological catastrophes of a type which, in this study, I assume will not occur (I.8.5); or else:
- Very harsh birth control measures of a type that has been practiced by such nations as Singapore or the People's Republic of China, which would be part of my **Pessimistic**, rather than Optimistic, Scenario.

In other words, given the emphasis on personal freedom that underlies this entire Optimistic Scenario, I see no hope that the population of Thailand, as of the horizon date, could be smaller than 75 million—much though I would prefer a lower figure from the standpoint of having more resources available to provide the Thai people with improved services, and opportunities to enhance the quality of their lives. Even this projection assumes that the Thai people will continue to employ contraceptive methods such as the condom, the pill, the diaphragm, and tubal ligation, which had become conventional by the mid-Eighties.

Abortion is a different matter. I do not project a future in which there will be, for example, widespread availability of government-financed abortion clinics; such a strategem would not fit my personal values and hence has no place in my Optimistic Scenario.

I regard it as almost inevitable that, at various times during the projection period, a variety of new technologies for birth control will be invented somewhere in the world, and will become available to the

Thai people. However, whether variations of these new technologies belong in my Optimistic Scenario is problematic. I refer here to such widely discussed possibilities as the "morning after" pill, plus a variety of other devices, procedures, and medicaments which one can scarcely imagine at this time, but which nonetheless seem highly likely to emerge as the Biotechnical Revolution gains momentum. All I am prepared to say at this point is that, optimistically, Thai scientists and technologists will stay in close touch with these developments; and Thai leaders, philosophers, and ethical and religious thinkers will engage in timely, proactive, honest, informed discussion as to whether such methods are consistent with the needs and values of the Thai people at that time.

2.1.2. Distribution Projections

I move now to a broad set of questions concerning how the Thai population will be distributed geographically. Optimistically, I project a future Thailand where those who prefer urban life will be able to find useful and satisfying urban employment, while those who prefer rural life will have an opportunity to live in rural settings without undue feelings of economic deprivation or social isolation. Optimistically and realistically, I project that by about A.D. 2020 the population of Thailand will change from its present distribution of approximately 75% rural and 25% urban residents, to a 50-50 distribution. Without some such geographic shift, I do not see how significant industrialization could occur. And significant industrialization is essential to my Optimistic Scenario because, without it, the overall productivity and competitiveness of the Thai economy would not be adequate to support an overall rise in the basic standard of living which I see as essential to the realization of "sufficiency for all" (1.4). That is, many of the more complex manufacturing operations that Thailand will need to undertake can only be successful in places where infrastructural and technological support is adequate, and this

will typically mean, only in cities—indeed, perhaps only in a few moderately large cities.

My Optimistic Scenario does not, however, visualize Thailand's industrial development as occurring only in urban areas. I also project a considerable increase in simple yet important industrial production—and productivity—at the village level, organized in the form of family firms, community cooperatives, or various types of coordinated regional networks. Whatever particular forms of organization may emerge, rural industry carries with it the important prospect that thousands of rural people will thus be able to realize a better economic lot in life without facing the hazards and stresses of urban employment, and that thousands of rural families whose members prefer to continue living together will be able to do so. In principle, I regard any economic arrangement that can keep families together voluntarily as good for the quality of life in Thailand. Such arrangements will help insure against the disastrous phenomenon experienced in some developing nations, in which the cities drain away too many people in their most productive years, leaving behind principally the very young and very old to carry on village community life—a situation which can result in rapid cultural decay.

Much of the rural industry I am here visualizing will be agroindustry or aqua-industry, whose very nature requires that people remain on or near the soil. This factor, in particular, will help prevent Thailand from becoming over-urbanized, and help provide a healthy balance between industrial and agricultural production.

Optimistically, the population shifts here envisioned, involving the sort of demographic mobility that permits people to optimize their economic and quality-of-life preferences, will be part of a larger process of closing the economic equity gap between urban and rural dwellers (1.5). Assuming steady improvement in transportation and communication, life in the rural areas will become more humane and rewarding, relative to life in the cities, than was the case in 1988.

Moreover, the distribution of Thailand's urban population

will also change, as more and more urban dwellers will reside in various **middle**-sized cities, rather than in the primate city of Bangkok—which by the Eighties was already much too large, too congested, and too polluted. Optimistically, through wise macro-planning and effective controls, these cities will avoid some of the more extreme problems of congestion, pollution, and crime that have plagued Bangkok.

It is of course impossible for all this urban migration to occur painlessly. The disruption of family and community life, and the loss of some sources of religious and customary satisfaction, are prices that Thailand cannot hope to avoid more than partially. However, the Thai government and society can seek to minimize this pain, and to cushion the shock in various ways.

Essential to such minimization and cushioning is wider and deeper understanding of these urbanization processes and how to handle them. While social scientists have already told us much about these processes in a general way, we need to understand much more about how they work in specific Thai situations. And essential to developing this understanding is effective applied research by our universities, teacher training institutions, and other research organizations.

Optimistically, these organizations will rise to the challenge, and do so not only by baseline studies, but by actual hands-on **participation** in on-going pilot projects designed to find the best ways to help people maximize the economic and other benefits of urban residence and industrial employment, while minimizing the sacrifice in quality of life.

2.1.3. Qualitative Projections

What about the **quality** of the people who will be born into Thai society? This depends on various factors, of which the most

obvious is how Thai society nurtures and educates those who are born into it. Much of this process occurs in schools and school-like programs, public or private, formal or nonformal, and this is a subject I will discuss under "Education" (2.10).

In addition, much education and enculturation also occurs informally in the home. Every family has its own "hidden curriculum" of learning opportunities and stimuli which it offers to its young members. In Thailand, as in any nation, there is great variation from family to family as to the richness of these opportunities and stimuli.

The above reflections about education are clearly related to demography. From the standpoint of building a richer and better-adapted cultural life for all the Thai people, it is certainly desirable that married couples who are highly educated, and who can provide a rich "hidden curriculum" in the home, not reproduce at a rate drastically lower than couples who have been educationally less fortunate. Optimistically, the general moderation of family size that will follow upon the heels of birth control practiced widely by Thais of every social and educational class, will avoid a serious problem of this type.

Definitely **not** a part of my Optimistic Scenario is any program, such as that recently broached by a national leader in Singapore, which would put heavy government pressure on educated women to marry, or on educated wives to have more children than they would otherwise freely decide to bear. This type of government intervention would run profoundly counter to Thai values, including my own.

So far, my qualitative projections have dealt with fairly conventional phenomena. In addition, though, we must now consider highly unconventional possibilities which pose a whole set of bewildering new problems, namely those posed by the biogenetic aspects of the on-going Biotechnical Revolution. I must stress, as firmly as I can, that this Revolution is real. It is here to stay. It will almost inevitably open up a wide range of new choices. People in Thailand

and throughout the world will suddenly find themselves capable of doing things that, just a few years earlier, they had not dreamt to be even remotely possible. Some of these new possibilities, if pursued, will result in situations that conflict with traditional values—or even "modern" values. That is, the Biotechnical Revolution will make possible all sorts of interventions into human gene plasm that simply did not exist during the centuries when our Thai values were crystallizing into the form we know and honor today. While our culture does indeed provide a rich and systematic set of general ethical standards to guide us into this unknown future, we will be forced to apply these standards in the context of a bewildering array of concrete new possibilities that are utterly without precedent in our historic experience.

This is not my area of technical specialization, but I will share with you examples of some of the kinds of problems I expect to arise. Let us start with gene therapy. To take but one example, some Thais suffer from a disease whose explicit genetic causation is already known, namely thalassemia. The day will doubtless come when the gene therapist will be able to cure this terrible and otherwise untreatable disease by removing certain cells from the patient, manipulating the gene content of these cells, and then re-inserting the healthy cells back into the patient's body. Such therapy is "gene" therapy in the sense that it could not be successful without invading the patient's genes. This is an example of what medical scholars call "negative" gene therapy because it "negates" some obviously undesirable, indeed horrible, human affliction.

In the future, medical science will no doubt be able to cure a number of gene-specific diseases in this manner. It will also be able to **prevent** such diseases from occurring to people who would otherwise be genetically predisposed toward them. In cases where the disease is obviously painful, crippling, and life-shortening, I see nothing in our Buddhist way of life which would, or should, stand in the way of our utilizing such gene therapy. Indeed, in the case of

thalassemia, such research and development work has for some years been going forward in Thailand itself, as for example in the laboratory of Prof. Prawase Wasi, who has attained worldwide renown in this area.

We must, however, look further into the future. Well before A.D. 2020, it will no doubt be possible to practice a greatly increased array of gene therapies. Some of these will quite possibly be of the "germ-line" type—that is, the type that alters not only the genes of a particular living person, but also those of all of his or her descendants. Suppose, for example, that a young Thai married couple wants germ-line gene therapy. Suppose further that the type of germ-line therapy they desire is what medical scholars call "positive," in the sense that it adds something that did not exist before, and that the couple considers desirable. In such a case, there is no debilitating or painful disease to be removed, but rather, something new to be added, something that would not otherwise occur.

Let us illustrate with an extreme example. Suppose that this Thai married couple, for idiosyncratic reasons of their own, wants a child with blond hair and blue eyes—and is able to achieve its desire. It is easily conceivable that as this child grows up, he or she will deeply **regret** this unusual condition for the rest of his or her life.

The use of such extreme forms of "positive" gene therapy is not a part of my Optimistic Scenario. Given the values that I hold today, I do not want this sort of "therapy" to be practiced. Nor do I want it to be legally tolerated. However, notwithstanding the repugnance I feel toward such technological possibilities, I do hold to the principle that future generations should be allowed to make such decisions for themselves, based on the values that they hold at that time (1.12). The Thai society of that time should make its own decisions as to whether to permit, discourage, or prohibit such practices.

Just where the line should be drawn between "negative" and "positive" gene therapy is a problem that will pose many dilemmas in the future. Consider the possible example of a young married

couple, both of whom are physically frail and come from families of frail people, who request gene therapy that will bring them normally muscular children—not superpersons, but simply normal, robust kids. In the Thailand of A.D. 2020, should such therapy, if available, be legal? Should the government provide it free in low-income cases? Again here, my position is that such choices should be left to the Thais of 2020 to decide, on the basis of the values, norms, and laws that prevail at that time.

Finally, my Optimistic Scenario envisions an ongoing process in which Thais, both urban and rural, representing the entire span of socio-educational levels, will take a proactive, informed interest in these bioethical issues, with the end in view of building a degree of advance consensus concerning the medical, ethical, and philosophical issues that will inevitably be posed.

2.2. TECHNOLOGY AND ECONOMY

As indicated in 2.1.2, I see the key to "sufficiency for all" to lie in industrialization, including agro- and aqua-industrialization. This means, first and foremost, finding ways in which Thailand as a whole can deploy capital, technology, and human resources in such combinations as to be efficient and effective in enhancing sustainable productivity and promoting economic equity in harmony with nature and culture. Basically, my Optimistic Scenario projects that Thai leaders, public and private, will select the **right** technology for the tasks to be accomplished—whether or not such technology is "high."

Aiding in this process will be a steadily rising level of sophistication among the general labor force. This will be a consequence both of better education reaching more people, and of a growing realization by management that true competitive, sustainable success requires that a company give a high priority to human resources development. Optimistically, capital, management, and labor will come to value harmony above strife. Increasingly, factory

workers will participate in technological and production decisions affecting them, and will do so in a cooperative rather than confrontational spirit, in somewhat the same manner as characterizes many Japanese firms today. Workers, whether organized in unions or otherwise, or not at all, will be protected by company policies emphasizing long-run growth and prosperity—rather than, as often in the past, quick profits. Optimistically, a pattern will become increasingly prevalent in which running a company "according to the Dharma" of Buddhism (or the ethical code of some other great religion), will serve to promote an equitable sharing of the fruits of annual gains in productivity. By such processes will the nation's total industrial productivity rise steadily from year to year.

The fact that Thailand has a large domestic population means that many industries can be developed that will serve both a domestic and a foreign market. If, through economic growth, 75 million Thais become sufficiently affluent so that they can afford to purchase Thaimade motor bikes, solar hot water heaters, plastic water piping, or whatever, the result will be that numerous Thai factories will enjoy a much enhanced basis for accomplishing economies of scale, and achieving stable viability.

While high technology will sooner or later have an important place in Thailand's future, most of the technology the country will be using during the projection period will involve production processes that are less capital-intensive, and more labor-intensive, than is normally implied when one thinks of "high" technology.²

As suggested in 2.1.2, optimistically the Thai state and politico-economic leadership will plan and administer the nation's

²Clearly, this principle has its limits. For example, it is conceivable that textile firms in Thailand might tempocentrically invest heavily in low-technology textile manufacturing facilities, only to find themselves a few years later competing with a Korea, or even a China, where computer assisted design and manufacturing would confer such enormous productivity advantages as to leave Thailand far behind competitively.

industrialization policies in such a fashion as to encourage the siting of appropriate factories in middle-sized regional cities such as Chiang Mai, Pitsanuloke, Nakorn Sawan, Khonkaen, Korat, Chon buri, and Songkhla-Haad Yai. The problem in the past was that most governmental planning was sectoral rather than regional. It focused on a particular sector for the entire nation, rather than multi-sectoral growth for a particular region. The result was that balanced overall growth of industries in the nation's smaller cities—even those that were reasonably supplied with such infrastructural facilities as roads, telephones, machine shops, repair shops, etc.—had progressed considerably less far than might otherwise have been the case.

Only in the 1980s did Thailand begin to do some of its planning on a regional basis, namely in the case of the Eastern Seaboard Development Scheme, covering the provinces of Chachoengsao, Chonburi, and Rayong. Among the key objectives of this scheme are to establish a major regional industrial base outside of Bangkok, and a more direct and convenient transportation corridor between the outside world and impoverished Northeast Thailand, so as to stimulate development in the latter area. The scheme further calls for the creation on our mainland of two deepwater ports—the first that our country has ever had—at Laem Chabang and Map Ta Phut, which will greatly reduce trans-shipping costs into and out of the country. Optimistically, this regional planning approach will prove its value and be adopted in other regions, with effective input from local residents.

For those millions of Thais who remain on the soil, an Optimistic Scenario is not difficult to ground, for in recent decades Thai farmers have proven themselves to be remarkably receptive to opportunities to try out new crops. Many farmers who a generation ago depended almost solely on rice for cash income, have since diversified to a variety of new crops. Not too long ago grapes were an imported luxury; today Thailand exports them. There is every reason to suppose that this innovation-mindedness will continue into

the indefinite future. Optimistically, success will breed success, especially in the all-important sense of adding to the total capital pool, hence making it ever easier for impoverished farmers to secure that sine qua non of innovative success: long-term developmental loans at non-usurious interest rates.

Given Thailand's sunny, moist climate, there are possibilities for the practice of many agricultural specialties. The availability of cheap plastic sheets will encourage greenhouse type cultivation (2.3.1). Various forms of so-called intensive agriculture, involving the deep and intensive working of small plots of soil to produce enormous returns per unit of area, are also a possibility.

Capping all of this is the possibility that, well before the horizon date, biogenetic technology will make it possible deliberately to tailor wholly new species of plants and animals that will:

- be highly suitable to the Thai natural and human environment;
- have highly valuable survival and productive characteristics; and
 - be free of undesirable side-effects.

No longer will scientists and technologists be restricted by a constraint built into conventional "plant breeding" approaches (highly useful as these have been), namely that the new type of plant or animal must be the result of a cross between two or more closely related species. If the Biogenetic Revolution fulfills its promise, there is every reason to expect that genetic material from widely differing species can be used in the tailoring process. While it is not possible to say just when this or that particular tailoring potential will become available, it seems likely that at least some of these capabilities will be available to Thai scientists and technologists, and to Thai producers, within the projection period.

A similar hopeful panorama lies ahead in the related area of aquaculture. Already Thailand has become one of the leading aquacultural nations of the world, if not the leading one. A problem

has arisen, however, in that the seashore aquaculture used in the production of prawns for export has done serious damage to the brackish wetlands that are necessary to the overall ecology of the area. Seawater irrigation and conservation measures are urgently necessary, and, if they are to be successful, require the strong cooperation of the entrepreneurs who have developed this industry. While it is by no means certain that these conservation measures will be implemented in time to save the area ecologically, a distinctly hopeful sign is that many of the entrepreneurs in question are people who live in the area itself. Many of them can thus be expected to have a strong vested interest in the sustainability of the industry they have created. This makes them sharply different from the so-called "forest mafia," who live in cities far from the forests they are destroying, and who are interested in enormous quick profit killings, rather than moderate long-run sustainability of yield from a rich variety of species.

2.3. Energy

Since energy is utterly essential to expanding and modernizing the Thai economy, this section will be a somewhat detailed one. I will not take space to deal with the already-established energy sources that have been in use for some time, and are well integrated into the Thai way of life—namely wood and charcoal, hydroelectric power, and low-sulfur lignite. Instead, I will concentrate on four "emerging" or potential energy sources that could conceivably be crucial in the future—namely petroleum, gasohol, solar energy, and hydrogen-based energy.

2.3.1. Petroleum Energy and Feedstocks

The recent history of Thailand's energy policies provides a basis for considerable optimism. Just ten years ago, the nation had to import some 90% of its energy, while by 1988 this figure had dropped

to 60%. The key to this accomplishment lay in the decision of Thai policy makers to build what was then the longest and most expensive undersea pipeline in the world, extending some 425 kilometers along the floor of the Gulf of Thailand to off-shore natural gas fields. Today the nation is in much better shape financially, thanks in part to this bold development plan, as well as to contextual changes, such as in the baht exchange rate and the world price of oil.

The situation concerning domestic oil has been different. To date, Thailand's oil production, from both off-shore and on-shore wells, has been limited, and verified oil fields are small and scattered. However, it does not seem unreasonable to project optimistically that, with proper incentives, oil exploration and production will be greatly accelerated, and that Thailand will achieve something close to self-sufficiency in energy, particularly with the use of new extraction and refining technologies.

If we assume that the world price of oil will be around \$20 to \$25 per barrel at 1990 values, and that there will be a 5% to 8% annual increase in Thailand's energy demands, then it is reasonable to estimate that the nation's total economically recoverable petrochemical resources will be sufficient to meet national demand for 30 to 40 years. If one projects a steeper rate of increase in the rate of use, both for energy and for products made from natural gas derivatives (such as plastics), then 20 to 25 years would be a more realistic figure.

The inescapable fact that these natural gas resources are nonrenewable has forced difficult choices. Should the nation use its natural gas only domestically, or should it also engage in some export? The government has decided that that portion of our natural gas resources that is to be used for energy, will be used primarily for domestic purposes. This policy contrasts with those of Indonesia and Brunei, for example, which export liquified natural gas to Japan.

However, the same hydrocarbon materials that flow from natural gas and oil wells can also be used to make feedstocks for industry, for use in manufacturing a wide variety of products such as

plastics, polyesters, and paints. Should a portion of the nation's petroleum resources be allocated for such purposes? The government has decided to use as much natural gas fractions for such feedstocks as possible. I support this policy, for it will result in the production of hundreds of kinds of finished plastic goods which will not only significantly improve the domestic standard of living, but will also conserve, and bring in, much-needed foreign exchange. Justification for this policy is found in an analysis of the value that is added when a country or company converts natural gas into feedstocks, and feedstocks into finished products. This added value can exceed the value of the raw natural gas by an impressive factor, which may range from four to as high as 100 times, depending on the type of product. Moreover, the policy of establishing primary industries with a secure natural resource base, thereby completing the entire chain of elements required for a petrochemical industry, will spur the general growth of Thai industry for decades to come.

2.3.2. The Context of All Energy Planning

A slight digression is appropriate at this point. As one deals with energy policy problems, one learns that there is a certain common context in which all such problems are embedded, as I have earlier suggested in more general terms (1.8). In all of my thinking about energy policy designed to improve the productivity and living standard of the Thai people, I find myself closely examining two crucial contextual factors: the world price of oil, and the baht exchange rate. Since these two factors are not subject to Thailand's control, they impart a certain roulette-like quality to the process of viewing our economic future.

This slippery international context is obviously a complex and technical matter, and a detailed discussion is not possible here. Suffice to suggest that in thinking about this context, one would do well to put aside any "free enterprise" biases or assumptions. There is no such thing as a totally "free" enterprise petroleum industry anywhere in the world—though some nations certainly do come closer to this extreme than others. The truth is that every oil-producing and -refining country uses various legal and administrative devices to influence selling prices. These devices take a variety of forms, including subsidies, tax deductions, tax credits, depletion allowances, and the use of proceeds from one derivative product to compensate for losses on another.

2.3.3. Gasohol

Having briefly examined our major non-renewable energy resource, I move now to the question of whether alternative renewable sources of energy can be developed. As an illustrative example, let us look at the prospects for gasohol as a fuel for automobiles, busses, and trucks. Here, the example of Brazil is instructive, for in that country the government has subsidized gasohol production even when the world crude oil price was low—with encouraging results reported to date, in terms of efficiency, reduction of air pollution, and foreign exchange savings. Since Thailand is, like Brazil, a tropical nation, it makes sense to ask whether it, too, could develop gasohol.

Technically speaking, there is no question that Thailand could produce large amounts of gasohol. Thai scientists have already demonstrated this experimentally. But the crucial question is not technical alone. Rather, we must ask whether it would make overall sense—technically, commercially, and ecologically—for Thailand to move in this direction.

In terms of air quality, there is little question that Thailand would gain—for gasohol burns much more cleanly than gasoline.

The difficult part of the question, however, is the economic part. Here, my short answer is that gasohol could not become competitive unless and until the world price of crude oil were to rise above \$30 or \$35 per barrel. An advantage that Thailand possesses in this

respect is that it can regulate or stabilize the **domestic** price of such oil, through its Oil Reserve Fund—and the existence of this stabilization capability would in itself serve to enhance the incentive of investors to develop a useable gasohol fuel.

There are, of course, also other considerations to face, such as the conversion of automobile production facilities to produce new automobiles with engines capable of burning gasohol. (The cost of retrofitting existing automobile engines would doubtless be sizeable, and probably prohibitive.)

