HUMAN NEEDS
NEW SOCIETIES
SUPPORTIVE TECHNOLOGIES

COLLECTED DOCUMENTS PRESENTED
AT THE ROME SPECIAL WORLD
CONFERENCE ON FUTURES RESEARCH 1973

VOLUME IV

IRADES
Institute of Research and Education in Futures Studies
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SUMMARY

VOLUME I

- Summary
- General index
- Contents
- Foreword

CONFERENCE PREPARATIONS:
- Memoranda
- Program

CONFERENCE PROCEDURE:
- Introduction
- Basic papers (abstracts)
- Panel
- Working group 1

Alternative concepts of human development, including personal development as a complement or alternative to economic development: presentation of images and conceptualisations of persons whose development depends not only on food needs etc. but also on communication, interpersonal relationships, etc.
VOLUME II

- Contents
- Working group 2
  The need for man to accept responsibility for wath is required of him by social institutions, and the need for institutions to become true facilitators in the man-society interaction.

- Working group 3
  Meta-scenario of alternative quality-of-life models, new societies based not only on the feasible but also on the desirable.

VOLUME III

- Contents
- Working group 4
  Arts as an indicator of the future and as means for the development of man's creativity.

- Working group 5
  The participation of all people in physical and ecological survival.

- Working group 6
  The participation of all people toward their selfrealisation through communication: the present state, potential advantages and disadvantages of the 'holistic' approach in the study of systems and the development of communications facilities.
VOLUME IV

- Contents
- Working group 7
  Participation of all people in human development, understood as the integral development of man on the individual and societal level; religion as a human need and as an integrative factor in human relations; other possibilities of integration.

- Working group 8
  The presentation of alternative social models by countries of the South and the possibilities of common elements with diverse roles and diverse functions.

VOLUME V

- Contents
- Working group 9
  Blueprint for a new technology: old technologies revised, intermediate technologies, innovative technologies, revolutionary technologies, new technological systems, communications technologies.

- Evening groups
  1. The possibilities and utility of global models.
  2. Policy-making for the future.

- Open public meeting

- Papers related to the Conference in general

- Index of Authors
- Index of subjects.

VII.
## CONTENTS

**Summary**

<table>
<thead>
<tr>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
</tr>
</tbody>
</table>

### WORKING PAPERS GROUP 7

- A.J. Bahm: "PREDICTING FUTURE PHILOSOPHY"  
- E. Boulding: "SOCIAL COMPLEXITY AND RELIGIOUS POTENTIAL"  
- E. Cantore: "HOLISTIC DEVELOPMENT OF MAN IN THE SCIENTIFIC-TECHNOLOGICAL AGE: A PHILOSOPHICAL CONTRIBUTION"  
- J.L. Daly: "THE PERSON IN WORLD COMMUNITY"  
- L.G. Hewage: "THE RELIGIOUS ASPECTS OF THE GLOBAL PROBLEMS OF THE FUTURE"  
- C. Mendes de Almeida: "SEMANTIC GAPS IN THE CONSTRUCTION OF ALTERNATIVE SOLUTIONS FOR THE PRESENT; PERSONALIZATION DESPITE MODERNIZATION"  
- J. Millendorfer: "RELIGION AND ECONOMIC DEVELOPMENT FROM THE POINT OF VIEW OF THE GENERAL PRODUCTION FUNCTION"  
- J. Platt: "BELIEFS THAT CAN LINK MEN TOGETHER"  
- G. Puri: "THE REVIVAL OF RELIGION IN YOGA EXPERIENCE AS A TECHNOLOGY OF THE FUTURE FOR THE INTEGRAL DEVELOPMENT OF MAN IN URBAN-INDUSTRIAL SOCIETY"  
- I. Re-Beth: "THE NEED TO FIND LEVELS OF MUTUAL UNDERSTANDING BETWEEN RELIGIONS AND THE NECESSITY FOR A HARMONIZING MEDIATION BETWEEN SCIENCE AND RELIGION"  
- J. Wellesley-Wesley: "HUMAN DEVELOPMENT"  
- D. Zadora: "TECHNOLOGICAL ABSTRACTION AND RELIGIOUS LIMINALITY"

### WORKING PAPERS GROUP 8

- M. Caldera de Pietri and P.P. Yañez: "PROSPECTION OF VENEZUELA — MOTIVES, VALUES AND OBJECTIVES OF DEVELOPMENT"  
- E.P. Elungu: "MAN AND SOCIETY — HUMAN NEEDS"  
- J.J. Greco: "THE PRESENTATION OF ALTERNATIVE SOCIAL MODELS BY COUNTRIES OF THE SOUTH"  
- F.K. Mariakasli: "THE SEARCH FOR ALTERNATIVE DEVELOPMENT MODELS IN THE THIRD WORLD"  
- A. Nordwall: "ORGANIZATIONS-RELIGION"  
- R. Thapar: "A DESIGN FOR LIVING — A DESIGN FOR DEVELOPMENT"  
- A. van Dam: "CAN CORPORATE PLANNING "INVENT" THE FUTURE OF THE THIRD WORLD?"
Participation of all people in human development, understood as the integral development of man on the individual and societal level; religion as a human need and as an integrative factor in human relations; other possibilities of integration.
I oppose those who assert that we cannot predict the philosophy of our changing future. I claim that we can begin to discern the kind of philosophy we need by examining the kinds of needs inherent in our present problems.