One must also consider the economics of land use. Since gasohol is essentially transformed solar energy, and since solar energy is highly diffuse, the production of plants that would yield gasohol would doubtless require that enormous tracts of land be devoted to this purpose. Whether this would represent, in an overall sense, the most economically efficient, ecologically sound, and socially desirable use of our ever-scarcer land resources would be highly debatable.

At this point, however, I would urge that we avoid tempocentrism in our thinking. We must be alive to the notion that if there are vast new technological break-throughs, the foregoing economic reasoning will have to be fundamentally re-thought. Where would these break-throughs come from? Clearly, from the new biogenetic technology, with its capacity for tailoring new living organisms designed to optimize across several desired factors. It is readily conceivable that through biotechnology some totally new type of plant could be engineered, would require a substantially smaller commitment of land area while still not exhausting the soil. And perhaps the tailored plant could be designed for use on land not otherwise economically valuable.

Another exciting possibility lies in possible breakthroughs in fermentation technology. For example, new micro-organisms might be genetically engineered which would greatly increase the speed or thoroughness of the fermentation process, and thus raise efficiency

and lower production costs for gasohol—quite apart from whether the feedstocks used were genetically engineered.

One factor that could enhance economic and commercial feasibility would be to develop a feedstock which, after being used in the production of gasohol, still remains useful for some other purpose, such as the manufacture of fertilizer or paper.

One can also imagine the use of a plant as raw material for gasohol which, in the ground, will have unusually effective soil-restoring, erosion-retarding, or air purifying features. In such a case, it is always possible that substantial government assistance could be offered, and justified on ecological grounds. Such government assistance might take any of several forms, such as low-interest loans or tax incentives.

There might also be a deliberate government policy to promot e localized gasohol production, so that the bulk of the gasohol used in certain regions of the country would be produced in that region, thus saving fuel transportation costs. Energy to run a gasohol extraction plant—and also to produce other products, such as animal feed—could come from gasohol itself.

For all of these reasons, then, it does not seem to me to be beyond the realm of credibility that by the horizon date Thailand might be using substantial amounts of gasohol for various purposes, and that the gasohol industry might have become more or less selfsupporting and self-sustaining.

2.3.4. Solar Energy

Since Thailand has ample strong sunlight, it is reasonable to look briefly at solar energy as a supplementary source. The nation has already done research and development work in this area, and indeed a few new homes and hotels have been built with solar energy collectors, which work reasonably well in providing hot water for domestic use. The more serious question, however, is whether solar energy,

collected via photovoltaic cells or however, could make a really substantial contribution to the nation's total energy needs, either for consumption or production. So far, given existing technology, the answer would appear to be No. The basic problem with solar energy is that it is diffuse, so that Thailand would need to fill very large tracts of land with solar collectors before it could realize enough solar energy to make a significant contribution to meeting its total energy needs.³

However, recent developments have occurred, in the direction of ever more efficient photovoltaic cells. Optimistically, Thailand will monitor these developments carefully, and be prepared to seize opportunities when and if the technological breakthroughs, and cost of energy from alternative sources, would justify investing in solar energy devices and networks.

2.3.5. Hydrogen-Based Energy

A tantalizing possibility is that of obtaining plentiful cheap energy by forcing hydrogen and oxygen to combine together under the right conditions. The technology for doing this has already been conceptualized and developed, but not to the point of commercial practicality. The key problem is that when these two elements are brought together (to make water), they explode. The explosion must be contained and controlled. Somehow, this problem must be solved.

It is useful heuristically to compare this case to that of nuclear fission. In the latter case, the problem of generating energy while avoiding explosion was indeed solved, by means of the nuclear reactor. I hope fervently that the equivalent of the nuclear reactor will be found in the case of hydrogen and oxygen. If the necessary devices and processes can be made cheaply available, it will be blessing for

³It is true, however, that in extremely remote locations small solar energy units have been successfully utilized to generate electricity for communication and lighting purposes.

all mankind, because hydrogen and oxygen are, of course, in totally ample supply throughout the world, and because there would be no pollution or waste disposal problem as in the case of nuclear energy.

In addition to the above method involving the **combining** of hydrogen with oxygen, there is also the possibility of fusing hydrogen nuclei with each other in a nuclear **fusion** reaction. So far, this feat has proven impossible to achieve, except very briefly in a few expensively equipped laboratories, using technology that could never be replicated on a mass basis.

Could this situation change? In principle, Yes. What would change it? Conceivably, supermagnets made of superconductors might make possible the formation of magnetic fields strong enough to bring about small but effective amounts of fusion. These nuclear processes would confer large energy advantages. That is, the energy required to make the reaction happen would be far less than the energy that would be produced. Further, hydrogen-generated energy could itself be used to run the generation process. The end result would be ample safe energy at affordable cost.

Any such hydrogen-hydrogen fusion technology would, of course, be utterly revolutionary for the same reasons as above: the raw materials are free for the taking, and there would be no pollution or other harmful side-effects. Indeed, if such a technology were ever to be fully utilized throughout the world, it would wipe away many of today's most fundamental inequities, which are based on distinctions between nations fortunate enough to be rich in the sources of energy, and those not so blessed. This could, in turn, vastly change the balance of political power in the world.

These various exciting energy possibilities form a backdrop for my thinking about Thailand's energy future, and about the constraint that we really cannot **plan** on having natural gas available for more than 20 to 40 years. I consider it highly likely that one or more of these new possibilities will come to fruition well before we run out of natural gas, and this consideration is part of the rationale for my

favoring the extensive use of natural gas to generate industrial feedstocks (2.3.1). While there is no justification whatever for wasting our petrochemical resources, there is, I think, a solid case for using our non-renewable assets for legitimate consumption needs and otherwise-reasonable industrial development goals. In my judgment, the opportunities outweigh the risks.

2.4. Environment and Ecology

One important environmental victory that has already been won by means of exploitation of our natural gas resources is that liquid petroleum gas (LPG) today powers all of the one hundred thousand taxicabs in the Bangkok area, vehicles that formerly used principally Diesel fuel. Since LPG is relatively non-polluting, the air in Bangkok is today bearable. In effect, a domestic non-renewable resource has been used to replace an imported non-renewable resource, namely gasoline. What made this change easy and swift was that it embodied no economic sacrifice. To the contrary, taxi drivers now pay about half as much for fuel per kilometer as before.

This example suggests a further question: Is it ever good policy to use non-renewable energy sources to replace **renewable** ones? Intuitively, one's answer would probably be No. However, I depart from this conventional wisdom in one particular case, which has to do with urgent action to save what is left of our forest resources while there is still something left to save.

The over-cutting of our forest lands has become a problem of the utmost urgency. In recent years we have lost forest cover at a terrifying rate. While in the early Sixties 51 percent of our total land area was forest-covered, by 1988 that figure had dropped to 19 percent. While some of this loss is attributable to land-starved Thai farmers clearing areas for permanent cultivation, or to hill tribesmen practicing slash-and-burn agriculture, much of it is attributable to illegal felling of timber by the forest mafia. Denuded forests have

resulted in lessened rainfall, excessive run-off, and soil deterioration. The net social result has been, and will be, strongly negative—for farmers almost immediately, and for the entire nation in the longer run. Unfortunately, to date our society has not found a way to punish these miscreants, or even to require them simply to make good the damage they have done.⁴

Another cause of deforestation is the use of large amounts of firewood and charcoal for cooking. In this vein, I project optimistically that well before the horizon date millions of Thai homes will be cooking with liquid petroleum gas instead. While we have seen that the nation has at least 20 years of natural gas supply left (2.3.1.), our forests will be almost totally gone well before that time, if the current rate of destruction persists. Therefore, it makes overall good sense ecologically to use **non**-renewable energy sources in this instance, so as to help give our forests time to renew.

This example, by the way, is a good illustration of the use of the newer "attack" approach to problem solving (1.13). In the first place, it is neither desirable in terms of Thai values, nor politically

In late 1988 a tragedy befell several villages in southern Thailand. A sudden mudslide snuffed out the lives of almost 100 people. The slide was caused by heavy rains falling on steep hillsides that had been clear-cut for timber profits, and then planted with shallow-rooted rubber trees. The incident shocked the national consciousness. The cabinet issued an emergency order revoking and cancelling, for the time being, all forest concessions throughout the country. This action was unprecedented in Thai history, and is particularly impressive when one considers that the cabinet was generally considered to be distinctly pro-business.

I see in this tragic episode a step in the evolution of national policy toward the environment. Unfortunately, however, the inevitable immediate result of this attempt at a "quick fix" has been a sudden steep increase in the price of timber. This in turn has made illegal timber cutting, in blatant defiance of the law, more profitable. The entire episode thus points up the inadequacy of responding to the symptoms of a problem, rather than attacking its root causes (1.13).

possible, simply to **instruct** people not to use firewood or charcoal. Rather, some sort of inducement is needed, such as providing an alternative type of fuel that is cheaper, cleaner, or more convenient. LPG meets these requirements, but to make it available and accepted on a mass basis will require appropriate policy and careful planning. Specifically, it will require that public policy deal with the **context** of the problem: with the need to market LPG cooking fuel actively and skillfully, and to do whatever is necessary in the context of Thai culture to insure that the public is educated to the value of using this fuel. If all these measures are reasonably successful, the use of charcoal and firewood will decline, especially in the cities and among families with a more modern life-style. Of course, there will also be large numbers of rural Thais who continue to use firewood gathered locally, and charcoal produced locally. Even so, the net overall effect of this initiative could be highly beneficial.

Optimistically, the nation will catch up with the deforestation problem. Public opinion will demand better protective laws and tighter law enforcement. The general raising of the nation's educational level will have a positive effect in inculcating among the nation's young a firm basic ecological understanding of deforestation and related problems, and a moral attitude condemning deforestation.

Also assisting toward gradual solution will be the creation of an array of new jobs available to unemployed or underemployed rural poor people so that they will feel less inclined to do illegal work for the forest mafia. It is my perception that the great majority of the Thai people definitely prefer to avoid illegal or socially destructive employment when legal and constructive alternatives are available to them.

Some further grounds for optimism are found in massive planting programs that might be undertaken by the government or the private sector. Optimistically, the sorts of trees planted will include a diversity of nitrogen-fixing, soil enriching species which will mature rapidly, serve rain-inducing and ground-holding functions well, and provide timber that brings a good price. This means that in many instances exhausted stands of, say, teak, will be replaced with less exotic, yet still useable, species of trees. The technical understanding necessary for such reforestation is already available. What is **not** yet available is the ecological understanding of how all these new species will interact with each other—and, optimistically, some of our best scientists and technologists will be set to work through time on just these problems.⁵

Of the various domains in this chapter, none presents greater obstacles to optimism than forestry. After all, even assuming that millions of relatively quick maturing species of trees are planted, they will not be harvestable until at least A.D. 2010. I shall return to this stubborn domain in Section 3.3 of my Pessimistic Scenario.

2.5. Transportation

Improved transportation is basic to Thailand's aspirations for industrialization and modernization. The past 30 years have seen rapid development of our transportation infrastructure, and there is no reason to believe that the next 30 years will be fundamentally different.

Thailand is fortunate to possess a number of large rivers that have traditionally been used to ship bulky agricultural and other products to and from the market, and for 150 and more years we have augmented these natural waterways by digging an extensive canal network. Optimistically, we will further develop this infrastructure, employing more appropriate boat designs and superior powering and steering technologies—for example, those that push a craft through

⁵A team of Thai forestry specialists and social scientists is now collaborating with experts in Finland on reforestation. Even though trees grow slowly in Finland due to the cold climate there, Finland has actually succeeded in increasing its forest resources through use of the high technology of reforestation.

the water will be substituted for traditional pulling technologies. Further, when our nation succeeds in curbing the over-cutting of its forests, the silting of our river-beds will become a less serious problem, and one that will be dealt with by improved dredging technologies.

The early Twentieth Century ushered in railroad transportation. Then, in the 1950s, came an extensive development of allweather regional highways. Optimistically, both these means of transportation will be developed further during the projection period. However, a problem inevitably arises whenever a new major route of either type is constructed: land speculation. Investors, eager for windfall profits, rush to "buy cheap, sell dear"—and such investors include not just urban sophisticates, but also villagers. This is truly a serious national problem, because money invested in quest of such windfall profits is money not available for investment in true productive capacity. Nonetheless, optimistically Thailand will manage to keep this problem under sufficient control, through the use of wise legislation and sound planning, and useful transportation routes will be opened in areas most in need of them. For example, there will be good new routes, rail or highway, connecting Thailand's first deepwater ports now being built at Laem Chabang and Map Ta Phut, directly with the impoverished Northeast, obviating the present necessity of traversing the highly congested Bangkok area.

We come now to urban transportation. One of the most vexing transportation problems the nation faces concerns getting millions of Bangkokians to and from work. Those Bangkokians who must commute long distances to work are in a truly difficult situation. Anyone who has found himself in a bus in downtown Bangkok during rush hour will have no difficulty appreciating just how frustrating and soul-numbing the present situation is. And even those who own airconditioned cars are deeply stressed by grid-lock traffic jams.

Optimistically, the Thai government will give high priority to improving **public** urban transportation, rather than spending large

amounts of money for flyways and expressways that primarily benefit the small minority who own private automobiles. There is reason for optimism that such a policy priority will be rendered more feasible by new technology, especially that which utilizes new superconductive materials. If "room temperature" superconductor materials become available at affordable prices, this might make possible new forms of public transportation that previously had not been economically feasible, such as levitated rail transportation, perhaps of the type already demonstrated in pilot projects in Japan. Optimistically, within not too many years, overhead levitated skytrain public transportation will be available to all Bangkokians. Since levitated transportation is free of wheels-to-rail friction (though not air-drag friction), energy costs will be dramatically lower. Such transportation will be rapid, cheap, convenient, and non-polluting.

It is instructive to compare a hypothetical future Bangkok with the present Vienna, Austria. Vienna offers a streetcar system that is so efficient and convenient that many middle class Viennese who could afford a private automobile, choose not to own one—because it is not necessary. It took Vienna, using conventional electric power and non-levitated technology, many decades to build up this system. It is conceivable that Bangkok might achieve the equivalent of this system in a decade or two, through taking advantage of the economies to be made available by superconductor technology. If so, the enhanced convenience of public transportation will make it highly probable that the use of private automobiles will actually decrease—with overall results that will be heartily welcomed by all who live in our capital city.

2.6. Tourism

Following closely on the heels of vastly improved international air transportation has been an economic phenomenon of profound importance: tourism. During 1987, the "Year of the

Tourist," Thailand hosted over three million visitors, principally from Europe, America, Japan, and other Asian nations. The average tourist spent \$100 a day and stayed six days. Tourism has actually become the number one foreign exchange earner of our economy—ahead of garments, rice, gems and jewelry, tapioca, and rubber. This is truly an historic phenomenon: no expert on the Thai economy would have projected, thirty years ago, that within a generation tourism would displace rice as the primary source of foreign exchange.

2.6.1. The Bases of the Tourist Industry

What explains this phenomenon? Although there has been encouragement by government, this alone is hardly an adequate explanation. Other factors are also important. Foreigners obviously find Thailand attractive because the Thai people who serve as their hosts are renowned for their relaxed friendliness and hospitality. Sojourning in Thailand is also economically attractive; hotel rooms and meals are not prohibitively expensive. Even fastidious foreigners on limited budgets can find economical accommodations if they seek them out. The climate is also attractive to people from the northern industrial countries during wintertime. And there are beautiful beaches and mountains to be enjoyed.

Furthermore, the artistic and other outward aspects of Thai culture--from temple architecture to traditional music and dance—are objects of genuine beauty, and command the sincere respect of many visitors. Compared with the traditional cultures of other Southeast Asian nations—most of which suffered serious erosion at the hands of European colonialism—that of the Thai is relatively intact, and different enough from others to serve as a magnet of some power.

But the attraction is bilateral. As indicated in 2.1, the Thai people have long been known for their interest in strangers. They

have a general tolerance toward foreign people and foreign ways, and remarkably little of the hesitation, prejudice, judgmental criticism, or discrimination that is often found in other countries around the world. All this helps explain why Thailand has become one of the more popular tourist destinations of Asia.

Another magnet of great power, which most commentators shy away from discussing, has to do with night life. Thai men have traditionally enjoyed night life and attendant sexual services, and many male visitors from abroad also find this a definite attraction. For some, it is **the** principal attraction. Estimates of the number of female prostitutes in Thailand range up to 200,000 and beyond, and doubtless many of these—though a minority—derive a substantial portion of their incomes from tourist patrons. The fact that a considerable portion of the profitability of the tourist industry can be traced to this particular attraction, poses complex ethical questions to the social philosopher and policy-maker.

2.6.2. Implications of Tourism for Culture Change

With respect to tourism in general, the government role has been straightforward; it has sought only to **encourage** tourism. There have been few if any government attempts to limit or control this phenomenon. The implicit premise underlying existing government policy has been straightforward: the more tourists, the better.

But is this really so? What have so far been the consequences of rampant tourism for the Thai people? One may summarize many of these consequences under two major headings: economic dependency and culture change potential.

The dependency phenomenon varies enormously from one type of case to another. To the village handicraftsman, tourism might provide simply a welcome "add-on" to the regular domestic or export market for his goods. For many hotel, restaurant, and personal

service workers, however, tourists are the market, and if this market were to disappear, hundreds of thousands of these people would be severely hit. And in major tourist centers, such as Pattaya, Chiang Mai, and Phuket, thousands of other types of people whom one would not normally regard as being tourist-dependent, in fact are so—less directly, yet still substantially. These include car rental agents, doctors, lawyers, bankers, architects, and real estate agents, as well as barbers, dressmakers, and construction workers.

Tourism is fundamentally different from most other forms of foreign trade in that it has high culture change potential, because it involves large numbers of people in direct person-to-person contact. This contact is at its greatest in such centers of tourism as Bangkok and Chiang Mai, and at beach resorts on the Gulf of Thailand and the Andaman Sea. More and more Thais, of varying social class origin, whose parents had virtually no face-to-face contact with foreigners, now have frequent contact. Almost certainly, such contact goes some distance toward dissolving false perceptions of foreigners, perceptions heretofore deriving primarily from foreign movies and imported television programs, which often deal mainly with crime, greed, violence, and trivia.

Associated with this rapid growth of tourism is the everincreasing tendency for world organizations to hold conventions in Thailand. Many educated Thais who have little opportunity to travel abroad are in this way brought into contact with new professional, technical, intellectual, and commercial ideas.

This person-to-person contact is the kind that is most likely to produce changes in attitudes and values that might eventually add up to culture change—for these foreigners directly and interactively model types of behavior that are in many ways sharply different from traditional Thai ways. While all foreigners doubtless have some degree of influence, it would appear that the most influential are the Japanese, other East Asians, and Americans. The impact of tourism on our culture is already noticeable in certain subsections of our

society, even to the casual observer. This is clearly a subject worthy of intense study by professional researchers, and deep understanding by our national leaders.

Such research should ask hard questions, such as: Is it healthy for Thai handicraftsmen to produce traditional products, and for traditional dancers to perform dances—when the primary or even the sole motivation is the tourist's dollar or yen or mark? Does the traditional art form gradually cease to come from the heart, and lose its status as a thing of beauty, worth pursuing for its own sake? Will valued traditions become atrophied through the loss of traditional bases for motivation?

2.6.3. The Problem of Prostitution

Another tough problem is posed by the reality that thousands of male tourists are attracted to Thailand primarily by the prospect of affordable sex with congenial and complaisant prostitutes. This is clearly a problem with moral dimensions. It also has implications for national public relations, for foreigners whose knowledge of the Thai people is superficial might to some degree come to equate being Thai with being a prostitute.

It may well be true, as some observers have said, that many Thai prostitutes (perhaps to some extent unlike their Western counterparts) "sell their bodies but not their souls," and feel less sense of self-loss over the way they make their living than outsiders might assume. However, other observers have held that this is **not** generally true, but is merely a convenient euphemism serving to justify the status quo.

However this may be, one thing is sure: the root cause of the sex-for-sale phenomenon is **poverty**, and the key solution will be the elimination of poverty. Optimistically, this is just what will happen—slowly but surely. This optimism is grounded in analogous historical situations in post-war Japan, and, more recently, in such "newly industrialized countries" as South Korea and Taiwan.

Having said all this, however, I must add my feeling that there is much more to be asked, and learned, about this deeply complex and troubling phenomenon. Indeed, to oversimplify, I regard prostitution in Thailand as a kind of national sickness, and one that we have so far not squarely faced.

2.7. Information and Communication

Much of what Thailand can do with the proper use of information technology can be revolutionary in its sociocultural results. This is true both of "conventional" mass media technology and, even more so, of the "new" microelectronically based technology, which is often of a non-mass, individual, and highly interactive nature. Each of these types of technology deserves our serious attention.

2.7.1. The Use of Existing Information Technology

Optimistically, the great positive potential of existing forms of communication technology—print, radio, film, and television—will be realized in substantial part. Fueling these positive changes will be a largely literate population (the adult literacy rate in 1988 already having risen to 91%), as well as a steeply growing number of university-educated Thais (the two Bangkok "open" universities in 1988 currently having combined enrollments of over 500,000 students). Under such circumstances, a market demand has been emerging, and will continue to emerge, for all the media to provide solid news and responsible news analysis, as well as sophisticated educational content—with a corresponding decrease in emphasis upon crime, sex, and sensationalism.

In this broad change process, the press and television are central, because they are, *de facto*, relatively free of government domination. The recent historical record provides grounds for optimism. During the last two or three decades the periodical press

has been responding to the growth of this educated populace by producing progressively better products, and optimistically this pattern of steady improvement will proceed apace. As for television, by the end of the Sixties it had begun seriously to challenge radio's popularity, first in the larger cities and then, gradually, throughout most of the rural areas. Television's impact has been profound, and there is no reason to project that this increase in influence will not persist. Quality, however, is a separate matter. Whether television will tend unduly to purvey imported low-grade dramas from Japan, Hong Kong, and Taiwan,, or move toward high-grade dramatic and educational content, is problematic—but I have enough confidence in the quality of those who make such programming decisions to feel that it is not utopian to project a gradual but solid trend toward higher quality.