Although it is possible that we shall continue to be so stupid as not to recognize our needs, including need for a new philosophy, I believe that the magnitude of these needs themselves will force us not only to recognize the need for a new philosophy but also to discover what essentials must be included in our basic assumptions. We have accumulated such a vast variety of interrelated problems that hope of solving them piecemeal is no longer possible. Solution will require some "quantum leap" to a higher-level gestalt (i.e., a more intricately complex but unified whole; a social-economic-political-educational-logical-philosophical gestalt, at least), which will involve its own key ideas, techniques for communication, and methods for decision making. It will require new levels of comprehension, new values and moralities, new technologies, including new educational techniques, and new and more sensitive varieties of responsibility.

RELIGION

My assignment in this conference pertains to religion as a human need and as an integrative factor both within persons and society. I accepted the assignment readily, since I have been a life-long student and teacher of philosophy of religion based upon comparative studies of both Western and Asian religions.

What is religion? My studies have forced me to abandon the traditional Western conception as belief in God or gods or supernatural or superhuman
power or powers. Two of the world's ancient living religions, Jainism and Theravada Buddhism, explicitly reject belief in God and give religious reasons for their disbelief. The ethical monotheism shared by Judaism, Christianity, and Islam is largely peculiar to Western civilization. If religion is not "belief in God," then what is it?

After several revisions, my hypothesis about the traits common to all religions is this: Religion is man's concern for his ultimate values. By ultimate values I mean both intrinsic values or ends-in-themselves and the value of life as a whole. Some religions are other-worldly, locating the goal of life, and the ultimate value of life, beyond life, in Heaven, Kaivalya, or Nirvana. Some are this-worldly, locating the goal of life within life, and the ultimate value of life in the quality of living. But what all religions have in common, and what I propose as a definition, is this concern for ultimate values.

Such concern manifests itself in two interdependent ways, through beliefs and practices.

1. Each religion, and each person, tends to have beliefs about the origin, nature, and future of self, society, and the universe, including their values both goods and evils. Since, as I believe, persons are essentially social, at least some social values interdepend with the ultimate values of each person. The more civilized, and socialized, each person becomes, the more fully he recognizes not only kinship with, but also an interdependence with, all other persons, with mankind as a whole. Although life perpetually provokes some conflicts between individuals (as well as within individuals) and between societies, since such conflicts usually produce bad results, few can fail to idealize a world from which conflict has been eliminated or reduced to a minimum.

2. Beliefs, then, may be said to constitute one's philosophy of life. But
religion also involves practices, i.e., whatever one does in pursuit of his life's goals. One's religion is the practice of his philosophy, or at least his philosophy of life. Thus religion is not something which exists only in churches or temples or at sacred times and places. It is true that one may appreciate his ultimate values more fully if he deliberately takes time to give specific attention to them, to meditate upon them, to celebrate them, and to enjoy them. But the work one does, the money he earns, the children he bears, the experience he acquires, the medicines he takes, the political decisions he makes, the wars he fights, the vocation he follows, the ways he recreates himself, the ways he associates with others, and the things he shares with others, are all religious when they bear upon the ultimate values of his life.

I agree that religion is a human need. Conceived in terms of concern for one's ultimate values, it is his greatest need, for it includes survival as well as happiness. Man is incurably religious, not in the sense that he is superstitious (he may be that also), but in the sense that he is naturally concerned with his ultimate values. I agree also that religion integrates. However, religion unites, but religions divide. Doctrinal differences and derivative practices which divide men exclusively cause conflict. Paradoxically, we need more religion and fewer religions; unfortunately just now we seem to be acquiring more religions and less religion. The integrative power of religion should not be overlooked by either predictors or planners.

PHILOSOPHY

My concern here is limited to philosophy (i.e., to beliefs rather than practices). I shall suggest the kind of philosophy which appears inherent in our present needs by outlining first some needs and then some presuppositions
which seem needed.

Needs

For convenience, I shall distinguish eight needs (deficiencies), even though each is really a complex of needs and each interpenetrates all of the others; inability to adapt to complexities, rising expectations and frustrated efforts, loss of direction amid cultural diversity, moral disorganization, unwillingness to trust, alienation, loss of confidence, and feelings of hopelessness. The list is not exhaustive.

1. More people find themselves unable to adapt to life's increasing complexities. These complexities are of many kinds:

a. Megalopolitan. The intricacies of life in our largest cities, which intimately interdepend with their surroundings as well as with more distant suppliers, have become so complex that no one, neither policemen, commissioners, mayors, or social scientists can understand all of them.

b. Scientific. Proliferation of fragmented subsciences has proceeded so rapidly that introductory courses outlining single fields can only sketch major essentials, and new discoveries supercede older theories so rapidly that engineering curricula, for example, have an increasing obsolescence rate which promises to require annual revision within a few years. 2

c. Technological. Increasingly specialized tasks and tools require special training and, with rapid obsolescence, special retraining for increasingly complex skills. Earlier father could fix the family car, but now only a specially-trained mechanic can be trusted to manipulate repair tools. Atomic power plants require teams of technologists, in finance, ecology, urban geography, as well as nuclear physics.

d. Industrial. Large scale production demands investment and managerial magnitudes which practically eliminate individual inventors from exploiting
their own inventions. Cost of production of multiplex machines has become so
great that guarantee of large scale production is necessary to make some
financially feasible. Individual workers complain of serving as mere impersonal
cogs in a great machine. Possibilities for profitable original craftsmanship
have been diminishing.

e. Cultural. Although freed from narrowness of rural dogmatic sectarian-
ism, people find themselves plunged into a chaotic sea of "cultural pluralism"
in periodicals, books, radio, movies, television, department stores, amusement
advertisements, college courses, and travel adventures, and increasingly
variegated, disorganized, and disturbed personalities as associates.

f. Educational. Children of increasingly mobile parents encounter multi-
farious efforts to reselect and reorganize essential learning in ways which
may deprive some, overexpose others, confuse, disorganize, and bore many.
Lock-step procedures often penalize both advanced and retarded students; and
arbitrary demands by overworked teachers produce disgruntled students. The
ideal of a well-rounded education, still believed worthy in the 1920s, has
become obsolete. Now the most that can be expected is to be a well-rounded
sub-specialist.

 g. Global. A shrinking globe and growing knowledge of Asian cultures
reveals the fact that beliefs and practices opposed to ours have worked suc-
cessfully for centuries, and that those living in our emerging world culture
confront a plethora of conflicting mores, ideologies, religious authorities,
and philosophical presuppositions, as well as languages and laws. World law,
and a world bill of rights, are lacking.

 h. Novel. News, whether monthly, weekly, daily, or "every hour on the
hour," through periodicals, newspapers, radio, and television, is so much a
part of standard diet that anxieties increase as newstime approaches. Each
novelty which is faced brings with it problems of choice relative to conserving past goods or acquiring new goods. Choices between conservatism, radicalism, or some compromising moderatism become more complex when the options involve a seeming flux of conflicting philosophical presuppositions. Which should be trusted? The wisdom of the ages or the latest discovery? When both have proved inadequate, what shall one trust?

2. Rising expectations made possible by scientific, technological, industrial, and educational achievements have not been matched by equally idealistic opportunities. Although due in part to mismanagement, and lack of effective philosophy of responsibility regarding public economic planning, failure to recognize limits of both total and per-person resources have spurred unwarranted optimism. A more realistic evaluation of both maximum and optimum ratios of population, consumption, and resources is needed.

3. Loss of direction resulting from both too much cultural diversity for those who desire to but fail to master it. Idealization of individual freedom, prevalence of cultural relativism, and absence of reliable ideals by which one can guide his life cause uncertainty, instability, and even incapacity to become effectively self-directed.

4. Moral disorganization. Not merely rising crime rates, which seem to have nothing in sight to stop them, but also the pervasiveness of crime, petty and major, at all levels, from welfare clients to presidents of corporations, banks, and nations, proves that multitudes believe that crime does pay. Loss of traditional bases for moral appeals without replacement by newer, more effective ones leaves more and more persons adrift in a chaos of temptations.

5. Unwillingness to trust others is motivated not merely by economic deception, political corruption, and other forms of social disorganization but also, especially these days, by widespread inspiration from quantitative
literature of atheistic existentialism. "Hell is other people." "Existenz precedes essence." One's own act of will is "authentic" only if it refuses to permit itself to be imposed upon by any law, political, moral, logical, or natural, by other wills, or even by one's own previous will as expressed in promises. Each act of will is self-generating, indebted to nothing, solely authoritative, and dictating its own whiteness, including any responsibility it may happen to choose.

6. Alienation, which takes many forms and degrees, deprives the alienated of fullness, of fellowship, of feeling at home in his self, his society, and his universe. It fosters fear, hatred, enmity, exclusion, frozen borders, and further frustration; and reduces opportunities for sharing, cooperation, creativity, and survival.

7. Loss of confidence. If a self is unable to cope, in a society which is unable to cope, in a (God-is-dead) universe unable to cope, with problems growing inexorably in magnitude and complexity, how can one have confidence that things will turn out all right in the end? The rising expectations of more highly educated persons combined with a growing awareness of their powerlessness to control or even influence the course of events tends to add anger to loss of confidence and ripens prospects for political disorder.