Radio is different, because in 1988 this medium was largely government controlled. It would indeed be utopian to project that radio will play a leading role in this broad process of positive evolution. Radio will, though, play a useful supporting role. For example, it will continue to provide traditional drama, such as the *likee* and *lakhaun*, which can have the effect of reinforcing morality and increasing empathy on the part of rural populace for the larger world of nationhood and modernity.

2.7.2. The Use of the New Information Technology

We move now to the so-called "new information technology." During the past several years thousands of Thais—especially scholars, administrators, and businessmen—have eagerly adopted various aspects of this new technology. A telling example is that in 1981, at the time of an Ethnographic Futures Research study at Chiang Mai University (Bhansoon, Sidhinat, and Textor 1984: 51-2), there was not a single microcomputer to be found anywhere on that university's campus. Today there are at least a hundred.

There is little doubt that by the horizon date computers will be a commonplace part of life in the modern and urban sectors of Thai society. The same will also be true of computer networks, which will permit people to work together toward the solution of shared problems. Of course, as with most new technology, the adoption process will be uneven, and it is likely that this technology will only minimally filter down to ordinary citizens and non-specialists within the projection period.

As more and more Thais become habituated to more and more computer applications, the nature of communication in the society as a whole will almost certainly change in important respects. Optimistically, these changes will be in the direction of enhanced access to information and knowledge, so that more people will be able to benefit from the total stock of existing information and knowledge. The more people there are who have convenient access to important data, information, and knowledge, the greater will be the total capacity of Thai society to create new, useful knowledge. It is hard to see how Thai society as a whole could fail to benefit from this general process.

Optimistically, access to the new information technology will have a substantial democratic effect through time. As more and more intellectuals, teachers, scholars, leaders, and citizens gain more and more access to data and information relevant to public policy, they will be in an improved position to defend their own rights and interests, and, more generally, to participate in improving public policy.

2.8. Politics, Law, and Government

The context in which solid progress can be made in improving Thailand's politics, law, and government is that in which international tensions will be at a low level. Assuming a Thailand relatively

free of such tension, and the distortive pressure it would place upon the Thai polity, I find it easy to project a number of positive developments.

However, such developments will be evolutionary in nature. Truly fundamental change would be beyond the bounds of realism during the projection period. We have lived under a constitutional monarchy for 58 years, and our progress has been quite slow. Another 30 years will not produce radical change, partly because most Thais do not want it, being instead oriented toward the "middle path" (madchima patipathaa). The changes that will occur will take the form of alternations in the parties in power, and limited policy oscillations from left to right. The traditional rallying cry, "Nationhood, Religion, and Monarchy," will continue to be the dominant motif—one which enhances stability and permits people to get on freely with their personal, family, and livelihood affairs.

Some good leaders will arise, but the Thai political system is such that they are not likely to retain power for more than four to eight years or so—long enough to set directions, but not long enough to follow up systematically so as to insure steady socio-economic development. Even when such good leaders are in power, their ability to set new directions is more limited than a Western observer might think—because of the necessity to trade off heavily with other politicians, and business groups, in order to stay in power. Although I project, optimistically, that "gun for hire" type politicians will not be numerous, businessmen in politics will be commonplace, whether I like it or not, because economic power will unavoidably be extremely useful in winning elections and gaining political influence.

Optimistically, as education and communication develop, there will be a slow but steady growth of meaningful rice-roots participation in the political process. Protected and encouraged by laws favoring more decentralization and local initiative, local townspeople and villagers will gradually acquire greater sophistication and confidence in opposing the more inequitable and exploitative actors.

on the local political scene.⁶ Local leaders who are "both excellent and ethical" (1.14) will increasingly perceive positive political change as attainable, and worth the risks and sacrifices needed to attain it. Marginally but steadily, they will proceed to take those risks and make those sacrifices. In dealing with parliamentary candidates, local citizens will become more sophisticated in identifying ideas and programs that will genuinely contribute to the general local well-being in a stable and lasting way. And as local leaders and citizens gradually develop more sophistication, and become less easily overawed and mystified by urban politicians, the quality of their elected representatives will slowly improve. This evolution of countryside politics, already increasingly visible over the past decade or two, will grow in scope and effectiveness over the projection period, to the general benefit of all Thais.

The Cabinet and the Parliament will remain the "visible" national government. This visible government will handle national affairs in the accustomed way. In addition, it will handle an increasing number of regional problems, especially those involving, for example, whole river valleys that may include several provinces.

The "invisible" government will consist of the bureaucracy, intellectuals, and university students. Those intellectuals who have knowledge or skills directly relevant to policy problems will be at an advantage, since government has now become so technical that every cabinet will need such experts to carry on its work.

This invisible government may or may not include the military as well, depending on circumstances. The civil bureaucracy,

In 1975 the Kukrit Cabinet took a historic step in legislating, for the first time, that a portion of the tax revenues would be redistributed to rural Thais in the form of grants which local village or subdistrict councils could, within limits, use for local development as **they** decided. This policy was further extended during the Prem Cabinet in 1980 and thereafter. This policy has greatly strengthened a culture change process in which local villagers' interest in local government has become more substantive and less ritualistic.

however, will continue to hold great power, and to be able essentially to forestall the execution of public policy passed by Parliament, if such policy is deemed—by the bureaucrats—to be unworkable (1.2).

Despite these built-in systemic constraints, optimistically I project considerable positive change. There will be more political information available, and an increased tendency for voters to exercise their franchise in a more informed and sophisticated way. Political parties will come to be based more on coherent bodies of principle, and less on the personalities of individual leaders. In passing laws, Parliament will become more proactive, more likely to look to the future and anticipate problems—rather than simply, and often belatedly, reacting to problems after they have already become serious. Parliament will, through able leadership, become more and more sensitive to those areas—especially high technology—where opportunities must be seized quickly or forever forfeited, where risks are often difficult to assess long in advance, and where side-effects are likely to be serious and far-reaching. It is in these areas of high change potential that there is greatest need for proactivity, and for guiding change. Optimistically, the right national leaders will emerge at the right times, and Thai public policy will meet its challenges, attacking problems rather than reacting to them (1.13).

As time passes, power within Thailand will become more diffuse, and less centered in the hands of the bureaucracy. Moreover, a similar process of devolution will occur within the bureaucracy itself. Much of the power now concentrated in the hands of the Ministry of Interior will be more broadly diffused throughout the bureaucracy, so that there will be countervailing forces within the entire government organization, and hence an opportunity for a variety of bureaucratic subcultures to influence overall policy and practice. Given that the tradition of the Ministry of Interior has been, since its establishment in 1892, primarily one emphasizing control rather than development, the net result of this process will be an increase in the pace of true development (1.11). Indeed, even within

this ministry itself, my optimistic projection is that civil servants will gradually become more development-oriented.

Over the centuries, Thai culture has tended to be non-legalistic, and to place a relatively greater premium on preserving the stability of a relationship, than on meting out precise justice in the Western sense. This pattern has been consistent with that of placing a strong negative value on open, face-to-face confrontation, especially where aggravated by a display of anger (2.12.4).

With the advance of Western colonialism in the Asian region during the Nineteenth Century, however, King Chulalongkorn found it imperative to reform Thai law and justice, and, with the benefit of consultation from numerous Western legal experts and jurists, a farreaching reform and codification of Thai law resulted. This led to the happy consequence that during the 1920s the onus of extraterritoriality was finally lifted from the Thai people.

The modern Thai judiciary is relatively independent and free from meddling by the executive or legislative branches of the government. It is also relatively professional and definitive in the way it carries out its business. While granting that the enforcement of law has been known to suffer from interference by local mafia and from other forms of coercion, I nonetheless see the judiciary as grounds for considerable optimism for the slow but steady growth of democracy in Thailand, protected by benevolent laws competently interpreted.

The ever-increasing modernization and monetization of the economy will, however, bring with it unavoidable negative consequences. It is only to be expected that life in Thailand will become more legalistic and litigious—and that is indeed what has been happening in recent years. Only recently, for example, there have appeared in the press stories of brothers suing each other for large sums of money—something that would have been unthinkable just a generation ago.

2.9. SOCIAL STRUCTURE

I will deal with only three aspects of this complex topic, namely relations among the classes, between the sexes, and within the family.

2.9.1. Relations Among the Classes

Since the onset of coordinated national development programs in the Sixties, the economy and occupational structure of Thailand have diversified greatly; educational opportunity has expanded; and the middle class has grown. While formidable problems do persist in terms of a skewness in the distribution of income and wealth, the general dynamism of the economy and society do provide some grounds for an overall optimism that social mobility opportunities will improve and that a person born poor will be able to rise in socio-economic status through hard work and professional merit.

Optimistically, during the projection period Thailand will experience a diminution in the percentage of its citizens living in outright abject poverty—a process already evident in the Seventies and Eighties. The nation will be led by statespersons sincerely committed, at the very least, to slowing the rate of increase in the gap between rich and poor. However, it would be utopian to project that the distribution of income in Thailand will become substantially more nearly equitable by the horizon date, given the mode of capitalist development to which the polity is firmly committed.

To begin actually to reduce this gap, progressive property and inheritance taxes would be required. The current situation may be summarized as follows.

• The current income tax can be described as reasonably progressive, running from a minimum of 5% of net income on those who need to pay it at all, to a maximum of 55% for the portion of net income over two million baht per year.

- The current property taxes are fixed rate and small. They do take into account the appreciation in value of a piece of property and, like the income tax, are collected annually.
- At present there is no inheritance tax. There is, however, a small 2% transfer and registration fee, and a .5% stamp duty.

I believe it would be utopian to project the attainment of true fairness in the property and inheritance taxes within the projection period. The basic reason for this is that these two taxes get at accumulated wealth as distinct from recent income, and thus fundamentally threaten the social position of a small number of extremely wealthy Thai families. While these families might begrudgingly accept a progressive tax on recent income, they will not accept one on accumulated wealth, which is the ultimate basis of their total power and influence within Thai society. And the bedrock political reality is that they are prepared to bring this very power and influence to bear in the political process, in order to preserve this very wealth.

Given the stubbornness of this aspect of our political economy, the most optimistic projection I judge to be realistic is that there will be some moderation of the income gap between the extreme rich and poor during the projection period. This will come about, in part, due to an increasing realization on the part of owners and managers that treating one's employee well and fairly is, in fact, good business—in the long run.

2.9.2. Relations Between the Sexes

My Optimistic Scenario for this subdomain is that the status quo will continue, more or less. That is, as a Thai male, a Buddhist, and a humanist in the Thai tradition, I am inclined to accept the present situation with respect to relations between the sexes.

This position will probably upset a small minority of Thai readers, and puzzle quite a few non-Thai readers. Therefore, some

explanation is needed, in cultural terms. My perception is, frankly, that the great majority of Thais, of either sex and including those with the highest levels of formal education, share my belief that relations between the sexes in Thailand are not a problem of any great seriousness. In this respect, they view their own sociocultural system quite differently than do many Westerners, especially those actively involved in the feminist movement.

There is, however, one major exception, and that has to do with poverty, both rural and urban. Wherever there is poverty, it is the women and children who end up being most severely exploited. As discussed in 2.6.3, poverty explains prostitution, and I certainly agree with numerous social critics that any female forced by poverty to rent her body involuntarily, is being exploited by society.

Aside from this single but important exception, I believe that the status quo will prevail. At the same time, as a Thai, a Buddhist, and a humanist, I fully acknowledge that many very worthy Thais, especially feminist women scholars, writers, and social critics, are not satisfied with the status quo. Optimistically, as time moves forward, as economic justice improves, and as democracy flourishes, the disagreements between such feminist Thais and persons like myself can be gradually and positively adjusted.

2.9.3. Relations Within the Family

I live in a kin-based compound in central Bangkok with more than fifty of my relatives, embracing four generations. I greatly value the warmth and unity of this co-residential extended family. It is deeply rooted in traditional Thai culture and makes possible not only economic cooperation, but also the raising of the young by more than one senior generation—thus providing strong emotional support and a sense of belonging. Further, it provides for the care of the elderly infirm by family members who love them.

I wish I could find a way, in this Optimistic Scenario, to

ground a projection that somehow the extended family will survive—but that would be, in my judgment, utopian. In the great majority of cases, it will not—not even in the countryside, except under unusual economic and technological circumstances. The trend in this direction is already clear and unmistakable.

The general response of Thai society to date has been to search for various substitute arrangements that can preserve at least some of the feeling and comfort of the older tradition. Part of this response has been ceremonial. Instead of living together as an extended family, a group of relatives might meet for dinner together once a month, or on the birthdays of their senior members. Alternatively, the extended family might co-sponsor a yearly ceremony at the temple, such as a Thaud Kathin. Such events, however, are often characterized by a certain lack of emotional depth, and in this respect they mirror the reality that the emotional closeness that formerly characterized the extended family has diminished. I can find no grounds for projecting other than that this tendency toward ceremonialization and emotional thinning will continue.

The most optimistic projection relevant to the family that I can provide grounding for, is that certain of the functions of the extended family will be adequately assumed by the nuclear family, or some similar family form. I have no doubt that in some cases the nuclear family will succeed in this, but clearly the strength and scope of this process will vary widely from case to case—especially since, in the modern sector, both husband and wife will often hold full-time jobs away from the home. Even in those cases where the mother is not absent, if no grandparent is present, there will be a considerable loss in awareness and appreciation of family depth.

The question of care for the aged is even more vexing. If the trend toward nuclear family living continues, and if marital pairs living in their own homes fail to take much interest in the plight of aging parents, then more and more aged Thais will doubtless end up in nursing homes—the very sort of fate that Thais visiting America

are likely to find inhumane. Indeed, such homes have already made their appearance in Bangkok—though not yet, as far as I know, upcountry. The most positive projection I can produce in this respect is that the nursing homes will be of good quality, with a warm and caring ambiance.

2.10. EDUCATION

In my judgment the Thai nation needs to raise the general level of formal education to the point where all children will finish at least the ninth grade, in order to be able to participate fully in processes of technological modernization and sociocultural development. Optimistically, this will occur.

Beyond this level most people will probably not go, though there will be ample educational facilities for those who wish to go further, and also facilities for lifelong education, both nonformal and informal.

2.10.1. The Role of Higher Education

I conceive of our institutions of higher education as having a three-fold charter.

- 1. They should **respond** to social needs that arise. Here, our universities have done an excellent job throughout the past several decades. When the national leadership has pointed to a problem, the universities have generally been effective in dealing with that problem.
- 2. They should anticipate future social needs. Here, our universities have done at best only a fair job. They have not been as future-oriented and proactive as I would like.
- 3. Finally, they should stimulate social consciousness and provide moral and ethical leadership. Here, our universities have not been effective. The only point in history when they made a serious

effort to be effective was during the 1973-76 "democratic" period—and they largely failed, due to overconfidence and general immaturity.

But Thai universities have been changing rapidly, and optimistically, over the projection period, they will substantially improve their performance in these latter two respects. In this connection, I find it possible to ground considerable optimism on the enormous inflow of new young academics possessed of high enthusiasm, energy, and ability. Optimistically, our institutions of higher education will discard certain dysfunctional notions of academic prestige that are often part of a somewhat snobbish Western academic tradition which tends to value non-practical knowledge above practical. Instead, with proper leadership, our institutions will become more focused on applied research geared closely to the solution of specifically Thai problems. Of course, we do need a certain number of PhDs deeply educated in theory—but not nearly as many as some people think. By contrast, we need many more people of lesser theoretical background to work on practical problems. Optimistically, people will become available who are well enough trained theoretically to keep abreast of world developments in their scientific or technological specialties, yet motivated to take such knowledge and transform it into processes and routines that will yield practical results in terms of an improved life for all the Thai people.

To pick just one example out of hundreds, we need people in our universities or teacher training institutions who will find ways to prepare or treat our tropical fruits so that they may be successfully marketed in Europe, Japan, and the U.S. A kilogram of longans that fetches 20 baht in Thailand would bring at least five times that amount if sold in France. However, we have not yet found a safe, technically sound, and commercially viable way of treating and sending our highly perishable fruits overseas, so they arrive either fresh or in a condition in which the taste and texture are as they would be in

Thailand itself. Applied research on this problem, if successful, would make a genuine contribution to our national well-being, would help the less advantaged rural sector, and would provide valuable teaching opportunities. Optimistically, applied research of this mundane but useful nature will become more and more common, and our academic prestige system will reward it.

More broadly, our universities much face the challenge of technology and ecology. The destruction of ourselves and our planet, or our survival with happy and full lives, depends on our choice and use of the right kinds of technology. Optimistically, our universities will focus their research and training on technology to fulfill basic human needs. A balance between technological progress and a quality of life which is good and humane, compassionate and considerate of the good health and well being of the planet, and all who exist on it, should be the thrust of our research.

2.10.2. "Distance Learning" at the Tertiary Level

Over the past ten years Sukhothai Thammatirat University, one of the nation's two "open enrollment" universities, has pioneered in the development of "distance learning," using the mails, radio, television, and video. Its impact to date has been profound, both among educated Thais and among those of lesser educational attainment and a more traditional outlook, such as young village residents, or monks in upcountry temples. Since Thailand's two open-enrollment universities currently have between them over 500,000 registered students, or about one percent of the entire Thai population, it is not difficult to project optimistically that distance learning will produce an enormously better informed, educated, world-aware Thai populace by the horizon date.

2.11. BUDDHISM AND OTHER BELIEF SYSTEMS

Buddhism is overwhelmingly the religion of the Thai people. Indeed, in casual speech it is common enough to hear someone simply equate being Thai with being Buddhist. Except for relatively small Muslim, Christian, and other minorities, it can be said that all Thai people respect Buddhism, and that many practice it. Those who practice it seriously are found, in much higher percentages, in rural villages (1.10). Sad though it is to contemplate, the clear truth is that there are now some millions of Thais whose experience with urbanization has brought about a diminution of religious activity, and probably of religious commitment as well. There are many aspects of city life that help explain this phenomenon, but I will here mention just three.

- Urban residential patterns are such that people often do not know their neighbors, and do not live in distinct neighborhoods with the type of intense community solidarity which, in the country-side, supports a particular temple and its ritual life.
- Urban living leaves less time for ritual participation, study of the Dharma, or meditation.
- Urban living contains within it a certain tendency to value material things more, and this undermines the Buddhist teaching against craving for sensual gratification.

While I would agree that urbanization and modernization need not deeply damage Buddhist understanding and commitment, the particular kind of modernization experienced by millions of Thais has, I fear, had that effect.

2.11.1. Buddhism and Education

The above-described secularization process is doubtless to some extent inexorable, just as it has been in other nations with respect to other traditional religions. However, in my Optimistic Scenario I am not prepared to give up easily. I am deeply impressed by what I perceive to be both the truth and the viability of Buddhism. As an educator, I look to schools and universities actively and affirmatively to **teach** Buddhism to the young—or at the very least to go out of their way not to undermine the faith. I ground much of my confidence in our nation's religious future on our schools and other educational institutions, including, of course, those intended specifically for our Buddhist monks and novices.

I grant that to date most of our schools and universities have NOT done a very good job in this respect. Even so, on the face of it, what I am optimistically visualizing does NOT seem to me to be a utopian dream. Why? For one thing, because the very nature of Buddhism lends itself remarkably well to this goal. For example, a course in science can be taught so as to emphasize that Buddhist philosophy, like modern science, is based on notions of causality. And a course in philosophy can be taught so as to emphasize the remarkable fact that the Lord Buddha, unlike the founders of other world religions, stressed the use of one's critical intellect, and urged his followers to believe his teachings only if those teachings stood the test of logic and personal experience.

2.11.2. Reinterpretation and Reform of Buddhism

There are at present a number of hopeful signs that Buddhism remains strong in Thailand. Many of these signs take the form of attempts to reinterpret our Dharma, or to reform the existing social organization of Buddhism, nationally and locally. While some Thais are upset by all of these efforts, and most are upset by some of them, the fact yet remains that thousands of people are actively involved in these efforts precisely **because** they take Buddhism seriously—and this is a most encouraging fact.

Reform movements such as the controversial Santi Asoke take the position that the orthodox Thai Buddhism of today is

corrupted, and that the hierarchy does not really preach or model the essence of the Lord Buddha's teachings. Some of these reform movements call for renewed efforts to make his teachings more relevant to problems of modern life. There is a tendency to move away from the superficial externals of behavior—quasi-ritualistic deference gestures, for example—and to emphasize the actual living of Buddhist precepts.

While I will not here discuss the particulars of any of these reform movements or controversies, my Optimistic Scenario projects a continuing active national concern with problems of relevance, adaptation, and interpretation. It also projects good leadership within the official governance structure of the monkhood, especially the Ecclesiastical Council, so that new efforts to make our faith relevant to modern conditions will be given a fair hearing. Optimistically, some of these efforts will be so sound as to find acceptance, so that new interpretations of our Dharma will gradually be woven into the syllabus of Dharma instruction offered to junior monks, and into the fabric of our national belief system.

2.11.3. Buddhism and Development

Buddhism remains generally much stronger in our rural subculture—though not nearly as strong as it was a few decades ago when, in thousands of rural villages, the true and respected local leaders were monks. Optimistically, our ecclesiastical leaders will find ways to nourish the strength that remains in this village tradition. As part of a reinterpretation process, both the content of the Dharma and the structure of the monkhood will more adequately serve the overall goal of true development at the village level.

I ground my optimism here on various recent developments, notably the active, though still small, movement of so-called "development monks." These are village monks who have successfully initiated a number of needed changes at the village level that have

raised living standards, such as producers' cooperatives, credit unions, child care centers, and the like—while also espousing continued commitment to the Lord Buddha's teachings, and to awareness of the limited nature of the connection between material progress and true happiness. Development monks teach, for example, that increased income deriving from agricultural production ought not to be devoted to gambling or to unnecessary purchases of material goods that serve primarily as status symbols.

Optimistically, the Buddhist hierarchy will recognize the value of this sort of activity, and revise the content of its Dharma instruction so that junior monks will be exposed to this Buddhist development philosophy. All this can be done without requiring any particular monk to undertake any particular development project. Indeed, the great strength of the "development monk" movement is that it is spontaneous and locality-specific. It is not the sort of movement that the central hierarchy ought to try to administer or "replicate." It should remain spontaneous and locality-centered. The most the hierarchy can hope to undertake successfully is to provide legitimation for these activities as Buddhist activities, and to put senior monks who have actually done this kind of work successfully, into touch with junior monks who would like to become involved. Optimistically, this is what will happen.

The phenomenon of development monks is, however, only one ground for optimism out of many that might be cited. In my own case, I ground my optimism also on broader matters of faith. As one who is deeply committed to both Buddhism and development, I remain convinced that development is NOT just a process of provid-

⁷It is not part of my Optimistic Scenario that the government become involved. Some involvement by non-government organizations, however, would be helpful, as well as some involvement by community development-oriented professors at our universities, who might seek to understand this movement as a development process, and involve their students, selectively, in programs to support the work of development monks.

ing physical infrastructure, material products, and modern medical care. Providing such materials and services is, of course, necessary, but in itself is **not** sufficient, to the attainment of true fulfillment. In truth, such material change is best regarded merely as the **proximate** cause of development—nor development itself. For development is also a process of the spirit. Material goods do nor, in themselves, make one happy or fulfilled. This is a profound truth, and one that Buddhism teaches with great clarity.

2.11.4. Spirit Worship

It is instructive, for various reasons, to contrast Buddhism with spirit worship, even though the latter is certainly a less prominent feature of Thai village culture than it was a generation ago. I regard spirit worship in an entirely different light than Buddhism. While in my Optimistic Scenario Buddhism will endure and grow stronger, spirit worship will gradually assume an ever less important role in the lives of our people, since it is quite clearly counter to a scientific way of life. While it is true that spirit worship still serves positive social functions in parts of our rural subculture—such as maintaining a sense of continuity with deceased kinfolk, and preserving social order—these functions can gradually be assumed by other belief structures, and by a modern social structure. Optimistically, this is what will happen—but gradually enough so as not to be broadly disruptive.

2.12. THAI IDENTITY

Inevitably the Thai identity will undergo considerable change at the hands of modernization, urbanization, tourism, and the world media. In most cases, these changes will occur more rapidly, and more deeply, in the urban-modern sector than in the rural. Optimistically, overall change processes will be gradual enough so that people born into either sector will not lose motivation, morale, or reason for living life with enthusiasm and a sense of self-worth. Thai culture is, has been, and should be broad enough to permit a situation of "harmony within diversity" (1.1). Just as Thais have been tolerant of other cultures, so, optimistically, will they remain tolerant of variation within their own overall "umbrella" culture.

While my Optimistic Scenario envisions such tolerance of variation, however, it does not envision tolerance or indifference when it comes to the clear economic and cultural disadvantages that are the lot of most of our rural populace. Optimistically, our society and polity will take steps to reduce these disadvantages, which are closely related to the equity gap (1.5). I project continued growth of various organizations, governmental and non-governmental, which will send educated urban young people to work in development projects in rural poverty areas. This volunteer approach is fully consistent with the basic values of our Buddhist religion, and, with the right leadership, will fit well into an evolving structure of relatively non-bureaucratic organizations emphasizing education for self-help.

So much for variation within the overall Thai culture. I turn now to the nature of that overall "umbrella" culture itself, a culture that gives identity to all Thais, urban and rural. Here I find no difficulty in grounding an Optimistic Scenario in which many aspects of the overall Thai identity will survive more or less intact—even assuming realization of the broad process of technological and economic modernization that I am optimistically projecting.

In approaching this problem, by the way, I consider the entire Thai identity. I do not restrict myself, as do some observers, primarily to drama, dance, and other art forms. Indeed, these latter aspects of the uniqueness of the Thai way of life, while certainly important, are in my opinion not as basic as certain other aspects. I shall now deal with four of these basic aspects.

2.12.1. Empathy and the "Caring Heart"

A salient traditional Thai characteristic is generalized empathic kindness (namcaj). The Thai morpheme caj, which may roughly be glossed as "heart," is found in well over three hundred Thai terms (Lee 1987: 149-93). This is a truly remarkable pattern, and suggests, to me at least, that the notion of heart, feeling, and empathic concern is pervasive in our culture, and that the "caring heart" can legitimately be considered a basic aspect of the Thai identity. I am projecting optimistically—and indeed most probably—that this feature of our culture and identity will survive essentially intact. This feature of kindness is related to the open nature of our society, and to our willingness to entertain cultural alternatives, and to consider other ways of doing things (1.1). In this sense, the very fact that many foreign ideas and values are pouring into our country, via tourism or the international media, might actually serve to reinforce our "caring heart."

Our tendency to be open and empathic is in turn related to our strong tradition of avoiding open confrontation. We do have culturally acceptable ways of telling each other the truth, but we strongly prefer to do this in a manner that is kindly and empathic, and that minimizes emotional upset. Especially in unequal hierarchic interaction (2.12.3), but even among friends, peers, and spouses, we prefer to avoid open confrontation (2.12.4). By my values, this is a worthy emblem of our identity, and one that optimistically will survive in many areas of our national life.

There are, however, a few areas where intact survival of this feature is so unlikely as to be utopian. These are in the modern-urban sector, and especially in financial and political affairs, such as wage

⁸No cultural feature as broad as this one could exist without exceptions. Among the situations where the caring heart feature is likely to be absent or weak are those in which overly selfish factory owners pay their workers extremely low wages, or in which village girls are illegally exploited by brothel hoodlums. This entire matter is further dealt with in my Pessimistic Scenario, Section 3.3.3.

labor agreements, commercial property transactions, and competition for political power. In the rural sector, these values have a much better general chance of survival.

2.12.2. Joyfulness

Another essential feature of our national culture and identity that optimistically will survive is a certain joy in life, a playful attitude (khwaam khiilen), a preference for things that are fun (sanug), and a proclivity toward comfort (khwaam sabaaj) in a general sense. This proclivity is not just toward material comfort, but toward interpersonal relations that make everyone feel comfortable at heart (sabaajcaj). Along with this goes a tendency not to take the troubles of the moment too seriously. Our cultural tendency to emphasize "knowing" in a wide sense (1.1) is related to a tendency not to take any one set-back too seriously, and to value the Buddhist notion of equanimity (ubeegkhaa). This view of the world, and of the potentials of life, is useful in helping the individual deal with the inevitable disappointments of life-and with stresses of participation in modern, competitive, highly technologized living situations. Optimistically, the very utility of this aspect of the Thai culture and identity will help insure its survival.

2.12.3. The Decline of Hierarchical Rigidity

A third aspect of our national identity is a tendency to defer to hierarchical superiors—and here my optimistic projection calls more for change than persistence.

The roots of our traditional sense of hierarchy are deep. The Thai monarchy was heavily influenced by the Khmer culture several centuries ago, following the Thai subjugation of the Kingdom of Angkor. The Khmer political culture emphasized the notion of the god-king (theewa-raacaa), and since that time the Thai political

culture and social organization have become characterized by steep hierarchical social arrangements. Since Western influence became prevalent in the late Nineteenth Century, there has been an erosion of the more extreme forms of hierarchical deference—especially those forms based on status ascribed at birth. Since economic modernization became settled national policy during the 1960s, the attenuation of hierarchy as a basis for interaction has become a truly general process, hand in hand with the growth of meritocracy and creativity. And even where meritocratic criteria have been minimal, the erosion of hierarchy has occurred. For example, over the past twenty years even personal servants have shown, on the average, less deference toward their employers. I project, optimistically, that this broad dehierarchization process will continue.

What will drive this process? In brief, I anticipate that the structures in which hierarchy will erode most rapidly will be those in which it is most visibly and seriously dysfunctional: where people can see clearly that it "just doesn't work," and where its failure to work is clearly costly. More specifically, I anticipate very rapid erosion in those structures that relate most intensely with the world outside Thailand. Such structures include private business firms in competitive market situations. In order to survive economically, such firms must make flexible, technically complex responses to outside opportunities and risks.

This is not to say, however, that all hierarchical arrangements are dysfunctional and will prove themselves so. To the contrary, there will doubtless be many factories in which hierarchical arrangements will survive because they permit rational control and coordination of a production process, to insure greatest economy and efficiency. Such hierarchies, though, will typically be participatory hierarchies where junior employees may readily submit innovative suggestions and designs.

In university life, tight hierarchical constraints have been withering for some years, and today junior lecturers use their right to

disagree with senior professors in many situations where, thirty years ago, overt disagreement would have been unthinkable. Optimistically, this broad process will continue, and the degree of academic freedom available to a Thai academic will more and more approximate that of his or her colleagues in the U.S.—where, indeed, a large percentage of these junior academics will have been educated. The creative benefits that will flow from such freedom will far outweigh any negative consequences—especially in the sciences and technology, where progress is now so rapid that senior professors, unless they keep up scrupulously with developments in their fields, are likely to be less qualified than their juniors, in many respects.

A broadly similar relaxation of hierarchical constraints will characterize the relationship between university professor and student, with generally similar and positive results.

It remains to deal with that citadel of hierarchy, the civil service. The various ministries and departments vary widely as to the degree of their hierarchical rigidity—and, indeed, as to how much rigidity is optimal, given the tasks that a particular governmental organization must perform. In general, however, it is my judgment that our government is characterized by too much hierarchy and rigidity. In particular, I regard the Ministry of Interior in this light, and feel that its hierarchical tradition is part of the explanation for its limited ability to serve as an agency actively fostering development (as distinct from merely maintaining sheer control). This enormous ministry has always been conservative, with a strong tradition of control.

Optimistically, I project that modernization and professionalization will gradually bring about a relaxation of this hierarchical tradition throughout our public bureaucracy, and with it an improvement in efficiency, creativity, and active, resourceful responsiveness to public need.

2.12.4. Harmony and the Avoidance of Confrontation

Since some of the traditional pattern of avoiding confrontation is related to that of hierarchy (in the sense that the individual is especially inclined to avoid confrontation with a status superior in the same organization or group), it follows that an erosion of hierarchical orientation might in some cases spur an erosion of the cultural value placed upon non-confrontational harmony. Thus, non-confrontation is more likely to remain a controlling norm in, say, the Ministry of Interior, than in a small modern start-up business firm.

Modern elective politics is another area where hierarchy has been eroding. Since political parties are not as hierarchically structured as civil service bureaucracies, and since politicians can often gain advantages by "bashing" bureaucrats, the net effect of elective politics on the principle of hierarchy has been erosive. I expect this trend to continue, though I am not sure whether it belongs in my Optimistic or Pessimistic Scenario.

It is important to emphasize, finally, that only a part of the Thai penchant for harmony is rooted in hierarchy. Thais also treat their social peers in this spirit. It is a valued part of the quality of Thai life to be treated this way. This fact provides additional grounding for my projection that, except to some degree in the domains of commerce and politics, Thais will continue to emphasize harmony and non-confrontation to a marked degree, for some decades to come.

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This concludes my Optimistic Scenario. In it I have included all major domains that I consider to be of most vital concern. There is more that I would like to say about each of these domains, but a monograph like this does have space limitations, and hence must be quite selective.

In the next chapter, I turn to some pessimistic projections.

CHAPTER THREE:

THE PESSIMISTIC SCENARIO

Principally because I am by temperament an optimistic person, this chapter will be quite brief.

Another factor explaining this brevity is that my Pessimistic Scenario is generally similar to that of the 24 Chiang Mai University professors who received Ethnographic Futures Research interviews in 1981, and whose conglomerate Pessimistic Scenario is reported in Chapter Four of Bhansoon, Sidhinat, and Textor 1984. The interested reader may therefore consult that monograph.

I hasten to add, however, that I regard my inclination toward optimism as being more than just a matter of personal temperament. I believe it is rooted also in a number of what are, in my judgment at least; relatively **objective** factors in the total Thai situation. I begin with a consideration of domestic factors, then move to foreign factors.

3.1. THAILAND'S INTERNAL ASSETS

As it confronts its future, Thailand possesses a number of internal assets that are imbedded in its ecological situation and sociocultural system. To the proverbial visiting anthropologist from another planet, who is by temperament neither optimistic nor pessimistic, an examination of these assets would suggest that Thailand's chances for achieving a desirable future during the projection period are strong. Among these assets, five stand out:

- a rich natural resource base;
- a satisfactory person-to-land area ratio (2.1);
- a relatively high degree of ethnic and linguistic homogeneity (2.11, 2.12);

- an open and assimilative culture (1.1); and
- a stable and responsive polity (1.2).

These assets make Thailand somewhat more fortunate than some other nations in Southeast Asia, such as Malaysia, Indonesia, and the Philippines—and vastly more fortunate than others, such as Cambodia, Laos, Vietnam, and Myanmar (formerly Burma). Indeed, when one considers the five above-stated factors in the aggregate, in my judgment no other Southeast Asian nation, aside from small but extremely resource-rich Brunei, comes close to being as fortunate as Thailand. Thus, while there are many sorts of highly pessimistic scenarios that one could plausibly conceptualize for most other Southeast Asian nations, such a facile pessimism would, in my judgment, be inappropriate in the Thai case. One could, for example, pessimistically project:

- for Cambodia, food crop failure as a consequence of the fundamental disruption of normally productive irrigation systems by the Khmer Rouge regime; or
- for Malaysia or Indonesia or Myanmar, bloody interethnic conflict of a type that **has** occurred there in recent decades, and plausibly could occur again.

Such undesirable realities have not characterized Thailand within the historical period, and I see no grounds in the present situation on which to base such dire projections for Thailand within the projection period. In sum, I judge Thailand's present internal situation to be fundamentally sound.

3.2. THAILAND'S EXTERNAL DANGERS

The objective nature of Thailand's external situation is,

'In more technical parlance (Appendix, Section A.3), in my judgment there are a number of pessimistic projections one could make for certain other Southeast Asian nations which would not be dystopian (below zero on the 0-to-100 scale of possible projections) but which would be dystopian for Thailand.

unfortunately, quite another story. At bottom, my position is that while both our internal and external situations are characterized by both opportunities and risks, the former is tilted toward opportunities, while the latter is tilted toward risks. This is true not just because, as is obvious, our polity is more in control of its internal opportunity/ risk situation, than its external. It is true also because the objective nature of our internal situation is more favorable, in terms of the ratio of opportunities to risks. To take a simple example: with respect to basic food supply, not only is it true that our polity can control the situation (in terms of providing irrigation facilities, incentives to farmers, farm-to-market infrastructure, family planning programs, etc.)—but it is also true that the situation itself is inherently favorable (because we have enough good soil to feed our people).

In viewing our external situation, by contrast, we are disadvantaged on both counts. Not only is the objective situation in some respects less favorable (e.g., certain goods and services we need to import are scarce and expensive), but our polity has far less capability of regulating or even influencing the situation so as to maximize benefits and opportunities, and minimize costs and risks. It is simply a fact of life, in an increasingly interdependent world, that there are real problems affecting Thailand which are almost totally beyond its control. Thailand is, after all, a small and relatively weak nation. It is thus not difficult to imagine possible changes in our external situation that could serve to ground a truly painful Pessimistic Scenario.

While a Thai leader should resolutely resist the temptation to "cop out" of taking decisive and strong action of the type that could solve a national problem by blaming the problem on "foreign powers," nonetheless it is true that in many ways our country is almost totally at the mercy of events and processes outside Thailand. Five possible sources of major difficulty should be mentioned.

• Competition and conflict among the world's military and economic powers, especially the U.S., the Soviet Union, China,

Japan, and the Middle East, could produce disharmony serious enough to threaten Thailand profoundly. Moreover, if Thai leaders sense a clear and present danger to the nation's independence, they are likely to involve the nation in defensive alliances. While such alliances probably would have a positive effect on national security, past experience suggests strongly that they would also probably produce serious political, economic, or cultural side-effects that would constrain the Thai polity's freedom and capacity to pursue the kind of development most suitable to meet Thai needs as determined by Thais.

- The world price of commodities we must import, especially oil, could rise disastrously. For example, the 1990 UN naval blockade of Iraq, plus other possible subsequent disruptions in the Persian Gulf, could severely limit the oil flow from the Middle East to other parts of the world.
- The world price of raw commodities (such as tapioca) and finished products (such as ready-to-wear clothing) that Thailand exports, could fall disastrously. Countries constituting major markets for such products could restrict their markets by various tariff and quota devices.²
- The value of the baht internationally could fluctuate unfavorably.
- There could be a drastic increase in the already burdensome number of political refugees and displaced persons. Thailand would need to care for, accompanied by little genuine assistance from other nations.³

For reasons such as the above five, when I construct a Pessimistic Scenario I assign great weight to the international politi-

²For example, the new European Economic Community to be established in 1992 will remove tariff barriers within its area, but might, in effect, raise them visa-vis imports from countries like Thailand. Recent experience suggests, for example, that this might be the case with Thailand-produced animal feed which competes with that produced in Europe.

cal and economic situation. And my task is further complicated by the sheer fickleness of this situation. For example, the political pressures to which Thailand must adjust could shift abruptly if there were:

- a sudden change of government in some world power;
- a stock market crash in some distant financial center;
- a sudden rise in energy prices; or
- a bumper crop of a primary commodity in some nation with which Thailand must compete on the international market.

In this Pessimistic Scenario I cannot possibly hope to do full justice to all of these international complexities and vagaries; I will simply deal with them briefly as best I can and try to make my assumptions reasonably clear as I proceed.

3.3. Key Dynamics in the Pessimistic Scenario

With the above external dangers and internal assets in mind, I turn to an outline of the key dynamics of my Pessimistic Scenario.

3.3.1. Demography

Pessimistically, over the projection period our national population will increase at a rate close to the maximum projection provided by experts, and reach about 85 million by A.D. 2020. This will place great burdens on the capacity of our nation to provide the

³In 1989 there were about 120,000 refugees and 250,000 displaced persons from Cambodia, Laos, and Vietnam living in camps along Thailand's northeastern border. Although support from international agencies and foreign governments has been received, and some foreign governments have been reasonably willing to accept some of these refugees as immigrants, the bottom line fact has always been that a considerable administrative burden for looking after these unfortunate folk has fallen on Thailand. If this burden were multiplied several times, it could become a severe constraint on the nation's ability to support development programs for its own people.

economic, social, and educational infrastructure necessary to meet the needs of such a large and young population. The result will be widespread individual frustration and anomie, social dysfunction, and cultural decay.

On similar grounds, pessimistically I project that the efforts of the government to encourage industry in middle-sized cities, and in the countryside, will largely fail. Instead, the already-serious Bangkok situation will be further aggravated, as more and more young people from the countryside flock to the metropolis in desperate search for economic opportunities that do not exist. While considerable new technology will be imported and put in place, less sophisticated people from the countryside will learn the bitter lesson that the new technology most benefits those who already possess sophisticated educational and skill backgrounds appropriate to mastering and using the new tools. So, the gap between affluent and needy will be exacerbated—as will congestion, pollution, and general human degradation. Almost everyone's quality of life will suffer in one way or another.

As the population growth rate vastly outpaces the ability of the economy and polity to provide education and health services, the overall quality of our population will inevitably drop. Exacerbating this process will be an accelerating trend toward better-educated parents having smaller families. The resulting less-educated population will in turn be less trainable for modern technology, and this will adversely affect the nation's ability to attract, adopt, and adapt foreign technology. The result will be lowered productivity, and perhaps even a negative trend in gross national product. Under such circumstances, the "vital surplus"—which facilitates education and research, makes developmental activity possible, and underwrites social experimentation—will be lost, and all these adaptive and enhancing activities will further shrink. Even the best of leaders cannot lead unless they have resources at their disposal, and under this Pessimistic Scenario, such resources will be limited, indeed.

3.3.2. Resources and Environment

An excessive population growth rate will place even greater pressure on Thailand's natural resources and environment than was true in 1988. Irresponsible use of our resources, and abuse of our environment, will further reduce sustainable productivity.

Some elements of the Biotechnical Revolution will reach Thailand, but pessimistically will contribute little toward the solution of the nation's escalating woes. The generally poor economic and leadership situation will permit little truly social use to be made of the Biotechnical Revolution. And even in the exceptional cases where positive use is made of these new tools, the benefits will go largely to the wealthy.

Notable among the looming environmental disasters is the Bangkok subsidence problem. During the Seventies and Eighties, Bangkok was sinking several centimeters each year as a consequence of the over-pumping of its groundwater for industrial and other purposes. Since many parts of Bangkok are only one meter above sea level, it is likely that much of the nation's capital will sink below sea level during the projection period—and indeed, parts of the city already have. Pessimistically, inept and corrupt political leadership will fail adequately to slow down this over-pumping. If, in addition, the world greenhouse effect causes substantial melting of polar ice caps, and a consequent rise in sea level, Bangkok will be flooded for a greater portion of each year—with severe implications for public health, economic efficiency, and general quality of life. Whether our government could safeguard Bangkok by the construction of extensive sea dikes, after the model of the Netherlands, is problematic. The same seems true of other suggested solutions, such as slowing down the Bangkok in-migration rate, or the groundwater pumping rate since these are difficult matters to police.

Bangkok and the entire nation could also be endangered by an

unusual but readily conceivable pattern of unbalanced rainfall, in which:

- unusually **heavy** rains would fall on the Lower Central Plain below the southernmost dam system at Chainat (thus making it impossible to store this water and gradually release it over several months to meet irrigation needs); and
- unusually **light** rains would fall north of Chainat (thus denying farmers there the water they need for established crops). This imbalanced pattern, if repeated several years running, could devastate Thai agriculture and consign some millions of our farmers to destitution. Recent experience suggests that the danger of such an unbalanced pattern is real. And the fact that global climatic conditions have recently been changing quite fundamentally, yet with an ominous unpredictability, do nothing to relieve this pessimistic prospect.