8. Feelings of hopelessness. Not all have been infected, but if the conditions fostering loss of confidence continue, we should expect more to lose their ambition and willingness to cooperate constructively. Already many have turned to drugs and yoga. Others hope for help from nostrums: older religions, new sects, communes, astrology, Hari Krishna, Soka Gakkai, and Jesus Freaks movements. When these fail, some, with tongue in cheek, rejoin the system deliberately intending to "beat the game" as soon as possible.
Presuppositions Needed

What kind of philosophy will help us overcome our deficiencies? If we are intelligent (I do not predict how intelligent we will be), we will determine what our needs are and devise a philosophy and religion suited to such needs. Without taking time to show how the following proposals meet each of the foregoing deficiencies specifically, I shall select a few outstanding traits which should characterize the philosophy which need.

1. Acceptance of the ultimacy of both change and permanence. The omnipresence of changes, rapid changes, increasingly rapid changes, has made us aware that social and cultural changes may, when seen in combination with growing awareness of biological, chemical, and astronomic changes, serve as additional evidence that change is an ultimate characteristic of existence. Yet, since change involves something which changes, or something which remains through the change from its beginning to its end, the omnipresence of permanence as interdependent with such change may be regarded as a universal characteristic also. What is needed is a philosophy of both permanence and change in which each interdepends with the other. Permanences which never change, and chances which, being instantaneous, do not endure, are both unnecessary in trying to account for the dynamic nature of existence as we experience it. Such a metaphysical assumption involves a both-and logic, something not yet developed in an explicit way.

2. Acceptance of the ultimacy of parts and wholes. Although surely now everyone knows that a whole is always a whole of parts and a part is always a part of a whole, we find the Greek atomists reducing all things to mere parts, or indivisible particles which, because they were uncuttable, were called atoms, and we find the Hindu Advaitins reducing all things to Nirguna Brahman, a whole without parts, without any distinctions. Even when we do
not go to such extremes, we find some people tending to believe that parts are more real than wholes or that wholes are more real than parts. But surely the whole of anything is just as real as its parts and the parts are just as real as the whole, even though some things have more parts than others, and the same thing may gain or lose parts. Understanding of the nature of whole-part relations will need a whole-part logic or, as I call it, an organic logic, to supplement the currently popular logic of parts, i.e., of atomic propositional facts.

3. Acceptance of the ultimacy of both complexity and simplicity. Growth in complexity we know. How to organize and resimplify such complexities into new unified living individual-social gestalts remains unclear. Experiments with communes and multinational corporations within other kinds of organization add to our knowledge. Although A. N. Whitehead warned about "the fallacy of simple location," we have not yet developed a logic and metaphysics in which the complementarity of both simplicity and complexity is clearly revealed.

4. Acceptance of the ultimacy of levels or hierarchy as well as of coordination or equality. Although the presence of hierarchy has been recognized from ancient times, the nature of emergence of new levels of organization, physical and biological as well as psychological and social, remains obscure. Earlier successes of physical sciences have impressed many with the reliability of lower levels of organization and have tended to promote physicalistic reductionism. But current problems demand recognition of interdependent interaction of things involving multiplicities of levels of organization. A multi-leveled logic, i.e., a logic in which the interrelations of many levels are clarified, is needed.

5. Acceptance of the ultimacy of interdependence, i.e., of both some independence and some dependence. When two things, persons, societies, organ-
isms, levels, etc., are interdependent, they are partly independent of each other and partly dependent upon each other. Dynamically, things vary in interdependence; that is, they may become more independent of or more dependent upon each other, and may develop patterns of such variations. But we lack an adequate logic of interdependence, of dynamically varying interdependence, and of rhythms of interdependence. 4

Lack of space prevents further elaboration, but I believe we need also a logic of degrees, a multidimensional logic, and a logic of process, including dialectical processes. 5 I believe that we cannot clearly understand how to resolve other problems, not merely metaphysical, but also physical, biological, psychological and social, including economic, political, moral, and religious, until we have developed an adequate logic. If I can make this point sufficiently impressive, I will regard my contribution to this Conference, indeed the Conference itself, as having been worth while.

Turning specifically to predictions about values and religion, including political, economic, educational, and moral values, what do our needs imply? Caught between deteriorating, but still well-established and powerful traditions of sectarian religions insisting upon the authority of special revelation, on the one hand, and widespread prevalence of, and appeal of, cultural relativism, on the other, mankind is in need of a science of values (axiology), a science of beauty and art (aesthetics), a science of oughtness and rightness (ethics), social, economic and political sciences, and a science of religion or of the ultimate values of life, i.e., of each person and mankind as a whole.

We need a philosophy of science, including logic, which not only permits, but sees as central, the task of understanding the nature and value of life as a whole. Science is not value-free, 6 but is most valuable because it is useful in helping us to understand values, including ultimate values, and how
achieve and maintain them. Science which fails to do this contributes unwittingly to a suicidal tendency which seems to have gripped mankind. My prediction is that, if mankind is to survive (i.e., by its own intelligence, vs. by the power of some dictator), then it will need to develop a new philosophy, including a new philosophy of science, which will compel responsible thinkers, decision makers, to employ scientific methods in solving the problems of understanding ourselves, our values, and our social nature and needs.