3.3.3. The Vicious Downward Moral Spiral

As more and more consumers compete to share a less and less adequate national economic product, a "big fish eat little fish" mentality will emerge. While our Buddhism will certainly help us to sustain our tolerance, patience, and forbearance, nonetheless many will find it less and less practical to take the Buddhist moral code seriously, and will breach it with increasing frequency.

Buddhist ethical standards will still be nominally invoked, but less and less put into action. This will be a consequence of a tendency that had been building for several decades, in which modern Thai intellectuals more and more came to feel that Buddhism was for the uneducated—in part because they themselves, statistically speaking, had tended more and more to go through life ignorant of Buddhist philosophy and ethics. One reason for this ignorance has been the growing tendency, since at least World War II, for Thai schools and universities to confine their curricula to scientific and professional

subjects, to the detriment of teaching humanistic, ethical, and religious subjects (2.11.1., 6.2.1). Also, there has been a growing tendency for educated Thai males to go through life without becoming monks, thus denying themselves the culturally provided opportunity to study the Dharma systematically.⁴

Not only will Buddhist faith prove unavailing against the forces of self-concern at the national level, but spirit worship, too, will lose much of its former efficacy (2.11.4). Due to the penetration of village society by commercialism and certain forms of social modernization, traditional spirit worship will atrophy. The social control function formerly served by the fact that people were afraid to commit anti-social or criminal acts because they would be going against the wishes of the ghosts (phid phii) will be largely lost, and no alternative means of enforcing morality will emerge to take its place. The result will be an increase in crime and a weakening of social order in the countryside.

3.3.4. Corruption and Its Further Consequences

In such a moral climate, privileged elements in society will strive desperately to protect their privileges, and be prepared to buy the cooperation of whatever politicians and officials can help them

⁴It should be noted in passing that even if most Thais were to learn more about Buddhism and take it more seriously as a guide to behavior, this would by no means totally solve the problem of social order and political responsibility (though it would certainly help). The reason, in my view, is that Buddhism, at least in its prevailing form in Thailand, tends to be centered, to a marked extent, upon the individual, and tends to offer individual rather than societal guidance. I realize that this is a complex analytical matter, but suffice to say here that, historically and culturally, standards for societal propriety and political responsibility have tended to come more from the monarchy, and to some extent the armed forces, than from Buddhism, seen either as a social organization or a cultural system of beliefs and standards.

toward this end. Politicians and officials, for their part, will find it increasingly difficult to be "both expert and ethical" (1.14)—expert, perhaps, but less and less ethical.

This corruption could take the classic, straightforward form of officials selling influence, permits, etc., to privileged private entrepreneurs. It could also take a variety of subtler forms. Pessimistically, Parliament will be studded with members who possess very limited qualifications, and are essentially "hired guns" for narrow constituencies of wealthy business interests. Such parliamentarians will essentially be "for sale," and will serve, not the people, but those interests who have bought them. They will become expert at maneuvers designed to favor their own political cliques, in effect allowing clique insiders to make windfall profits from projects that contribute little directly to true development (such as real estate speculation), while shielding them from the discipline of true free market competition.

Pessimistically, the "mafia"—in and out of Parliament—will seize many new opportunities to use the computer, networking, remote sensing, and similar technologies for their own purposes. This projection is readily grounded; such antisocial use of all sorts of new technology has often occurred in the recent past.

In such a political and moral climate, fewer and fewer key decisions will be made in the interest of our society as a whole. More and more often, those who do not suffer directly will retreat to a "maj pen raj," "couldn't care less," attitude. The public will more and more lose confidence in the political process. They will also lose respect for the bureaucracy, and this in turn will make it harder for the government to find and hold honest, capable, dedicated public servants. And such civil servants of this type as do remain in the service, will find it harder and harder to initiate and carry out effective economic development and environmental protection programs.

As corruption becomes more serious, the government will sometimes attempt to control it be resorting to a variety of highly rigid, red-tape-bound measures. On the whole, however, such measures will result primarily in rendering the bureaucracy so inflexible that it will be unable to respond to rapidly changing conditions, or to secure the best financial arrangements for Thailand in its dealings with foreign markets and technology sources. In such fashion, anti-corruption measures will often boomerang, creating the very kind of irresponsibility they were designed to correct.

Poor government leadership, planning, and administration will in turn lead to other inadequacies. For example, the licensing of oil exploration and drilling rights to foreign concerns will be both ineptly and corruptly handled, leading to a decrease in the finding of our petrochemical resources; or a decrease in the fruits of our petrochemical resources that actually are socially shared among all the Thai people; or both.

Lack of cheap energy will discourage new foreign investments in development-relevant projects, and in turn cause a lag in the industrialization process.

Industrialization will fail to create the vast number of new jobs needed, partly because too much of Thailand's limited savings will be invested in an overabundance of luxury highrise buildings, golf courses, and shopping centers—all of which will further fan the flames of mindless consumerism. In general, the economy will falter, and there will be less of a gross national product to tax and redistribute, even if the political will to redistribute were existent—which it will not be. For such reasons, the gap between rich and poor, already wide in 1988, will grow ever wider.

The desperately poor, including some bilked of their land by real estate developers, will increasingly seek employment in a well-established non-industrial field, namely tourism. To a considerable extent these people, unable to sell their manufacturing labor, will instead sell either their dignity or their bodies, or both. In a too-real sense, Thailand will become a nation of low-income service workers, pimps, and prostitutes, both female and male. In time, this new

situation will bring about a general diminution of national self-esteem.

National anomie will be accompanied and abetted by a sharp increase in the use of heavy drugs. Through both sexual and needle contact, an AIDS epidemic of gigantic proportions will develop, just at a time when the government's health budget will have become dangerously thin.

To sum up: pessimistically, there will be an interactive downward spiral, which will link demographic hypergrowth, resource depletion, and environmental abuse, on the one hand, with leadership and management that are deficient in both expertise and ethics. As favoritism, corruption, and waste eat away at our nation's surplus available for social welfare and developmental advancement, in due course these phenomena will provoke a sharp and abrupt political response.

3.4. THE POLITICAL RESPONSE

Pessimistically, the political response to this vicious downward spiral will take the form of an ever more desperate population waiting for the "man on a white horse," the hero who can create order out of chaos. The result will be one or more coups d'etat, and the assumption of power by an authoritarian ruler, either of the far left or the far right. A far left ruler would enforce a degree of authoritarianism that would make virtually the entire Thai nation, with its deep cultural preference for individual autonomy, exceedingly unhappy. A far right ruler would probably handle problems roughly as Ferdinand Marcos did in the Philippines, with the net result that both freedom and economic progress would sooner or later be set back drastically.

Regardless of political stripe, such a new leader would pose the universal dilemma of authoritarianism. If he remained in power too short a time, he could not be effective. If he remained too long, his regime would almost certainly become more and more corrupt and less and less effective.

There are, however, limits to my ability to ground this Pessimistic Scenario. Given the Thai system of governmental stability outlined in 1.2, I consider it to be unrealistic to project that a highly authoritarian, irresponsible ruler could hold onto power for decades. Such an outcome would be dystopian (A.4.2). Sooner or later, events and processes will take a positive turn, as the forces of equilibrium—"Phra Sajaam Theewaathiraad"—restore a more moderate regime. Supporting this bounce-back process will be the nation's well-developed human resources. However, these resources might not become effective enough, soon enough, to prevent the great downward moral spiral from negating many of the highly positive development processes of the Seventies and Eighties.

3.5. CONCLUDING REMARKS

To summarize: in my view the key imponderables in a pessimistic view of the Thai future are international in one sense or another: natural or political-economic. Thai climatic conditions could shift for several years running, as a consequence of the fate of natural events, or of our abuse of nature, or both. Or, the Thai politico-economic situation could be placed under crippling pressure by unfortunate shifts in the relations among the great powers.

On the domestic side, in my view Thailand is inherently less subject to pessimistic projection, due to its wealth of natural resources and the increasingly strong development of its human resources. If, however, through tempocentric leadership and antisocial behavior we mismanage our economy, squander our resources,

For example, in 1990 elementary education was almost universal, and some 40% of age-eligible youngsters were in secondary school, while close to a million Thai adolsescents and adults were enrolled in one university or another.

and abuse our environment, this situation could change—and in time undermine our ability to create a situation where everyone will be able to "eat sufficiently, live sufficiently."

The "bottom line" of the Pessimistic Scenario, then, is that, given reasonably good luck in Thailand's external situation, there is solid grounding for an overall projection of general success in the middle-range future. In other words, there is a good chance that the Optimistic Scenario summarized in Chapter Two will end up being considerably closer to actual reality, as the future becomes the present—than will the Pessimistic Scenario just presented. To explore this matter further, I proceed to the Most Probable Scenario.

CHAPTER FOUR:

THE MOST PROBABLE SCENARIO

This Most Probable Scenario is fundamentally different from the previous two, in that my task is strictly limited to forecasting outcomes that I consider to be **most** probable—regardless of whether I would regard those outcomes as desirable or undesirable. I am asked to suspend my own values, and simply imagine that I am betting my own money on a particular scenario to come true.

After due reflection, I must say that my Most Probable Scenario turns out to be fairly similar to my Optimistic Scenario, though it does fall short of the latter in some respects. I feel confident that at least 60 to 70 percent of the projections in my Optimistic Scenario will become reality by the horizon date. Although such a statement is necessarily intuitive, I do believe that my Optimistic Scenario is reasonably sound in a scientific and technological sense, and adequately rooted in extant reality or in solid, demonstrable trends.

Because my Most Probable Scenario closely resembles my Optimistic, this chapter need not be long. I forecast that the population of Thailand in A.D. 2020 will most probably be between 75 and 85 million people, with the percentage of Thais living in the rural areas reduced to 60 percent, or perhaps 50. In general, the Thai people will probably be living in a manner fairly similar to that portrayed in Chapter Two. The nation will enjoy a greatly improved infrastructure of transportation and communication facilities, and this will in turn promote a more effective outreach of commercial, technical, and social welfare services even to the most remote parts of the nation. Primary health care will be available even in villages distant from large cities, as will elementary and secondary education opportunities

Because of a great expansion of the mass media and widespread use of the new information technology, the gap between rural and urban Thais, in terms of overall sophistication and lifestyle, will have become much smaller, and less serious as an obstacle to further overall national development. While regional dialects will persist, along with certain local customs, in general we will all be "Thais together" to a greater extent, culturally speaking, than was true in 1990.

How will all this come about? I will summarize my answer under the rubrics of Thailand's external context, internal situation, and political leadership.

4.1. EXTERNAL CONTEXT

In 3.2 I viewed in the pessimistic mode the complex and changeable international context with which Thailand must deal as it attempts to survive and develop. Viewing the same phenomena in the "most probable" mode, however, I take the position that on the whole this international context will be at least as favorable over the next 30 years as it was during the past 30—and perhaps considerably more so. A key reason for this lies in the reforms so far accomplished since Soviet President Gorbachev came to power. Under Gorbachev, in just a few years Soviet relations with the rest of the world have improved dramatically, and the objective threat of Soviet expansionism has greatly decreased. It no longer seems at all wishful to forecast a lengthy period of peace and cooperation among the world's great powers.

I grant that I might here be suffering from "recentism"—that is, attributing too-great significance to very recent events. I might be failing to consider adequately the possibility that there could be a change in Soviet leadership, perhaps sudden and profound, which could result in a reversal of some of the gains in world stability made under Gorbachev. However, one must also recognize that at least

some of these recent positive changes would be likely to survive, with or without Gorbachev—if only because many Soviet leaders and citizens would have acquired a stake in them, while others would simply recognize that reversal would not serve the desperate Soviet need for technological and economic modernization.

Another extremely solid development will be the 1992 emergence of the European Community. This new politico-economic unit will constitute the world's largest market, and its most populous industrialized political unit. It will be a new prime actor on the world stage, an actor committed to democratic values and peaceful coexistence.

At this writing, prospects for some sort of peace in the Indochina area seem to be improving. This permits at least some hope for a considerable reduction in the heavy economic and political burden that the Thai state currently bears in helping to care for almost half a million refugees and displaced persons from Cambodia, Laos, and Vietnam. Most probably some of these people will be resettled in various Asian and Western nations; others will return to their homelands; and a small minority will find niches in the Thai economy and society as permanent residents earning legitimate livelihoods.

I find it more difficult to lay out a Most Probable Scenario for energy, but feel reasonably comfortable with the notion that the world has fifty years of economically recoverable petroleum resources left (2.3). That gives world science and technology a considerable period of grace in which to develop workable substitutes.

Related to the energy situation are the crucial monetary and debt problems that the world currently faces. Whether these problems will be wisely and humanely handled is an immensely complex question, but certainly the above-noted prospect of overall stable peace among the great powers offers reasonable grounds for expecting that such problems will not get dangerously out of hand, at least insofar as Thailand is directly concerned.

4.2. Internal Situation

As stated in 3.1, I judge the "internal assets" possessed by Thailand to be favorable indeed. I consider the momentum toward true development that Thai society generated during the Sixties, Seventies, and Eighties to be powerful enough to overcome a great deal of political and social inertia.

The capacity of the polity to perform major proactive planning will improve substantially. The Eastern Seaboard Development Project will most probably be successful in reaching its major goals, and will set the tone for other regional projects, such as the Southern Seaboard Project and the Greening of the Northeast Project.

The Northeast will, however, remain the region in greatest need of concerted development effort. This effort will be substantially supported by the construction of modern deepwater port facilities at Laem Chabang and Map Ta Phut on the Eastern Seaboard. Transportation by already-existing highways, and by a new railroad route, will avoid the congestion and delay of transiting through Bangkok, and connect directly with the Northeast. Despite such efforts, however, the Northeast will almost certainly remain the least affluent region in the nation.

On the ecological side, my Most Probable Scenario is sharply different and dark indeed. Already we have drastically overcut our forest cover and brought about unnecessary erosion and soil destruction—damage that will, even assuming our very best efforts, take long years just to bring to a stop, let alone to repair. Indeed, much of this damage will prove to be beyond repair—with pervasively negative consequences in terms of resources, environment, productivity, and quality of life.

4.3. POLITICAL LEADERSHIP

Crucial to the entire process of development is the quality of

political leadership that will be available to Thailand. I forecast that this quality will most probably improve, perhaps even dramatically. I ground this forecast basically on the reality that our electorate in 1988 was vastly more sophisticated than thirty years earlier, as a consequence of the fact that millions of Thais had been educated at the secondary level, and hundreds of thousands at the tertiary. Since this educational expansion will doubtless continue, a better functioning electorate seems highly likely, one that will demand more responsible political leadership at the local, provincial, and national levels—as well as more direct participation by the citizenry.

This new national leadership will be more professional and imaginative. Corruption will decline, as more and more leaders assert a new ethic defining such behavior as simply unacceptable. In recent years it has become increasingly evident that more and more of the nation's top governmental administrators are essentially incorruptible—though sometimes their subordinates have partaken of corruption, often perhaps because of low salary levels. Most probably the polity will gradually provide more realistic salaries for government officials, though this will, of course, depend in part on the general level of economic prosperity. However, in any case it is not likely that

'A general methodological point is worth making here. In Textor's experience to date with the application of Ethnographic Futures Research to various nations and systems, political leadership has generally proven to be a crucial variable. In all polities, whether democratic or authoritarian, there is a special "luck of the draw" aspect to political leadership—for example, as between whether the system somehow gets a Chernenkov or a Gorbachev, a Kennedy or a Nixon, etc. This "luck of the draw" consideration is relevant to the distinction between one's Most Probable Scenario, and one's Optimistic or Pessimistic Scenario. In developing one's Optimistic Scenario, one is quite free to imagine that the luck of the draw produces political leadership of a type that one would consider highly desirable; in one's Pessimistic, highly undesirable. In one's Most Probable Scenario, by contrast, one does not have this freedom. Rather, one simply articulates one's most plausible expectation, taking into account all the contextual, demographic, structural, cultural, and situational factors that seem important.

government officials will achieve anything like full parity with comparably qualified persons in the private sector, and for this reason alone, corruption will remain a serious problem even at the end of the forecasting period.

The government's basic approach to the problems of growth without excessive corruption will be to progressively de-emphasize the government's role as regulator of the economy, in part out of a conviction that attempts to regulate the economy typically tempt some of the officials who administer the regulations to enrich themselves in the process.

This leaves, of course, the question of whether drastically reduced government involvement in the economy will give private interests a greater opportunity to take unfair advantage of their workers and the consuming public—and whether they will seize this opportunity or exercise humane restraint and reasonable responsibility. In this Most Probable Scenario, I am forecasting that a national political consensus will steadily coalesce, which will enable an increasingly vigilant media community, and an alert public opinion, to handle this general problem in an adequate way. While certainly some will disagree, I would suggest that this forecast takes on considerable plausibility when one considers the rapid maturation in recent years of the Thai press and television professions, which have been producing more and more serious news coverage for a rapidly growing audience of well educated readers and viewers. And recent experience does indeed suggest that public opinion has been growing more effective politically, at an encouraging rate.

This brings to an end my brief Most Probable Scenario. In the chapter that follows, a somewhat different kind of probable-realizable scenario is presented.

CHAPTER FIVE:

PAST ACCOMPLISHMENTS AND POSSIDICTIONS FOR THE FUTURE

Having finished with my Most Probable Scenario, I move now to a fourth scenario which is not normally a part of the EFR approach (A.5). This scenario is one that I consider less than the most probable, but still reasonably probable of realization. It consists of nine "possidictions." The term "possidiction" is sometimes used by futures scholars to refer to a conditional prediction of the possible. More specifically, in this chapter a possidiction is a statement as to a future process that I consider to be definitely desirable—typically more desirable than found in my Most Probable Scenario—and to have a reasonable chance of realization, provided:

- that there are appropriate national policies, and
- that there is national political leadership with the will and skill to carry out those policies.

In this chapter I will relate my possidictions to various key ideas that have undergirded Thailand's national plans since the Kingdom began systematic planning in 1961. Since then, except for the First Plan of 1961-66, the basic planning period has been five years, and at this writing the nation is in the midst of its sixth plan and in the process of formulating its seventh.¹

¹The First National Plan was issued under the administration of Prime Minister Sarit Thanarat in 1961. It was divided into two sub-plans, 1961-63, and 1964-66. The Second Plan spanned the years 1967-71, the Third, 1972-76, and so on until the present Sixth Plan, 1987-91.

The first two or three plans concentrated heavily upon the improvement of basic physical infrastructure of transportation, communication, etc., and on economic development. Some attention was also directed toward human resources development, including the establishment of the first upcountry (out of Bangkok) universities.

This chapter will not be organized in terms of sociocultural domains, as were the previous three. Instead, I will phrase my possidictions in terms of nine key themes, each of which cuts across several domains.

I consider each of these themes to be of fundamental importance to the future of our country. So do other planners and members of what may be termed our "national planning subculture." I define this subculture as a set of more or less coherent standards concerning the true, the valid, and the good, that are generally shared among those experts and intellectuals who have participated in the process of national planning in one way or another, or else have taken a deep and abiding interest in it. I have been an active member of this planning subculture for thirty years, during which I have participated in countless discussions with my planning colleagues. I have thus observed the formation of this subculture, and shared in shaping it.

The order in which I present these nine themes is roughly chronological and processual. It generally proceeds from themes that are more clearly formed and widely shared within the planning subculture to those less so, and from those that have been more thoroughly realized in Thai society, to those less so. Thus, to anticipate, the ninth theme is not yet even clearly shaped, much less shared, within the subculture—and even less has it been realized in society. Yet even the ninth theme, I would argue, is "in the air" within the subculture, and worthy of our attention.

The first four themes have been articulated with great clarity by Dr. Snoh Unakul (Snoh 1988). Dr. Snoh was for many years Secretary-General of the National Economic and Social Development Board, and in this capacity has earned the gratitude of all Thais for his leadership in the macro-planning of our national development. The remaining five themes are those that reflect my experience within the subculture, and that I regard as "emerging"—that is, apparently in the process of being shaped and shared in that subculture, with the prospect of becoming realized in Thai society at large, sooner or later.

The selection and formulation of these "emerging" themes—indeed, the very judgment that they are emerging—is, of course, my personal responsibility. I have no doubt that other members of the planning subculture might have rendered such selections and formulations somewhat differently, but at the same time feel confident that most of them will regard my selections and formulations as reasonable.

5.1. ECONOMIC GROWTH WITH STABILITY

The first four themes have to do with processes of economic growth and various associated attributes, namely: stability, diversity, participation, and decentralization. This focal emphasis on growth is appropriate, because since the Sixties Thailand has been, economically speaking, one of the great "success stories" of the world. Growth has been substantial and steady. Even during the oil-pinched years of the early Eighties, when some countries actually experienced negative growth, the lowest yearly growth rate for Thailand (in constant baht terms) was a respectable 3.8%. In 1988, this figure reached a phenomenal 11%.

One reason why our economic growth pattern has been stable is that our society as a **whole** has been stable. There has been a benign cycle: a general climate of sociopolitical stability has increased investors' confidence, which in turn has led to greater investment, which has stabilized the economic growth pattern, which has further contributed to sociopolitical stability—and so on.

My first possidiction is simply that our polity will continue to preserve stable economic growth, with overall social stability. This will not always be easy, and implies that from time to time our polity must make tough policy decisions to keep the national economy from overheating or overcooling.²

²An example of the kind of tough decision our polity is capable of making occurred in 1981, when our Deputy Minister of Finance took the politically unpopular but highly statesmanlike decision to devalue the baht, so as to increase exports and discourage excessive imports.

5.2. ECONOMIC GROWTH WITH DIVERSITY

Related to stability is the theme of diversity. The Thai planning subculture is deeply aware of the historic and tragic lesson of many Third World nations that have become overly dependent on just one or two export crops. All else equal, it is best for Thailand to produce a diversity of export products (including some agricultural commodities to which we add value through in-country processing)—and to sell these products to a diversity of markets both domestic and foreign. This policy has in fact been implemented, and the nation has been transformed from one that thirty years ago depended heavily on the export of rice, rubber, and teak—to one that today exports a rich variety of crops, including tapioca, sugar, and fruits. We have also diversified into the secondary sector, and our exports now include a wide variety of manufactures, including readvto-wear clothing and electronic devices. Our diversification has also extended into the tertiary or service sector, to the point where today our greatest single source of foreign exchange is tourism (2.6).