PROPOSALS

It is not my purpose here to propose many solutions. The urgent need for an effective world government is so obvious that even mention of it is anticlimactic. Replacement of legislation by special-interest pressure groups by scientific techniques seems called for.

I hope that I express something central to the common concern of members of this Conference by making two proposals:

1. Not only do we need more research institutes, we need many more. Not only do we need such institutes supported by foundations, private corporations, and perhaps from the budgets of foresighted religious sects, but also by national governments and the United Nations Organization. The expected founding of a United Nations University is occasion for a glimmer of hope that it will stimulate more widespread awareness of our needs and support research somewhat relevant to them.

2. Not only do we need more research, but such research should be more integrated. I propose that a world association of humanistic research institutes be organized. Three functions of such an association may be noted.

a. Many groups, some private religiously-motivated groups centering about some specific need, or good, or locality, or person, are exerting much effort. Some governments and corporations are paying for research with humanistic aspects.
Helping each to become aware of the existence, efforts, and achievements of the others and of their common interests seems worthwhile.

b. The need for comprehensive supervision of many research groups seems great, for not all can be expected to attain and maintain a wholesome perspective. Not only should there be some central awareness of what is being done by all of numerous research institutes, but also some attention to how well the efforts of each contribute to mankind's problems as a whole. By calling attention recurrently to overall needs, association officers may stimulate research to be more sensitively fitted to such needs.

c. A third function would be to discover which kinds or areas of research are being neglected by institutes and to publicize the lack to motivate support.

d. A fourth function would be to keep alert for still newer problems which arise from time to time, some of them resulting from the very success, if we should succeed, and which could not be foreseen by earlier planners.

I hope that a pooling of suggestions during this Conference will result in concrete steps toward both more research institutes and a world association of them for the purpose of helping mankind to discover the new philosophy, or the new basic assumptions, inherent in our present plethora of complex needs.
Footnotes


3 Bertrand Russell's "Theory of Types," which many consider inherent in Principia Mathematica doctrines, excludes the possibility of such a logic.


5 For a beginning, see my Polarity, Dialectic, and Organicity, Charles C. Thomas, Publisher, Springfield, 1970.


SOCIETAL COMPLEXITY AND RELIGIOUS POTENTIAL

by Elise Boulding
Professor of Behavioral Science
University of Colorado

Religion may be looked at as a continuing human need which has to be dealt with, as a "weakness" which has to be taken account of in developing integrative systems, or as a human potential, one more resource to be utilized in making a more humane and socially responsive society. Each of these views involve an essentially utilitarian approach to religion. There is a fourth view, which involves seeing the religious dimension as at once the least developed human capacity and the critical source of clues regarding the evolutionary development of humankind in social space and time. It is this fourth position that will be explored here. To do this, we will consider the experiential and institutionalized aspects of the religious dimension through successive periods of social complexification over the last 10,000 years, as a prelude to assessing our present situation and future capabilities.

In order to understand the historical role which religious awareness both in its experiential and institutional forms has played in human society, we must be clear that religious awareness has always dealt with two contradictory perceptions of reality. First, reality is changeless and enduring, and there is a stable cosmic order that can be relied on as an anchor for the individual even as she is buffeted about by disorderly daily experience. Second, reality is in process, creation is unfinished, and there are basic uncertainties and unknowables at the heart of the universe. The future may
be known to the creator-at-work, but humankind cannot pierce the dark cloud of unknowing that forever veils the alpha-cum-omega of existence. The nomizing work of religion, then, which Peter Berger writes about so well,¹ must deal with both sets of human experiences--the experience of the changeless and of the ever-changing. Much of the critique of religion in western history has represented understandable reactions to drastic oversimplifications in various religious belief systems in response to these underlying perceptions. Formulae describing an unchanging social order as a reflection of an unchangeable divine order, or glib articulations of divinely ordained evolution toward a perfect earthly end-state are equally unacceptable to many of our contemporaries.

The institutional features of religious life are the envitable result of the fact that the experience of the unknown is always a social experience, even when (or most of all) when the experiencer is alone. Culture patterns the experience, and social structure makes it possible to integrate that experience into everyday life. The cultural patterning and institutionalizing of religious experience is a work never completed because there are continually new eruptions of experience from the unknown into the daily; this fresh stock of experience must continually be worked into the fabric of existence.

Three approaches to conceptualizing the ever-new experience stream and integrating it into the corporate existence recur again and again in widely different cultural settings: 1) the animist-pantheist-spiritualist approach, which sees all matter, and the entire physical environment, as

a diaphany—a thin veil over the pulsing spiritual stuff of the cosmos; 2) the avatar-messiah-teacher approach, which sees the physical world as more opaque but continually subject to epiphany—the eruption of spirit through matter and usually mediated in that eruption by a great teacher; 3) the humanist approach, which sees the entire range of the experienceable and the perceivable as the normal stuff of human experience, and redefines perceptions of epiphany and diaphany as poorly grasped reality, possibly coming in through the extreme upper or lower ranges of our sensory receivers.

The animist tradition has continued unbroken from earliest recorded tribal religious beliefs down through the present. Spiritualism, one of its contemporary forms, is still strong, and has its own transnational network in the 20th century. The matter-of-fact accessibility of the spiritual in daily life makes this approach, at its best, a sensitively tuned balance between the two orders of reality. We rarely see it at its best, and because of the freakish forms it can take are accustomed to perceiving it as a kind of demonology.

The avatar tradition begins with the earliest temple-centered civilizations, and has also continued unbroken to the present. The great axial periods in human history, such as the seventh and sixth centuries B.C., which encompassed the birth of Zoroaster, Buddha, Confucius, and the great Jewish prophets, have profoundly structured the perceptions of the unknown in relation to the known for all the great civilizations since. The subsequent births at 500-year intervals after Buddha of first Jesus and then

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2 International Spiritualist Federation, with headquarters in London.
Mohammed, provided humanity with a kind of relationship to the cosmos that animism does not provide: a heightened and more focused awareness of the nature of the realm of the spirit. The heightened awareness becomes possible precisely because the spirit is only seen to break through from time to time, and not always to be accessible. The more focused nature of this spiritual awareness has been accompanied by a sharpened sense of time and historical becoming, a feeling for the future as something to be shaped, and a sense of common divine-human enterprise. In spite of the profound differences between the religions of China, India and Persia on the one hand, and the religions of the Book--Judaism, Christianity and Islam--on the other, the experience of epiphany and a resulting sense of some significant and purposive work to be done in the world is common to them all.

The humanist tradition springs from the early recognition of spiritual decadence when temple-centered religions first began to spawn their bureaucracies and weave webs of oppression instead of structures of support for their worshippers. It was not illogical for the more thoughtful scribes of Egypt, beginning to amass the first libraries and standing on what must have seemed like a very exciting knowledge threshold, to conclude that the mysteries the priests dealt with were as phony as their rituals. From there it was but a step to the perception that the key to all mysteries lay in the human mind, and in 1500 B.C. the first humanist organization to last down to the present, the Rosicrucian Society, was born in Egypt. "Rosicrucian teachings unite into one livable philosophy, science, art and mysticism and seek by an educational process to free society of the enslaving influence of
superstition." That currently used statement of purpose is probably not too different from the first version shaped in ancient Egypt.

Humanism deals with spiritual experience by redefining it as human experience. This deprives the humanist both of the diffuse sense of spiritual support which the animist has, and the focused sense of partnership with spiritual power which the avatar traditions provide. When things are going well in a society, it does lead to a greatly enhanced sense of human effectiveness. Everything there is to understand and to do, can be understood and done by the human individual. In times of social cataclysm, however, since humanism provies no way of relating to catastrophe and the unknown except a last-ditch stoicism, it tends to be overshadowed by the teaching religions of the avatars.

Up until now I have been emphasizing the continuities in human experience in relating to the cosmic order. But in fact human societies have experienced some very sharp discontinuities, particularly when in transit from one level of societal complexity to another. When the transition from a hunting and gathering existence to settled agriculture had been made by a substantial number of tribes by about 10,000 B.C., thus creating the preconditions for village life, a whole new set of economic, political and social mechanisms had to be developed. Since people were living in higher densities, interacting more frequently, sharing resources and running into allocation problems that did not exist in the nomadic state, many new kinds of behaviors were required. Once cognitive maps

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adequate to this new level of complexity had been developed, there must have been an explosive sense of new human possibilities. This first threshold has not been documented, since writing was still some time off. But we can imagine that there was some heightened sense of human capabilities as well as a linking of new knowledge about the physical environment and the changing seasons to the workings of the spirit world. This must have been the great era of the development of creation myths.\(^4\)

The first threshold we can actually document comes about 3000 B.C. with the establishment of the first great central empire in Egypt and the first dynasties in Sumer. Calendars and writing appear, and temple warehouse records give us our first glimpse of a whole new set of socio-economic and political patterns developing with the first human venture into urban centralization. With this new level of human density and the possibility of commanding human and physical resources over great distances, social power differentials and social stratification developed very rapidly. Peasants and unskilled laborers lived very different lives from scribes, administrators and priests. The heightened sense of human capabilities that came with this new level of societal complexity was highly selective and elitist. There were no visions of utopia in which peasant and priest shared alike. There was a keen sense of a human future to be created with the help of the gods, however, and the long centuries of expansion of political empire in the name of one or other deity began in 3000 B.C.