Complementing all this, we have taken steps to diversify our sources of needed imports. Twenty years ago we depended for petroleum imports largely on just one country. Since then we have diversified to several.

My second possidiction is that by means of appropriate government policies Thailand will continue to pursue and implement this policy of favoring greater diversity in many areas, including exports and imports.

5.3. ECONOMIC GROWTH WITH PARTICIPATION

Prior to the Sixties, and to some degree even through the Seventies, the general tradition of innovation in Thailand was characterized by a quite strict separation, at least in theory, between government and private enterprise. As the government has moved to

promote a more modern economy, the complexities inherent in the modernizing process have made increasingly clear that cooperation between government and the private sector is essential if problems and opportunities are to be dealt with in adequate and timely fashion. Indeed, in the Eighties it sometimes occurred that even a Prime Minister would be seen visiting a bank to discuss national problems with financiers—something quite unheard of a few decades earlier. Of course, to avoid both the fact and the suspicion of corruption, such government-private cooperation must be transparent to the public—and in fact progress has also been made in this direction.

My third possidiction is that there will be a continuation and expansion of this new spirit of encouraging more active participation by non-governmental groups in important development processes.

5.4. ECONOMIC GROWTH WITH DECENTRALIZATION

Bangkok is one of the classic "primate" cities of the world. Its metropolitan area, with some seven million inhabitants, is well over forty times as populous as that of our second city of Chiang Mai. While this phenomenon is understandable in historic terms, it is in many respects highly unsuitable to today's conditions. Many of Thailand's most important natural and human resources are to be found far from Bangkok. If these resources are to be fully harnessed, then some considerable degree of decentralization of the nation's growing urban population must be pursued.

Decentralization has a number of additional advantages. It will relieve pressure on an enormously overcrowded and congested primate city, with obvious ecological dividends. Moreover, decentralization of population (and especially of the better-educated population) is likely to lead also, sooner or later, to a measure of decentralization of political power and authority, with more scope for middle-sized cities and upcountry regions to take developmental initiatives in their own way.

Existing government policy does in fact favor decentralization. The Eastern Seaboard Project along the Gulf of Thailand shore east of Bangkok, and the Southern Seaboard Project in Peninsular Thailand, are designed to promote decentralization of manufacturing and commerce. Government policy has also identified a half dozen cities for promotion as regional centers of industrialization and development.

To date, these policies have met with mixed success. However, the reasoning behind these policies is so sound that I do not hesitate to possidict that they will be implemented by appropriate government policies and resource allocations, and will produce solid results through time, especially as more and more genuine local initiative emerges.

5.5. Socio-Economic Equity

So much for the four well-established thematic orientations so clearly articulated by Dr. Snoh. Is it appropriate to try to go further? Members of the planning subculture, including Dr. Snoh, tend to believe that it is, and I agree. It is now time to go beyond our emphasis on "economic growth with...", and examine other themes that are of clear relevance to the overall well-being of the Thai people. This I shall attempt to do, in the form of five additional possidictions for the next fifteen to thirty years.

I begin with socio-economic equity. On the dimension of income distribution, few cross-national scholars would characterize Thailand as highly egalitarian. The gap between rich and poor is relatively wide (1.5). Indeed, during recent years of rapid growth this gap has actually been growing wider—although it is also true that the percentage of Thais living in abject poverty has been getting smaller.

Thai industrial wages are low by world standards. A young Thai man or woman from the countryside is quite willing to work a

long day at unpleasant, irksome labor for about three dollars. This fact doubtless helps attract foreign investors who might otherwise take their money elsewhere. And such investors are doubtless further attracted by other features of the Thai situation, such as that:

- the government-mandated minimum wage is very low by world standards;
- labor unions in the private sector are generally not militant or effective; and
- the overall culture places a strong value upon the avoidance of confrontation (2.12.4).

As the nation matures educationally, however, I regard it as virtually inevitable that more and more Thais will come to consider "the gap" as morally unacceptable—and hence, ultimately, politically unacceptable as well. Unless reforms are undertaken in time, such dissatisfaction could result in the serious destabilization of our society, to the severe detriment of our overall efforts at modernization and development.

What reforms would be desirable? Possible? There are, of course, many ways to promote socio-economic equity, of which raising the legal minimum wage is only one. In theory, the polity can also use its power to tax income or wealth. As indicated in 2.9.1, experience to date shows that it is politically possible to tax income, but **not** politically possible to tax accumulated wealth—e.g., through an effective progressive inheritance tax.

Regardless of the way government revenue is obtained, another major avenue toward greater socio-economic equity is through redistribution, in the form of the government's providing the people with various needed services in the health, education, and welfare fields. Here the prospects for Thailand are quite bright, because the provision of such services is in many ways consistent with long-standing Thai Buddhist traditions.

My possidiction in this area is that the nation will continue with progressive income taxation and liberal redistribution, and that

fairer wages for workers will gradually become a reality, through processes both of specific legislation and broad cultural evolution.

5.6. DEVELOPMENT, EDUCATION, AND TRAINING

It is clearly recognized by all educated Thais that education and training are essential keys to technological modernization and overall sociocultural development, and as such have a high claim on the national budget. And within the planning subculture it is clearly recognized that this education and training must be oriented much more toward a limited number of carefully chosen professional and technical specialties than has traditionally been the case. My possidiction is that this will occur. Detailed commentary appears in 6.2.

5.7. DEVELOPMENT AND THE NEW TECHNOLOGIES

Within the planning subculture there is growing consensus that the state must increasingly encourage the types of technology that will most effectively permit the harnessing of our natural resources, and otherwise keep us competitive in world markets (2.2). Our macro-planners must carefully strategize so as to take fullest possible advantage of the new "revolutionary" technologies now breaking upon the world. My possidiction is that there are three such revolutionary areas that will receive highest priority in our national educational and scientific budgets: biotechnology, materials science, and microelectronics. In all three areas we have already begun to train Thais in the relevant scientific foundation fields and in specific technological applications. It is highly likely that we will expand these initiatives, with a view to relating these revolutionary technologies to Thai needs and Thai resources. While it is not difficult to possidict that our government will assign high priorities to the development of techniques in these three areas, it is exceedingly difficult to possidict just what the longer-term results of such investment will be, due to the very nature of the technologies themselves. In any case, it is worth listing what a few of these results could possibly look like, in broadest outline.

- Biotechnology: Thailand has intensive sunlight and a warm, wet climate. It is botanically rich and genetically diverse. Under such conditions, it seems reasonable to imagine that there might well be great potential in our country for the development of new biotechnical processes, and of whole new species, that will help provide the Thai people with more ample food, clothing, gems and jewelry, medicine, and shelter—in environmentally sound ways. These new processes and species might also provide the basis for major expansions in our export trade.
- Materials Science: This flourishing field could yield new technologies that would take advantage of Thai natural resources, such as petrochemicals, to help meet our needs. The result could be new ceramic or polymer materials that would raise our standard of consumption and contribute to our export competitiveness. We might, for example, develop new building materials to replace wood, which would be an important contribution, given the fact that we have grievously over-cut our forests.
- Microelectronics: This area cuts across the above two areas, and indeed all science and technology, since most types of research and development today are impossible without the use of computers, and since industrial production systems are increasingly dependent upon microelectronics for tool activation, accurate sensing, quality control, etc. There are in Thailand today hundreds of flourishing microelectronic firms of one sort or another, and I anticipate that this growth trend will continue.

5.8. DEVELOPMENT IN HARMONY WITH THE ENVIRONMENT

Within the planning subculture the consensus has now been formed that there can be no **true** development **except** in harmony

with the environment (1.3). A poignant example of the problem is that it takes only a few weeks to clear-cut a forest—but many, many years to change a political culture to the point where destructive clear-cutting will be made illegal, and more years before culprits are consistently punished for their crimes against our shared heritage. In general, our society has been far too slow in realizing just how seriously we have been plundering our resource base, and destroying the capacity of our biosphere to regenerate itself.

My possidiction in this respect is that the general Thai culture will catch up with the planning subculture fairly quickly, as the result of:

- the increasing generality and visibility of environmental destruction—as when, in late 1988, scores of village people in southern Thailand perished in mudslides that were a direct and obvious consequence of the overcutting of hillside forests by greedy businessmen;
 - greatly increased public education; and
- much greater responsibility on the part of the news media, which have the capacity of making environmental problems visible to the public.

Already, some appropriate environmental protection laws have been passed, and some success in executing them has been achieved. In recent years, for example, countless new factories have sprung up, and especially the larger among them have been obeying these laws.

My possidiction is that this process will expand with each passing year. I am mindful, though, that in all probability the process will still be a painful one. Too often, crops will be lost; soil destroyed; lives snuffed out. Too often, around the world, we observe the cruel irony that it is **only** when highly visible and dramatic suffering takes place, that a polity will move quickly enough to save a situation from total disaster.

5.9. DEVELOPMENT IN HARMONY WITH CULTURE AND ETHICS

Compared with the foregoing eight themes, this ninth one is the least clearly formed in the planning subculture, the most controversial among its members, and the farthest from actual realization in Thai social life. Nonetheless, I include it here, if only because it deals with a matter about which I have considerable concern, namely Thailand's achieving both modernization and development. The first can be achieved without any close harmonization of new technoeconomic mechanisms with our overall system of values and ethics. The second cannot. That is, in my lexicon, true "development" implies that a new situation be realized which, both overall and in its major individual features, is congruent with the way our people conceive and define the good life. I grant that every modernizing nation finds it necessary in some cases to compromise some of its values in various ways in order to build infrastructure and achieve growth. My possidiction in the case of Thailand, however, is that these compromises will be relatively minor, temporary, and subject to later adjustment so as to achieve harmony with value and ethical standards that are basic to the culture at that point in time.

Our national population is, of course, overwhelmingly Buddhist—even though important minorities espouse other faiths. Our political culture has thus been deeply influenced by Buddhist standards. The standards we use in evaluating our progress toward true development will thus tend to be consistent with Buddhist standards.

I heartily endorse the notion that we should seek to apply Buddhist standards, appropriately adapted, to some of the key questions that every student of development must ask:

- Development for whom?
- Who benefits?
- Who loses?
- In what terms?

An example is seen in the Buddhist principle of the "Middle Path." Buddhism stresses moderation in all things—and the avoidance of undue attachment, especially to that which is non-essential. For more than 2500 years Buddhist teachings have specified "the four" basic needs (padcaj sii): food, clothing, medicine, and shelter. If one adds education and a few other items, one has a list of basic needs that will permit "sufficiency for all" (1.4).

I should add that I have no objection to development providing luxury for some, **after** it provides necessities for all. I recognize that a desire for some luxuries is a long standing element in the Thai national economic incentive system.

My final possidiction, nonetheless, is that as modernization and growth proceed, as our educational and communicational institutions mature, and as our political culture evolves, there will be an ever greater tendency for those modernizational activities that transgress our ethics and morals to be called into question, and to be rectified and adjusted to better fit our culture. In short, sheer modernization will gradually yield to more and more true development.

This process will require good leadership, which in some cases might be provided by leaders directly associated with formal Buddhism. More likely, though, it will be provided by activist citizens who hold no formal religious status, but are simply acting on the basis of deeply held beliefs and ethical standards rooted in our Buddhist tradition, and applied to modern circumstances and problems (2.11.2).

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This completes my list of nine possidictions. I believe that, with good leadership characterized by political will and skill, Thailand stands a good chance of making these possidictions part of reality as the future becomes the present. We can build our national and cultural future in a way that provides an abundant, free, and fair

life for all Thais. Such a future is definitely worthy of our best efforts today.

In the next and final chapter, I will identify three policy strategies that I consider to be of the **highest** priority in Thailand's efforts to realize these nine possidictions, and otherwise to secure its best possible future.

CHAPTER SIX:

THREE TOP POLICY PRIORITIES

In the previous four chapters I have presented to you scenarios respectively embodying:

- what I hope will happen;
- what I fear might happen;
- what I consider most likely to happen; and
- what I believe can be **made** to happen through leaders with commitment and skill.

In this final chapter, I want to leave you with just three broad priority recommendations for national policy at this point in our history, recommendations that will, I believe, significantly help us realize the best possible future for all the Thai people. These recommendations have been developed through thirty years of involvement in Thai planning and development, and brought into perspective through the EFR interview experience. In briefest form, the three recommendations are:

- a basic stance of **attacking** challenges rather than merely responding to problems;
- an approach to developing crucially needed human resources; and
- a selective expansion of the role of Thailand internationally.

6.1. ACTIVELY ATTACKING CHALLENGES AND PROBLEMS AT THEIR ROOTS

We as a nation and a government have come a long way since 1960. We have learned how to macro-plan our national economic development, and have created a substantial pool of human resources capable of successful performance in the modern sector. Many of our plans have been implemented, and the results woven into the fabric of our national culture. The process has hardly been painless, but the net effects have certainly been positive. Given the fact that we have learned and grown so much during the last thirty years, it seems reasonable to believe that we can do at least as well during next thirty—and perhaps much better.

To pick up on a theme I introduced in Section 1.13: it is understandable that much of the early work of our planners had a certain **reactive** quality: problems **arose** first, and then we would search for ways to deal with them. Or perhaps we in fact anticipated a problem, but our plan dealt only with how to **respond** to it, not how to **attack** it at its roots. Though our Buddhist religion places great emphasis on getting to the roots of human problems, in our national planning we have often not done so, but have dealt simply with symptoms.

I believe the time has now come for us to fundamentally change our approach, and to concentrate our resources on attacking the roots of our problems. We must move steadily away from this older reactive/ responding stance, toward a new **pro**active/ attacking one. Instead of anticipating problems in order to plan a response that will serve as a **palliative**, we must anticipate problems in order to plan a response that leads to a sound **solution**. We must resist the temptation, which is often politically easy, to deal with mere symptoms, and instead deal with root causes.

In using the attack approach, we first assess the context of Thai development, the resources available, and the structure of available opportunities. We ask ourselves where our strongest assets lie among our total resources—physical and sociocultural. These assets are then deployed in development projects in such as way as to attack problems definitively and achieve benefits for all the Thai people. As we do so, though, we must keep in mind the need for maintaining harmony with the totality of our culture and our environ-

ment. Further, in pursuing benefits for ourselves, we would do well to take seriously the Buddhist injunction against excessive egoism, and take into account the well-being of other nations and peoples besides our own.

This problem of excessive egoism is by no means minor, as it is often the case that individuals of a problem-attacking temperament are likely also to be of an egoistic temperament. Examples are sometimes seen in cases where foreign governments or corporations do have proactive/ attacking stances, and deal with Thai government agencies or corporations that do not. The result is that the Thai side, unless it is extremely careful, will be unfairly exploited. Or, to take a domestic example, it might happen that a Thai central government agency proactively attacks a problem by initiating a certain project in a certain province or district, without consulting the local people, and without any inclination or system to monitor their reactions to the project through time. Here again, the result could be that people on the side lacking a proactive/ attack stance—i.e., some local residents—could end up being exploited.

In other words, where one side of a relationship is oriented toward reaction and responding, and the other side toward proaction and attacking, the latter side will often have a considerable advantage. The outcome of such a relationship is likely to be exploitation in some form or other, and in any case will not be "developmental"—for true development, by my definition, always allows and encourages participation by all parties concerned (1.11). Development is, after all, a process of learning and evolving in which all parties experience improvement in their well-being—as they define that well-being.¹

Specific areas where the proactive/ attacking approach is likely to produce excellent results over the next generation of time include these:

• Fundamental development of agriculture, through the use of new biogenetic technologies, as well as new methods of cultivation, processing, and marketing.

- Development of Thai factories producing a diverse range of products that will be in steady demand in both domestic and overseas markets.
- Design and implementation of creative and truly proactive programs of education and human resources development, which will equip the Thai people to deal with the major anticipatable problems and challenges of the future (6.2).
- Development of educational and environmental tourism, capitalizing on the Thai people's natural friendliness and openness to outsiders. Thailand has the opportunity to pioneer in new ways of intercultural learning, involving direct person-to-person contact and guided experiential learning situations (6.3).

'A clear example of the proactive/ attacking stance is seen in an initiative taken by Chatichai Chunhawan shortly after he became Prime Minister in 1988. He took note of the fact that portions of Myanmar, Laos, and Cambodia had become relatively peaceful but remained seriously undeveloped, especially after many years of domestic warfare and unrest. He conceived of the idea of converting battlefields into marketplaces, and actively encouraged Thai businessmen to become involved commercially, where possible, in each of these countries—in new and energetic ways.

Although this initiative is an example of the proactive/ attacking stance, whether the policy will end up producing results that could be characterized as "true development" is quite a different question. The answer will depend on a number of factors, such as:

- whether the relevant decision-makers on the Myanmaran, Laotian, or Cambodian side are themselves taking a proactive/ attacking stance, and otherwise dealing with the Thais as relative equals.
- whether the businessmen involved take a reasonably long-term view, or concentrate only on quick profits, through such means as clear-cutting the jungles.
- whether Thailand can manufacture products that people in these neighboring countries can use, priced cheaply enough so that these people can afford the products, yet expensively enough so that the Thai manufacturers can realize a reasonable profit.

6.2. RE-DESIGNING HUMAN RESOURCES DEVELOPMENT

The task of human resources development in Thailand requires a national education policy characterized by two basic thrusts:

- The first thrust should be toward selective **conserva**tion and re-assertion of certain aspects of Thai culture which many thoughtful Thais consider to be of high value on grounds of promoting a sense of Thai cultural continuity and **identity** (as well as on general humanistic grounds).
- The second thrust should be toward selective augmentation of the total content of Thai culture, in ways that will help the nation adapt to changing conditions, both at home and internationally.

In my view, it is not only selectivity that is needed, but also balance between the two thrusts. Neither thrust should dominate the other. The thrust toward selectively conserving the old should not dominate the thrust toward selectively creating the new—but neither should the latter dominate the former. In other words, both continuity and change are needed. It is the task of good leadership to provide a climate within which the interplay between the forces of continuity and the forces of change can proceed harmoniously and constructively, toward the end of producing a future that is better for all the Thai people. Let us briefly examine the first thrust.

6.2.1. Selectively "Re-Thai-izing" Thai Education

Since at least the beginning of the present century the Thai polity, notably through the Ministry of Education, has been busily involved in systematic attempts to develop the nation's human resources. In some respects these efforts have been quite successful. These relative successes have, however, been less common on the "identificational" side than on the "augmentational." Without going into detail, let me simply state my opinion that Thai education has

not, in general, been especially successful at the inculcation of selected Thai values and traditions—partly because it has not tried particularly hard, and partly because it did not, for the most part, employ approaches that were pedagogically effective. Thus, a number of unique or special aspects of Thai-ness—including some that many foreigners find particularly enviable—have been neglected. Examples include our Thai cultural emphasis on the caring heart, on personability, and on patience (2.12).

In urging this thrust toward selective cultural conservation I do NOT intend to suggest that we should attempt merely to "turn the clock back"—which would be impossible anyway. I DO suggest, however, that this identification-enhancing thrust be balanced and blended with a thrust toward adaptation to the outside world and toward modernity in general. I visualize that the results of each thrust will enrich, and become integrated with, the results of the other. I move now to a discussion of the second thrust.

6.2.2. Selectively Promoting Equity, Relevance, and Quality in Thai Education

With respect to the second, or "augmentational" thrust, there are three crucial considerations that should guide national policy in the human resources development field, namely:

- equity of access to education;
- relevance of the content of education to the real conditions of life in the present, and the anticipatable conditions of life in the future; and
 - quality of the education offered.

Each of these three considerations is important at every level of education, but the relative emphasis to be placed on each will vary from level to level. With this in mind, let me offer a few broad remarks on macro planning priorities.

At the elementary school level, equity is vitally important,

since only by reaching our entire national population can we hope to tap the talent and potential of every Thai, and insure his or her full identification with our national culture, and full participation in the fruits of its development. Education at the elementary level must also emphasize that which is relevant to current and future life—such as general scientific thinking that will enable people to keep learning new and useful skills throughout their lives. In my judgment, we have already succeeded reasonably well in both these respects at the elementary level. We now need to work especially hard at improving quality, such as by providing better pre-service and in-service education for elementary teachers.

At the secondary school level the equity consideration remains important, but somewhat more relative emphasis must be placed on **relevance** to the kind of life challenges that the young person will face in the future. But what are these challenges? The problem is rendered more complex because Thailand is really a dual society, with considerable cultural distance between the rural and urban sectors (1.10). A curriculum that is relevant to future urbanculture conditions will not be entirely teh same as one that is relevant to future rural-culture conditions.

The problem is rendered even more complex by the fact thayt an important incentive for rural young people to finish secondary school is that this greatly improves their chances for entering occupations that will allow them to move into the urban sector. While they should, of course, enjoy this freedom as a right of national citizenship, one cannot ignore the vital fact that massive urbanization poses serious problems in terms of a generation gap, and hence in terms of family stability. While it is important to the overall national well-being that talented young villagers be enabled to occupy jobs in the secondary and tertiary sectors, it is also important that not all talented youngsters desert the villages, for their skills are needed there as well. Here again we note a need for balance between the conservation and adaptation thrusts of educational policy.

At the college and university level, Thailand's priority needs are for relevance and quality. It is utterly essential that rich resources be earmarked for science, technology, and certain applied fields such as medicine—as these fields are, in my view, the most important at this level of education, from a national development standpoint. Such an earmarking of educational resources will require great political courage, because it will necessarily imply that other fields will receive a smaller portion of the total budgetary pie: fields such as the social sciences and humanities.