By 500 B.C. the human situation was entirely different. After several thousand years of experience of urbanization and the development of extensive land and sea trade routes, the knowledge stocks were accumulating in the cities of Egypt, Greece, Rome, India and China to the point where totally new understandings of humans-in-society were possible. The craft industry of large-scale reproduction of manuscripts, the development of the great library and center of learning at Alexandria, the writing of the first world History by Ephorcs of Cyrene, early developments in both theoretical science and applied technology, of building construction, irrigation and navigation, all provided the setting for the appearance of a new set of teachings about the spiritual nature and potentialities of the human being. There were new perceptions about the nature of the cosmic order and the earthly order of which it was the mirror.

The suggestion that woman and man had moral natures and could choose the good was substantially at variance with the human experience of several thousands of years of militaristic imperial expansion and oppression. Confucius, Lao-Tse and Buddha all held up a new mirror to humankind. A series of avatars with new teachings emerged in Hindu India. Early visions of utopia came from sea voyagers who imagined that somewhere beyond the ever-receding horizon of the boundless blue deeps lay isles of the blessed, where the cosmic order breathed undisturbed and all creatures dwelt in harmony.

Skills of social organization and an infrastructure of travel and communications networks had developed which made it possible to use

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5 Mohammed Mujeeb, World History: Our Heritage (Asia Publishing House, 1971).
the new knowledge in ways not possible earlier. Humans had arrived at another level of societal complexity altogether, and the old focus on one great temple-palace city where all wealth, knowledge and skill was accumulated, was gone. It was a threshold time. It was therefore not too surprising that by 200 B.C. the Emperor Ashoka actually drew on his infrastructure in order to refashion the Mauryan Empire according to the images evoked by these great moral teachings of 300 years earlier. He laid aside instruments of military force and tried to create the first "peace empire." The structures of peace were fragile, however, and by the next century all of India, China, Greece and Rome was submerged in a confused inter-necine battling and unpredictable movements of warrior nomads. Into this crumbling world Jesus was born, to bring a new vision of human possibilities and divine design to a world that was giving up utopias.

The sturdy practical early Christian communes did not look to political power as a means to the realization of the kingdom of heaven. Living in momentary expectation of the parousia, they lived as if it had already happened. But the parousia kept being postponed, and political organization became the church's solution to an indefinite interregnum. By the thirteenth century the hierarchy of the church itself was as much the enemy of earthly utopia as any barbarian emperor or warrior nomadic tribe. Even so there remained an unbroken tradition from the first century A.D. of monastics and hermits who stood apart from all structures to serve God and humanity. The very techniques of social organization and the communication networks developed by the Papal bureaucracy which became such an anathema to dissenting believers made possible the planning and
execution of the great cathedrals of the middle ages. God was praised
in songs of stone as he had never been praised before.

Out of that strange mixture of politics and vision another great
axial period dawmed. Still another level of societal complexity had been
reached. Yet another threshold appeared. All the ancient learning from
Alexandria, Greece and Rome, plus the science, scholarship and poetry of
the Islamic world, filtered into Europe through occupied Spain to be
treasured and worked with in the monasteries of Europe. Nuns and monks
by the thousands wedded the love of learning and the desire for God in
indefatigable labors of translation, copying, encyclopedic compilations
and new writings. Other thousands of barefoot monks swarmed across Europe
caring for the poor, the sick, the outcast. Schools erupted, first from
the great cathedral chapter houses, then outside them, and the learning
that had been for the few was increasingly for the many.

The craftsmen who were organized into guilds all over Europe
developed their own mini-society complete with their own schools, and as
they struggled to solve the technical problems of the building and adorn-
ment of the great cathedrals, birthed an explosion of scientific discovery
and technological innovation. The seething social crust of Europe erupted
in a series of socio-political explosions as Crusades came and went,
plagues decimated the continent, and empires rose and fell. In this

6Jean Le Clercq, Love of Learning and Desire for God (New York:

7Hastings Rashdall, The Universities of Europe in the Middle
Press, 1936).
period the countryside began emptying into the city. In fear and hope, alienated city burgers with new visions of the possible mobilized alienated peasants in a world in which old feudal securities were disappearing. Chiliastic uprisings that were intended to usher in a new age of justice and peace were part of the fruit of the chaos of Europe. Because the old order was still powerful, they were bloodily suppressed. In China the great nomadic empires of Genghis Khan and Kubla Khan were reorganizing the social face of Asia. Africa was seeing the rise of the golden empire of Mali, and Central America was cradling the spiritual and organizational power of the Aztecs. Everywhere one looked on the planet, the old was crumbling and new life was surging.