Ultimately what this selective emphasis on relevance and quality implies is that Thailand will be increasing the quality of the scientists and technologists it produces, and perhaps also the quantity, at least in the most development-relevant sub-fields. In the lower priority areas such as the social sciences and humanities, we should also emphasize quality, but this will probably mean, since resources are finite, that there will be fewer graduates in those areas. In other words, although I believe that the social sciences and humanities are important (as all of my foregoing scenarios suggest)—I contend that what we need are good social scientists and good humanists, and not necessarily tens of thousands of mediocre specialists in these areas.²

These choices are hard ones—the very kinds of choices that politicians usually prefer to dodge if they can. Politically, it is usually easier to simply raise the education budget modestly and leave to the political process at each university the question of allocating the

²I here refer to the production of good graduates who would normally be expected to pursue careers as full-time specialists in the social sciences or humanities. We also need adult citizens who have received adequate education in these areas as part of their general education, for that renders their lives more meaningful and their citizenship more useful. Moreover, those young people who opt to go into elementary or secondary teaching or the human service fields, will certainly do appreciably better work as a consequence of having received good grounding in relevant areas of the social sciences and humanities.

available pie. The position I here take is that this hands-off approach is highly unwise for the future of Thailand, however temporarily comfortable it might make some politicians. Earmarking means taking clear positions that permit the attacking of problems, and not just responding to them. And to me, the need for relevantly educated, high quality scientists and technologists is so overwhelmingly important that attack is needed, which means that earmarking is needed (1.13). I am convinced that only by pursuing such clear and courageous policy priorities are we as a nation likely to realize our most promising future.

As this process of developing our human resources goes forward, much use should be made of "distance learning"—an approach that our country has already developed to a higher degree than most developing nations (2.10.2). This approach should continue to use conventional media—such as the mails, radio, and TV—but should also take advantage of the new information technologies, such as the computer, interactive video, and multi-media pedagogy. In this respect, I am inclined to see the primary need to be in the realm of software rather than hardware. Some pedagogical software can be imported, but will need to be adapted to Thai culture and conditions. Other such software will only become available if Thais proceed to develop it. And the fact that hundreds of thousands of Thais have already taken a serious interest in the new information technology certainly bodes well.

What should be the end product of all these policies? At a minimum, the Thai university graduate of the future should possess the following assets:

- a good knowledge of the Thai language and the ability to write good expository Thai;
- a good knowledge of the English language, which effectively provides exposure to new ideas from the outside;
- awareness of conditions in the world outside Thailand;³

- solid professional competence and integrity;
- good management skills;⁴ and
- high standards of ethics, consistent with the basic principles of Buddhism and other religions found in Thailand.
- a respect for the world's natural environment and a feeling of responsibility to care for it, and for humane values in general.

6.3. BUILDING THAILAND'S ROLE IN THE WIDER WORLD

In this monograph I have shared with you a number of my ideas as to how things have worked in Thailand's past, and how I believe and hope they will work in Thailand's future. I have explained at some length why I believe my Optimistic Scenario for my country is also a highly probable one. In short, I am enthusiastic about the ability of the Thai people, working through the channels of the Thai social structure, and applying the value standards of the Thai culture, to design and realize a successful, satisfying future.

I would feel less than responsible, though, either to my own people or to those of the world, if I did not proceed to the next logical question, namely: Are there aspects of the Thai system of sufficient

³Strong encouragement should be provided young Thais to actually visit other nations, such as Cambodia, Malaysia, or Myanmar.

⁴Historically, ethnic Thais have tended to be oriented toward the "making a living" (tham maa haa kin) lifestyle. Chinese in Thailand have been more oriented toward the "commercial and selling" (khaa khaaj) lifestyle. The first lifestyle has tended to be associated with village living and an inward-looking orientation. The second has tended to be associated with urban living and an outward-looking orientation.

Although some management skills have certainly been required for "making a living," these have generally been of a lesser order of complexity than those required for "commercial and selling" activity. Given the current and foreseeable pattern of rapid change toward an ever more complex and global economy, the latter type of orientation is clearly the one that ethnic Thais must adopt, as part of their adaptation.

universal value as to warrant that they be more systematically shared with the rest of the world? What, if anything, can Thailand offer, that it is not already offering, as a contribution to the peace and well-being of the world?

6.3.1. The Role of Small Nations to Date

Since World War II, small nations have enjoyed steadily increasing opportunities to play significant roles in world affairs. Among the great powers there has evolved a tendency to rely on certain kinds of smaller nations for various kinds of political, economic, and sociocultural tasks.

On the whole, I view this tendency as highly positive, for at least the following reasons.

- It emphasizes the idea that creative ideas for world peace, and intercultural harmony, might come from small as well as large nations.
- It underlines the notion that mere might does not make right, and that the **world** will be better off if there is input into world policy from various of the less powerful nations.
- It takes practical advantage of the fact that a small nation can play an important role for world peace precisely because its smallness makes it a threat to no other nation.

Generally speaking, the countries most often invited to carry out these tasks have been those that share a number of attributes, including:

- a stable polity;
- a good record for keeping the peace.
- an efficient, yet small and non-threatening, armed force;
 - an able civil service;
- an electorate that supports this sort of international involvement.

Historically, the nations most often tapped for "small nation peace-building" roles have been European, especially Scandinavian. This is well and good, but I believe that in the future it would be desirable, as a matter of general political and cultural principle, for non-European and non-Western nations to share more fully and systematically in these international roles.⁵

6.3.2. Thailand's Existing Capacity to Contribute

Would Thailand be suitable to serve in international roles of this general sort? One can begin to answer this question by noting that Thailand has already served in such roles frequently. Because of our open attitude toward members of other cultures, and indeed our active interest in them, we have strongly encouraged a number of United Nations and other international agencies to locate their regional offices in Bangkok. At present some thousands of UN professional personnel are located in our capital city. My perception is that, on the whole, these foreigners find Thailand an interesting and attractive country in which to sojourn, and find local conditions reasonably conducive to productive work.

However, it is not only to international officials of a certain status and visibility to whom our hospitality has been extended. We have also opened our borders and our hearts to hundreds of thousands of refugees and displaced persons from the war-torn areas of Indochina and elsewhere. At present, in Northeastern Thailand alone, we are helping to house and care for almost half a million of such unfortunate people, some of whom have been there for many years awaiting return to their homelands or transfer to some foreign nation willing to accept them. (We should note, by the way, an enormous

These smaller European democracies possess populations on the order of one-fifth of Thailand's, and gross national products per capita on the order of ten times ours. However, at our current rate of economic growth, within a decade or so we will have attained a level of economic wealth sufficient to sustain a substantial contribution to international peace efforts.

variation in the willingness of various industrial nations to accept such troubled and tormented people.) Providing the infrastructure of asylum for so many unfortunate people is a significant burden on our country—and yet the Thai people, leaders and led, have rarely complained. In my view, this fact constitutes a moral credential of considerable validity.

I do not wish, however, to let the case rest only on the basis of friendliness and effective organization, important though those considerations can be. Rather, I would prefer to move the discussion to the other, less tangible potentials of my country and its culture, which might be realized at some level—diplomatic, administrative, consultative, or educational—in ways that will be of value to other nations, and to the world itself, seen as a system struggling toward stable peace and better integration. In short, I am repeating my earlier question: Are there cultural resources possessed by Thailand which, if applied or shared, could be of benefit to the rest of the world? This time, I will answer this question. Yes, I believe there are! At the risk of committing un-Thai immodesty, I would suggest that our openness toward change (1.1) and our emphasis on harmony, joyfulness, and the caring heart (2.12) constitute cultural resources well worth sharing with the world.

6.3.3. Enhancing Thailand's Capacity to Contribute

Assuming for the moment that I am correct in my assessment of Thailand's cultural resources, it follows that national leaders should try to develop and expand these resources. They should encourage as many Thais as possible to find practical ways to gain experience in actually applying these resources in intercultural situations. In particular, it is important to involve young Thais, and to provide opportunities for learning and development to those whose economic resources are limited, and who were not born into privileged families and situations.

In general, we should encourage more home-stay and exchange programs, so that foreigners will learn from the ordinary day-to-day reality of life in Thailand. If a group of young Thais and foreigners go camping for a week in Khao Yai National Park, for example, or take a two-week trip to Northeastern rural villages, they will get to know Thailand, and each other, a hundred times better than by taking a highly organized bus-and-photo tour of half a dozen Bangkok temples.

And the converse of all this is obviously true for Thais journeying abroad. Some excellent programs of this general sort have existed for a long time, but there is a need for deliberate, steady expansion of this sort of program. In time, a whole movement could be created, as "graduates" of such interchange programs move into positions of leadership. In this manner we will be expanding the base on which our next generation can develop cross-cultural awareness and knowledge, and put itself into a better position to help Thailand play a meaningful role in the wider world.

This kind of intercultural learning must come from the heart. Freedom, flexibility, and spontaneity are essential parts of it. Programs to promote such learning should therefore be led primarily by non-profit, non-governmental organizations in as non-bureaucratic a manner as possible.⁶

6.4. To the Horizon

In this chapter I have outlined three policy priorities that I consider to be of topmost importance if Thailand is to move swiftly and confidently to a desirable horizon: attacking problems at their roots; developing our human resources for both selective cultural conservation and adaptation to rapidly changing conditions; and greatly expanding true contact with other cultures.

These priorities have a coherence in principle. The first priority of actively attacking challenges and problems at their roots,

if it is to truly serve the priority needs of all Thais and not just some, must be carried out at all levels of Thai society by people who possess the necessary motivation and ability. And the second priority, human resources development, will promote that motivation by enhancing a sense of pride in being Thai; and promote that ability through educational policies that optimize appropriately across equity of access, relevance to new and anticipatable conditions, and sheer quality.

Unlike some peoples, we Thais thrive on contact with folks from other cultures. Such contact extends our own awareness and that of people from other lands. It nourishes our sense of humanity—and theirs. With the right policies and initiatives, this process of extending contact and promoting awareness can be rendered far more effective than is today the reality, by means of carefully designed international exchange programs.

Thus are linked together the three priority policy orientations I have outlined in this final chapter: attack, educate, internationalize. If our leadership is both expert and ethical, if it has both the will and the skill, we can move to the horizon with confidence.

It promises to be an exciting journey!

⁶ At present over five million foreign tourists visit Thailand each year (2.6). Many of them, I am afraid, do not really learn very much about Thai culture, for they are herded from temple to temple in tour busses in which the travel guide is often a native of Japan, Germany, etc., or else a Thai attempting to act like one. They then return to a Western-style hotel where, very often, they are served their own national style of food rather than Thai food. They meet few Thais in other than perfunctory situations, usually of an economic nature--such as shopping or paying their hotel bill.

White such tourists do learn something about Thai culture, often it is not much. Conceivably, they could learn much more if just a few modest changes were made in their routine.

In any case, tourism in Thailand will continue apace, driven by its own private-sector entrepreneurial economic dynamics. Where true leadership is needed, however, is in arranging for serious foreigners to learn more about the realities of Thai culture, and for serious Thais to learn more about the realities of a variety of foreign cultures.

AFTERWORD:

THE FUTURE BEGAN YESTERDAY

SIPPANONDHA KETUDAT

In my early childhood, I always wondered why we only learned of the past. History and social studies dwelt upon the past, and even geometry and arithmetic involved principles discovered and taught by the Egyptians and the Greeks a long time ago. Astrology aside, couldn't teachers teach something of the future?

My inquisitiveness about such matters was inculcated by my father from my earliest years. He was an airman, and one of the three young Thai army officers whom King Rama VI first chose to study aviation in France, and then to return home and initiate and build the future of Thai aviation. He held a high position in the Department of Aviation of the Ministry of Defense. The Department later became the Royal Thai Air Force.

Soon after I was born, however, my father was relieved of his duties, for he was a royalist and did not believe that Thailand, at that time, was prepared and ready for a democratic form of government, as claimed by the populists in the 1932 coup d'etat that transformed Thailand into a constitutional monarchy. His untimely early retirement deprived him of an opportunity to further develop Thai aviation during this critical period. It was an event of keen disappointment for my father, who had worked hard and served his country well for almost two decades. It was also, in retrospect, a great loss for the Department.

It was, however, an event of immense good fortune for me, because for the fourteen years from then until he died, I had the benefit of his spending his entire days and nights with me, teaching me everything he knew. He taught me arithmetic, foreign languages,

politics, Buddhism and other religions, science, and calculus, as well as his values, his craftsmanship as carpenter and gardener, etc.

During those days I went to school simply to play with friends of my own age—for due to my father's tutoring, I had already learned everything the teachers presented in class.

It was my father who taught me to think and to search for knowledge. He was my first teacher and my first friend. Without him and my mother—now ninety-six, who even to this very day always tries to make sure I am happy—I would not have come this far.

From these earliest years, the question of time has always intrigued me, and continues to do so. Eleven years of study and research in physics in the United States during the late Forties and Fifties only served to make me more curious about the future, and eager to understand it. Studies and pursuits relating to the future, and planning and development for the future, have been the main hidden principle of my career.

Let me begin with physics.

In classical physics, although there are certain limitations, one can predict the future path of a single body—its position and velocity—with a high degree of accuracy if the initial conditions and boundary conditions are known. This was clearly demonstrated by the spacecraft Voyager 2, which was launched for the grand tour of the planets on August 20, 1977 from Cape Canaveral in Florida. It made rendezvous with the planets Jupiter, Saturn, Uranus, and Neptune on July 9, 1979, August 26, 1981, January 24, 1986, and August 25, 1989 respectively—just as calculated and predicted.

Even in modern quantum theory, certain characteristics of the future of a particle or system of particles can be predicted, not as deterministically as could be described in classical theory, yet in a probabilistic way.

In the early Sixties, I had the extreme good fortune to be invited to join a research group at the Argonne National Laboratory in Illinois, U.S.A., headed by Dr. G. R. Ringo, to work on the problem

of time reversal invariance. The problem our group pursued, stated simply, was: Does a particle governed by the laws of physics in weak interactions¹ recognize the differences between the past and the future? Is a weak interaction past- or future-oriented? We conducted an experiment by aligning neutron beams from the Argonne Reactor upward and downward to see if the neutron beam decays were the same. To a very high degree of accuracy, statistically the decays proved to be the same. We therefore concluded that the time reversal was invariant—that past and future are indistinguishable with regard to the laws of physics in weak interactions.

Let me now turn to my faith in Buddhism.

The ultimate happiness, or the state of least suffering leading to non-suffering, is *nirvana*. This concept is based upon causality. Causes in the past determine the present. Actions in the present point to happenings in the future. Does the future really begin yesterday? Can the Western sciences based on rationalism and the Eastern wisdom really meet?

When Professor Robert B. Textor invited me in late 1987 to participate in an Ethnographic Futures Research project on Thai society, I accepted without hesitation, in the hope that I would be able to contribute my experience, however limited, to the field of EFR. The experience of my four careers—in academia, in government as a planner, in politics as a senator and a minister, and presently in industry—might, I hoped, contribute to an understanding of Thai society and its potential.

I first learned of Dr. Textor's work and his well known studyof life in Bang Chan village from my wife, Emilie, over twenty-five years ago. Dr. Textor was one of Emilie's first teachers about Thai life and culture, when she joined the U.S. Peace Corps in 1961. Our families are good friends.

¹For example, in the beta decay parity is not conserved, or in a beta decay the radioactive nucleus prefers to decay to the left rather than to the right. The beta decay is left-handed.

Because of my very close friendship with him, and with Professors Bill Klausner, M.L. Bhansoon and Sidhinat, during our EFR interviews I did not have the feeling that I was being interrogated by examiners. Instead I felt, and still feel, that the interviews—from the first session at my rural farm home in Chiang Mai to the last one at the San Francisco Airport—were intellectually stimulating discussions, with many piercing questions raised.

Through working intensely with Prof. Textor and collaborating with him for almost three years I learned a great deal about EFR. I am now convinced that the future really began yesterday. If such is the case, what should we do next?

At the present rapid rate of change in all aspects of Thai society, it is not possible for planners and policy makers to take action reactively, since in general it takes time to react—and the reactive response is too slow and in many cases creates even more problems than solutions. Proactive actions based on wise vision seem to be the only alternative for the future.

Holistic anticipation of the future through the use of the EFR technique, by many informants with varying backgrounds, can provide useful frameworks for planners and policy makers. Furthermore, in the process of generating the Most Probable Scenario for the future, one identifies logical actions that would stimulate movement toward one's desirable vision, as well as conditions that would inhibit such movement. Elucidating such stimulating actions and inhibiting conditions, and effectively communicating them, can be beneficial to development planning.

This monograph would not have come into existence without the collaboration and assistance of all those acknowledged by Dr. Textor and me in the Introduction. There are, however, two persons to whom I am especially grateful. The first is Dr. Textor, who is not only a good friend and excellent interviewer, but also the one who taught me Ethnographic Futures Research, its methodology and implications. Through his gentleness in delivering piercing ques-

tions, and his writing and rewriting of text, he taught me, once again, to be patient. It was a privilege to work closely with him. The second is Emilie, who has been an inspiration since before we were married close to thirty years ago. It was Emilie who introduced me to Dr. Textor. It was Emilie, who knows me best, who helped by editing the whole manuscript, and constantly raising questions requiring clarification. It was indeed a happy and productive experience to work on the monograph with Emilie.

As an optimist, I believe that the future of Thailand lies not in the extreme paths but the middle. The middle path is not static but changes with time. The verdant jungle, the calm rural life on the farm, and the flowing canals of Bangkok are all gone—but their virtues still exist in our minds. The serene temples are still here, though they may be fewer.

We cannot turn the clock back. Let us face a future with limited resources with courage and wisdom. We have to learn how to utilize our knowledge. We have to choose the knowledge, the technology, wisely.

The purpose of living, learning, and working is not to exploit nature or to overpower it, but to understand, appreciate, and love it, and to live in harmony with it. If this is the way we treat nature, is it not also the way we should live with our fellow men and women? We must learn to live peacefully with other human beings, with society and its cultural heritage, and with nature. We must learn to harness our knowledge and technology for the betterment of mankind and all creation.

Technology for human and societal development is technology in harmony with culture and environment.

Sippanondha Ketudat 19 September 1990

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METHODOLOGICAL APPENDIX

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ROBERT B. TEXTOR

This Appendix is written for the more technically oriented reader. Its purpose is to make the essentials of the Ethnographic Futures Research (EFR) method sufficiently clear so that you may:

- more fully understand how Dr. Sippanondha's ideas were elicited; and
- more knowledgeably decide whether the EFR method would be useful in approaching a research or educational problem in which you are interested.¹

Although a casual reading of this book might give one the impression that the EFR method is a simple and straightforward approach, this is not quite so. True, the basic rationale for the method is straightforward, but its actual execution is far from simple. Indeed, it hardly could be simple, for EFR ambitiously undertakes to explore what is obviously a highly complex subject, namely various possible, probable, and preferable alternative futures for a whole sociocultural system.

Some of the complexities and subtleties of conducting an EFR interview are difficult to communicate, and best learned through training and experience of the type I have been offering at Stanford University for the past ten years. However, the basic approach can be explained in a short statement, leaving out some of the subtleties—and that is what I am attempting here.

To begin with, let me emphasize that conducting an EFR interview is a disciplined undertaking. While it may seem to some to

'In this Appendix, pronouns have the following references unless a different reference is clear from context. "You" refers to the reader who is considering using EFR for his or her own research purposes. "We" refers to Textor and Sippanondha jointly. "I" refers to Textor.

be "just conversational" in **form**, it is much more than merely conversational in its underlying intellectual and logical **structure**. While it centers on getting the interviewee to create scenarios, there is nothing "passive" about the role of the interviewer. Indeed, the interviewer must constantly be listening actively and reviewing mentally the structure and gaps in the interviewee's presentation. This is demanding work, and after several hours of interviewing it is normal to feel quite fatigued.

A.1. THE HANDBOOK ON E.F.R.

Since I invented and began developing EFR in 1976 I have worked with numerous students and several colleagues in applying the method to a wide variety of problems involving a broad range of sociocultural systems, driving forces, and policy concerns. While the topics we investigated were of interest to me in their own right, the investigations were also useful in helping me learn the complexities, potentials, limits, and pitfalls of EFR as a method.

From the beginning it was my intention to incorporate the lessons learned from these various research experiences into A Handbook on Ethnographic Futures Research, to enable researchers who wish to use EFR, to do so conveniently, efficiently, and effectively. During the first four years I was able to bring out a number of informal editions of this Handbook, and a number of people who used these editions were kind enough to give me their criticisms and suggestions for improvement.

Since 1980, however, the evolution of EFR has been so rapid that I have not had time for further updating, and the **Handbook** is now seriously out of date. However, I am now working on a comprehensive updated edition, and expect it to be ready during 1991, in a form suitable to be of use to fellow researchers. If you should find yourself considering the use of EFR for your own research or educational purposes, I advise you to consult the latest

available edition of the **Handbook** first. To obtain a copy, you may contact me at 3435 N.W. Luray Terrace, Portland, Oregon 97210. If you advise me of the nature of your problem, I may also be able to send you other relevant material. Examples of such material appear in the Bibliography.

A.2. Previous Use of E.F.R. in Thailand

Since 1978 I have taught practicums in EFR at Stanford University many times, used it in many research projects, and administered EFR interviews (including training interviews) to almost a hundred people from many cultures and walks of life—principally intellectuals, civic and political leaders, and students. Various colleagues and graduate and undergraduate students at Stanford and other American universities have used EFR for numerous research projects involving a variety of sociocultural systems. Typically, such a project will deal with alternative futures for a particular nation—e.g., Austria, Brazil, Malaysia, Thailand, or the U.S. Sometimes the project will posit a particular "driving force," e.g., microelectronics or biogenetics. Examples of resulting publications appear in the Bibliography.

With respect to Thailand itself, the present monograph is the fourth publication to result from the use of EFR. The previous three were:

- The 1977 California Study (Textor 1978b), which involved 25 Thai interviewees, mostly graduate students, then resident in the San Francisco Bay Area. This was the first EFR project ever, and dealt with broad general sociocultural futures for Thailand.
- The 1981 Chiang Mai University Study (Bhansoon, Sidhinat, and Textor 1984), which built upon the experience developed in the 1977 study, and involved a probability sample of 24 professors in three faculties of Chiang Mai University.

• The 1988 Higher Education Study (Suphang, Samang, and Kulvitra 1988), which involved 14 leading national thinkers (including Dr. Sippanondha), focused on cultural changes and ethical problems in the Thai future, and examined the potential role of higher education in fostering a favorable overall future for Thailand. Their monograph is one of 21 parallel research efforts undergirding the formulation of a 15-year plan for the development of Thai higher education.

In my opinion, these three studies constitute an encouraging start toward understanding how to deal with the Thai future, and I see the present monograph as a significant further step in this direction. The present work also breaks new ground in the development of the EFR method itself, in that it is the first EFR study ever published, on any culture, on the basis of interviewing just one interviewee. Another important departure is that this study deals far more ambitiously with science and technology in general as driving forces, than any previous EFR study on any country. Since I accord a central place to science and technology in my own theorizing about how sociocultural systems change, I found Dr. Sippanondha's insights in this domain to be especially valuable.²

A.3. Some Basic Definitions

Ethnographic Futures Research is one sub-type of Futures

²My colleague Stephen Jay Kline and I are in agreement that in the overall sweep of world history, it is appropriate to regard technology as the most common force for change, and usually also the strongest. Speaking very broadly, we hold that usually the only stronger forces have been (1) natural disasters; and (2) subjugation by people from another culture—which latter process itself has typically been abetted by the use of a superior technology.

Not only has technology been causally quite central, but this very centrality has increased over the past 100 years, owing to the institutionalization of research and development programs, public and private, principally in the West but more recently also in Japan and elsewhere.

Research. Because Futures Research, and the general futures literature, will probably be at least somewhat new to many readers, it is appropriate to provide basic definitions of a few key terms as they are used in this monograph.

A.3.1. Futures Research

To recapitulate from Section I.6 in the Introduction, Futures Research, at least as I practice it, does NOT involve prediction in the traditional social science sense. Indeed, my experience in developing EFR has made me MORE skeptical, and humble, about predictability in this sense, than I ever had been as a practitioner of conventional ethnography.

Rather, the definition of Futures Research (FR) used here is considerably more modest. Broadly speaking, FR is any systematic inquiry into alternative futures that are considered to be possible or probable for a given population.

More specifically, FR attempts to:

- Describe alternative futures that are deemed to be possible or probable for a particular population.
- Determine the state of our knowledge (or uncertainty) about this or that possible future.
- Identify implications and possible consequences of this or that possible future.
- Provide early warning signs of undesirable possible futures.
- Understand underlying change processes (adapted from Institute for the Future 1976: 1).

A.3.2. Culture

"Culture" is one of the most general and abstract constructs that can be conceived. For this reason, there are innumerable definitions of "culture" and "a culture" used by anthropologists and others—literally hundreds of them. The loose and approximate definition used in this monograph is that a culture is a learned and shared set of more or less stable, consistent, and patterned **standards** of and for behavior, characteristic of a particular population, which standards often condition actual behavior (adapted from Kroeber and Kluckhohn 1952:181). These standards become involved in decisions made by members of a population as to:

- what is;
- what could be;
- how one feels about what is and what could be;
- what can be done about what is and what could be; and
- how one goes about doing it (adapted from Goodenough 1971:22).

Especially when we wish also to emphasize the specifically structural aspects or manifestations of these standards, we often use the term "sociocultural system" more or less interchangeably with "culture."

Like all definitions of "culture," the above is far from perfect. It is inadequate in part because to some readers it might tend to imply a greater degree or stability of consensus as to standards than is likely to exist within a large and complex society such as that of Thailand. In this monograph, certain ambiguities of reference may occur, as between the overall culture of Thais, and certain subcultures—such as, for example, that of Thai professional development planners, or rural farmers. We have done our best to keep these distinctions clear.

A.3.3. Cultural Futures Research

Loosely speaking, Cultural Futures Research (CFR) is simply that branch of Futures Research (FR) in which central use is made of the concept of culture. More strictly speaking, CFR refers to those research undertakings in which the concept of culture (or "cultural system" or "sociocultural system") is employed with some measure

of directness, explicitness, consistency, and sophistication. In CFR, there is at least some noticeable effort to employ an explicit model or set of propositions as to how a particular sociocultural system changes from Time 1 to Time 2.

Just as conventional research on culture change takes into account both cultural and non-cultural variables, so does CFR. In CFR, a cultural system is seen as being in interaction with a variety of types of (primarily or exclusively) non-cultural phenomena, processes, or systems. Examples might include the following:

- Natural change, e.g., earthquakes, typhoons, climatic changes, erosion, drought, desertification, soil exhaustion, crop failures, or epidemics.
- Political change, e.g., a change in a country's ruling regime (perhaps induced by international events) not associated with any very significant change in the country's cultural standards for behavior.
- Economic change, e.g., a sudden depression or inflationary spurt (usually induced at least in substantial part by the world economic system) not associated with any very significant change in the country's cultural standards for behavior.

A.3.4. Ethnographic Futures Research

Ethnographic Futures Research (EFR) is one method by which the cultural futures researcher can go about her or his task. EFR stands to CFR in much the same relationship that conventional ethnography stands to cultural anthropology. Just as the cultural anthropologist conventionally uses ethnography to study an extant culture, so he or she can use EFR to elicit from members of an extant social group their images and preferences (cognitions and values) with respect to possible or probable future cultures for their group. In developing EFR, I have attempted to keep the method as ethno-

graphic as possible—cultural, holistic, comparative, macrotemporal, and emically-etically balanced—while at the same time gearing it to both the needs and the constraints of Futures Research.

These constraints are, of course, formidable. Foremost amon g them is that, in the ontology I use, there are NO future facts—only facts about the present and past. The future is simply a construct and has no independent or objective existence. Thus, in doing EFR I make no claim to "studying the future." Epistemologically, I could not make such a claim, because of my ontological position that there are no future facts. What do exist, though, are a person's present set of images as to possible or probable future cultures, and his or her preferences among those hypothetical cultures. These images and preferences can in some cases be crucially important in influencing the process of change as the future becomes the present. It is these images and preferences that an EFR project elicits, describes, analyzes, interprets, and diagnoses—all in a manner generally consistent with the overall tradition of ethnography. For a more detailed discussion, consult Textor (1991) or Bell and Mau (1971:1-44).

A.3.5. Projection

A projection is here defined as a **conditional** anticipatory statement of what a person believes could possibly occur, or might probably occur, in the future. It might take the form of: "If A remains constant and B increases at a constant rate, then within 30 years C will occur." A projection normally focuses upon a rather specific and limited topic, and draws as heavily as possible upon available data about said topic in the past and present, and on models deemed applicable to such data.

In EFR, projections are used as building blocks for the first two scenarios, namely the "Optimistic" and "Pessimistic" Scenarios. In the former, projections embody optimistic assumptions as to how the sociocultural system will deal with its opportunities and dangers; in the latter, they embody pessimistic assumptions.

A.3.6. Forecast

A forecast is, as it were, an "expectational" projection. It is simply that one projection which, in the judgment of the interviewee, is most probable or plausible—as compared with all the other alternative projections cognized or considered by the interviewee.

In EFR, forecasts are used as building blocks for the third and final scenario, namely the "Most Probable Scenario." In this case, neither optimistic nor pessimistic assumptions are made as to how the sociocultural system will deal with its opportunities and dangers; instead, the assumptions are as "realistic" as possible.

A.3.7. Scenario

As suggested above, the scenario is central to the EFR interview. Typically, the interviewee is asked to provide the three above-indicated scenarios. These scenarios collectively constitute most of the recorded summary, or protocol, of the EFR interview.

A scenario is a story, an imagined "future history," and deals essentially with:

- what a particular situation could, might, or is most likely to, be like as of an approximate horizon date; and
- what could, might, or is most likely to, be the process by which the situation changes between now and that date.

The scenario should not be confused with the projection or the forecast, so we here note some distinguishing differences among these terms as we employ them.

1. A scenario is usually much more complex and holistic than a projection or forecast, and indeed will usually embody

a number of projections or forecasts. The converse will not occur. A projection or forecast might deal with just, for example, air pollution rates for the Bangkok metropolitan area as of approximately A.D. 2020. A scenario, by contrast, would quite likely deal with a whole range of phenomena between the present and that approximate horizon date, as these pertain to the environment, as well as the impacts of these phenomena on people's lives. In addition, a scenario would deal with people's reactions to these impacts through time, resulting in individual or political decisions that have the effect of altering the pollution rates, which decisions thereafter might have economic impacts, and so on. In EFR, as distinct from other types of FR (dis-cussed in Fowles 1978), the notion of scenario is pushed virtually to its limits, since the interviewee is asked to build scenarios about a whole sociocultural system, rather than about some more limited phenomenon, such as a particular institution, community, or organization.

- 2. Consistent with the fact that the scope of a projection or forecast is relatively limited is the fact that either of them is more likely to be expressed at least partly in quantitative terms, while the scenario is more likely to be largely qualitative in form.
- 3. A scenario is more likely to specify the **process** of change from Time 1 to Time 2, while a projection or forecast might say little or nothing explicitly about process.
- 4. While a forecast is defined as the most probable of several alternative projections, a scenario need only be probable enough to be plausible. Thus, in the EFR interview, when the "Optimistic Scenario" and the "Pessimistic Scenario" are elicited, no probability assessment need be made, other than that, in the interviewee's judgment, the projected events or trends are merely possible—that is, judged to have a probability of occurring that is greater than zero. After these two scenarios have been completed, a "Most Probable Scenario" is then elicited, which is judged to have the highest probability of occurring.

A.4. INTERVIEW STRUCTURE

With respect to the actual procedure for conducting an EFR interview, some comments would seem appropriate here, to supplement those in the Introduction (I.7).

A.4.1. Emphasis on Flexibility and Openness

Any interview of any kind will, by definition, have some structure. Some phenomenon must be identified as the focus of the interview. This automatically implies to the interviewee that you are less interested in other subjects. Since this is so, it follows that all interviews run the risk of introducing some bias.

In the tradition of ethnography, you make a deliberate effort to minimize such bias by keeping the interview loosely structured. This means that you treat the structure that you have initially created, in a tentative manner—and actively engage the interviewee's cooperation in altering that structure, reshaping its categories, dropping some categories, or adding new ones.

EFR shares this spirit. As an EFR interviewer you try to provide enough structure to insure adequate coverage of all the broad subject matter areas in which you are interested—but, beyond this, to "put the interviewee in charge," and to restrict your role to that of an active, sensitive, and sympathetic listener, non-directive stimulator, and careful recorder. You keep the interview moving productively by showing interest, offering encouragement, and posing questions where needed to insure a reasonable degree of clarity, comprehen-

³Dr. Sippanondha was also "in charge" of his interview in another respect: he could go on talking as long as he wished; the EFR interview is open-ended. Each interview sitting can continue for as long as the interviewee wishes, and there can be as many sittings as he or she wishes.

siveness, contextualization, and coherence (A.4.3). You take extreme pains to insure that your questions are non-directive and non-manipulative in both content and style.

A.4.2. The Three Scenarios

I explained to Dr. Sippanondha that the EFR procedure required that all three of the scenarios he provided should be perceived by him as **possible** (whether or not his notions of the boundaries of the possible coincided with mine). "Possible" was defined simply as having a probability judged to be greater than zero.

Only in the case of the third scenario did the degree of probability matter. Thus, the Optimistic and Pessimistic Scenarios were complex images held by Dr. Sippanondha of sociocultural futures for Thailand that he personally considered possible and desirable or undesirable, respectively—even though the degree of probability that he assigned to them might be rather low. The Most Probable Scenario, by contrast, was defined as the scenario he judged to be just that: most probable—regardless of whether he saw it as desirable or undesirable.

In order to supply a framework for elicitation, I asked Dr. Sippanondha to imagine a continuum of 100 possible future sociocultural systems for Thailand in approximately the year 2563 of the Buddhist Era—or A.D. 2020. Moving from the left pole to the right, there would be, in theory, 100 positions on this continuum. Position No. 1, located at the left pole, was defined as being, by his values, the worst possible sociocultural future for Thailand, while Position No. 100, at the right pole, was defined as the best possible. Futures located farther right (more desirable) than No. 100 were defined as utopian and impossible. Futures located farther left (less desirable) than No. 1 were defined as dystopian and, likewise, impossible.

In eliciting Dr. Sippanondha's Optimistic Scenario, I asked him to concentrate on a possible future sociocultural system at roughly Position No. 85 or 90 on the continuum—not the very best system that could possibly occur, by his personal values, but clearly very desirable. He was then asked to describe that system in his own words, emphasizing whatever aspects of it he chose. In most EFR interviews, the Optimistic Scenario takes much longer to elicit than the Pessimistic and Most Probable Scenarios combined, and the interview with Dr. Sippanondha was no exception in this respect.

When the Optimistic Scenario was completed, I then asked Dr. Sippanondha to move to the Pessimistic Scenario, by visualizing a possible sociocultural system at roughly Position No. 10 or 15 on the continuum—not the very worst that could possibly occur, but clearly very undesirable. As is usually the case in an EFR interview, his Pessimistic Scenario turned out to be much less concrete or elaborated, than his Optimistic.

When Dr. Sippanondha had finished building his Optimistic and Pessimistic Scenarios, I then elicited his Most Probable Scenario. At this point I was careful to point out that what he wanted or feared now no longer mattered: all that mattered was what he expected to be most likely to occur.

To summarize in simplest terms, then, the overall strategy of the EFR interview is to "stretch" the interviewee first in an optimistic direction, and then in a pessimistic direction—where "optimistic" and "pessimistic" are defined strictly and solely in terms of the interviewee's own value standards. He is told, though, that this stretching should not exceed the realm of the possible. Just where the boundaries of the possible lie, however, is for him alone to decide. Only after this is the interviewee asked to build his "Most Probable" Scenario. Much of the educational value of the EFR interview for the interviewee is realized at this point, for it is here that he is stimulated to perceive—in terms that are unusually clear, concrete, interinstitutionally articulated, and culturally contextualized—the contrast between what he wants for his people, and what he believes they are most likely to realize.⁴

A.4.3. Probing for Clarity, Comprehensiveness, Contextualization, and Coherence

Much of what the EFR interviewer does is to ask probing questions designed to insure that the protocol that eventually results from the interview will have a reasonable degree of clarity, comprehensiveness, contextualization, and coherence. It is important to stress that in conducting an EFR interview you strive actively to fulfill these four desiderata. The challenge, though, is to probe successfully in a non-directive manner, to be a stimulating inquirer and listener while at the same time not introducing bias into the discourse.⁵

Below I introduce, in briefest possible form, these four types of non-directive probe, which I used with Dr. Sippanondha both in interviewing him, and in the numerous editorial conferences we held to go over successive drafts of protocol. The consultants, when they joined me in working with Dr. Sippanondha, used a generally similar approach.

Since Dr. Sippanondha was such an informed, exciting, and helpful interviewee—overall, the most interesting I have interviewed to date—a number of the guidelines that appear below apply principally to the more typical or average interviewee, rather than to him. Indeed, given the broad range and deep richness of his ideas, the remarkable fact is that I needed to do so **little** probing.

Incidentally, experience in using EFR through the years has demonstrated clearly that unless the scenarist first experiences the "stretching" effects of the Optimistic and Pessimistic Scenarios, his Most Probable Scenario tends to be brief, bland, and uninteresting—to himself and to the researcher.

⁵In the case of a strong person like Dr. Sippanondha, who is extremely well versed in the subjects he deals with, the danger of inadvertent interviewer-induced bias was, in my judgment, minimal. However, in most other cases the danger would be greater, and in all cases the danger is one that the interviewer should constantly bear in mind, and guard against.

Nonetheless, below is presented a brief summary of the four major types of probe, so that you can get a general "feel" for the nature of EFR probes. Please bear in mind that the presentation is over-simplified, and risks portraying the EFR experience as somewhat desiccated—whereas in fact Dr. Sippanondha and I had numerous laughs together and enjoyed excellent rapport.

- Clarity. If, at any point, some aspect of the interviewee's presentation of a given projection is not clear to you, you find a polite way to tell him this, and ask for a clarification. In addition, the EFR interview process calls for feedback to the interviewee, as needed, in which you make remarks like "What I think I hear is...," and request that he tell you if your understanding is correct or not, and if not, that he clarify or amplify.
- Comprehensiveness. Since the sociocultural approach is broad and holistic, the material provided by the interviewee should be reasonably comprehensive. If you feel that the coverage of a given domain is too narrow or sparse, and not adequately informative, you probe for a more comprehensive or complete coverage. If the interviewee has not yet covered a particular sub-domain that you think should be covered, you ask him whether he would like to cover it. If he declines, however, that is the end of the matter.
- Contextualization. An emphasis on context is one of the hallmarks of ethnography. It is desirable that the protocol provide at least the broad outlines of the general sociocultural context within which a given change process is projected to occur. If this kind of context is not specified or at least implicitly clear, then you need to probe for it in a non-directive manner. This is a crucial strategy for helping people to escape from tempocentric thinking. In the present case, Dr. Sippanondha readily made clear numerous assumptions or projections about contextual changes. Some of these were domestic, such as population growth (3.3.1). Others were essentially external, such as economic and political pressure upon Thailand from the

The whole matter of probing will be discussed in detail in Textor 1991.

- outside (2.3.2., 3.2), or new technologies available to Thailand from the outside (2.2).
- Coherence. It is always important that the basic causal process of a given projection be "grounded" in some sort of explicit reasoning. Where it is not, you probe non-directively with a remark such as, "That's interesting, but I'm not quite clear what would cause that to come about. Could you ground that a bit more?"

A.5. THE ADVANTAGES OF FLEXIBILITY

By this point it should be clear that the EFR approach is quite flexible. In the present case this flexibility produced handsome results, of which three should be mentioned here.

• The elicitation of an interviewee's Optimistic and Pessimistic Scenarios often proves to be a quite effective way of getting him to clarify and elaborate the **general** values and principles he uses in approaching the scenario-building task. In the present study, Dr. Sippanondha soon found himself outlining his entire working philosophy of development. I was so impressed by the richness and clarity of this philosophy that I suggested he build a whole separate chapter out of it. The result is his Chapter One.

⁷In addition to insuring clarity, comprehensiveness, contextualization, and coherence, most EFR projects also require a fifth desideratum, namely cross-interview comparability. That is, a typical EFR project involves interviewing a sample of between ten and thirty interviewees, and the monograph resulting from such a study involves summarizing across ten to thirty protocols. Obviously, no such cross-interview comparison and summarization can be very satisfactory unless all or most of the protocols cover more or less the same broad domains. Hence, a fixed structure of domains is needed, as a guide for conducting each interview.

The present study is highly atypical, since it is based on a sample of one. For a discussion of various ways of designing a sample of interviewees, see Bhansoon, Sidhinat, and Textor 1984, Appendix 1.

- As we proceeded with Dr. Sippanondha's Most Probable Scenario, it became increasingly clear that my definition of this scenario as the one he considered most probable, was leaving him less than completely satisfied. More and more, he came to feel that he should add a whole chapter that would embody his projections for a positive scenario of reasonably—though not necessarily maximally—probable events and processes: a "possidictive" scenario that he felt could be realized if Thailand were to have wise and good leadership, plus a measure of good luck (especially in its international relations). In effect, he was saying: Who cares if it is the most probable scenario, as long as it is probable enough to be worth working hard to achieve? I encouraged him in this respect, and the result is his Chapter Five.
- By the time Dr. Sippanondha had finished laying out Chapter Five, he felt that it would be appropriate, finally, to stress a few **priority** policy matters to which he assigned the highest priority for public policy action in the near future—and the result is his addition of Chapter Six.

A.6. THE END PRODUCT

Chapters One through Six, then, constitute the end product of Dr. Sippanondha's and my work together. Essentially, this product is an elaborated, documented, edited EFR protocol. To the technically oriented reader, the question may now arise: What are the essential characteristics of a successful EFR protocol?

My short answer is that the protocol should assist the reader in reducing his or her tempocentrism. In more common parlance, the protocol should "make the future seem real," so that the reader can "relate to" it. In order for this to happen, the protocol ought to be adequate with respect to the four desiderata indicated above, namely clarity, comprehensiveness, contextualization, and coherence.

A slightly longer answer would be that an EFR protocol will

be most helpful in reducing tempocentrism to the extent that it, as a whole, presents ideas that are:

- non-obvious (for the obvious is usually not stimulating); and
- creative in identifying new opportunities and dangers; while at the same time
- plausible in specifying the causal processes it projects; but nonetheless
- richly suggestive of possible changes in short-range policy designed to maximize chances for a desirable middle- and long-range future and minimize chances for an undesirable one.

Whether the present effort has succeeded in these respects is, in the first instance, for each reader to judge. A more final judgment can be rendered after some years have passed, when it will be possible to assess the effect of this monograph on public policy.

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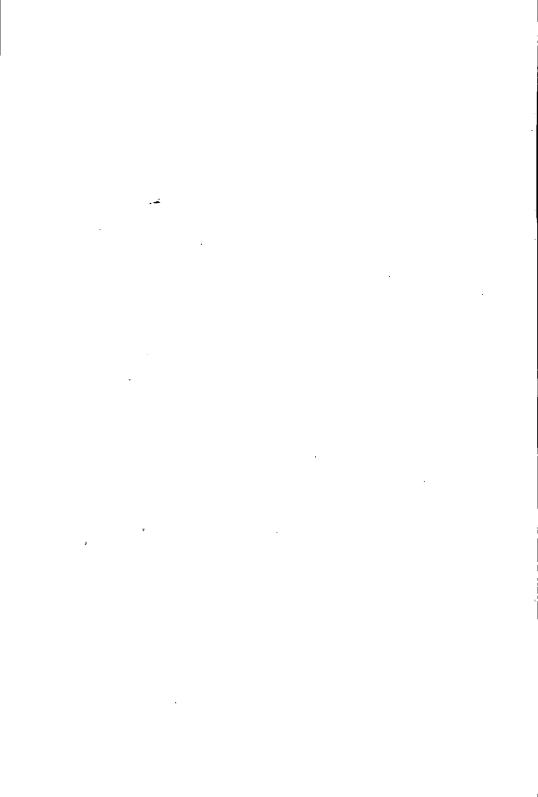
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