A Dominican monk, Joachim de Fiore, pondered all these happenings in the quiet of the monastery library and came to the conclusions that all these upheavals were signaling the end of the era of the institutional church. Until this time, the children of God had needed the outward forms and institutional supports which the church provided. Looking back, he saw how God had first ruled directly from the heavens to lead his people in the time of the prophets of Israel; then, in humankind's adolescense, he sent his son to teach disciples how to create an earthly kingdom. Now was the time of humankind's maturity, and the holy spirit, reborn in every human heart, would be all the guidance needed for a human society to live

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in peace and joy with material abundance for all. Joachim's message to
his time and to the succeeding centuries, developed in the Liber Figurarum
and in countless manuscripts produced by later Joachimists, was that human-
kind stood right on the threshold of a new age, the age of the holy spirit.
Institutions of church and state would crumble away, unneeded.9

Perhaps we were indeed on such a threshold again, in the thirteenth
century, as perhaps we had been in the sixth century B.C., and unknown
times before that. Certainly in Europe for the next three hundred years
every pope, emperor, queen, and crusader knight considered at one time or
another whether she was the chosen instrument to usher in the age of the
holy spirit. The energies unleashed in this axial age however all
drained off into the industrial revolution and the age of technology,
characterized by increasingly lethal warfare, widening disparities between
rich and poor, and increasing despair about humankind's capabilities to
bend and control human cleverness towards humane ends.10

Now in the twentieth century we face for the first time a level
of societal complexity of planetary dimensions. We are once more at
threshold. Science has brought us unimaginable possibilities with the
possibility of genetically redesigning ourselves, reshaping the physical
environment of the planet and crossing space to other galaxies. There
seems to be no limit to our capacity for network creation—it is cosmic in
proportions! And yet all this leaves us burdened with the sad awareness

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9 Marjorie Reeves, The Influence of Prophecy in the Later Middle

10 James J. Walsh, The 13th: The Greatest of Centuries (New York:
Catholic Summer School Press, 1913).
of how poorly developed our capacities for love, compassion and human bonding are. We are a people with informed minds and uninformed hearts, and the discrepancy may well lead to self-destruction.

The old brave voices of the intellect are still heard, as witness the Humanist Manifesto currently being circulated (in 1973), which urges humanity to abandon religion (equated with superstition) and trust to reason. But another set of old-new voices is also being heard. In some ways Teilhard de Chardin is the spokesman for an aching planet, as he calls out the lineaments of the "far-off divine event toward which all creation moves," and as he spells out a process or divinization of all created matter in which we are, know it or not, participating.

But who is to teach us how to become the new persons we must become to participate in this new kind of developmental process that erases old distinctions between matter and spirit? Many are asking this question. Recently the anthropologist Gregory Bateson called together a conference of physical and social scientists and specialists in systems design to deal with the challenge generated by the increasingly widespread perception that man's consciousness is now the agent of evolution. His charge to the group was, use human knowledge to design the next steps in evolution. They discovered that they not only did not know enough, but also that they did not know how to know. The title of the published account

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11 Humanist Manifesto II is being issued in 1973, the 40th anniversary of the first Humanist Manifesto (1933).

of the conference, Our Own Metaphor,\(^{13}\) reflects Gregory's remarkable daughter Catherine's flash of insight that we are our own metaphor, and that the secrets of the process of evolution lie untapped in the nature of our being.

Catherine Bateson's unique linking of highly developed intuitive modes of thinking with finely disciplined cognitions, as she struggles with the mass of interdisciplinary knowledge that comes together on occasions like the Bateson conference, offers a hint of new directions in learning how to know. It is my own conviction that we will continually the slide away from threshold of significant human development in the future, as we have in the past, unless we reconceptualize knowledge to include the exercise of the spiritual-intuitive faculties with the exercise of the cognitive faculties. We cannot do this without studying the centuries-long accumulations of experience in training the spiritual intuitive faculties found in all the major religious traditions. It is to be found in the contemplative monastic tradition of the Christian church, in the practices of mystical traditions in Buddhism and Hinduism and Islam, best known to us through Zen, Yoga and sufism, and it is to be found in other less well articulated traditions or religious practice.\(^{14}\)

The danger with this approach is that it tends to see religion as one more resource to be used for purely individual ends. The retreat to

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\(^{13}\) Mary Catherine Bateson, Our Own Metaphor (New York: Knopf, 1972).

privatism that the fad of eastern-style religions on American college campuses represents is the exact opposite of the orientation of the original traditions from which the practices of spiritual training come. The long quiet process of inward attunement always relates, in all traditions, to a larger process of cosmic attunement and specifically manifests itself in acts of social caring. In addition to the danger of failing to connect with the basic world view that underlies a method of spiritual training, there is also the danger of impatience, the desire for quicker solutions. The intellect in fact always becomes impatient with the arduous exercises of spiritual discipline. This tendency, equally manifested in Christianity and in other traditions, leads to a divorce of intellect and spirit as some specialize in the development of the one, some in the other.

Teilhard's work represents an approach, within Christianity, to the wedding of the two sets of faculties. Thomas Merton, whose work also represents a union of the two faculties, particularly in his apparently secular book, *Conjectures of a Guilty Bystander*,¹⁵ at the time of his death was working on the task of linking Christian and eastern disciplines of spirituality. Largely as a result of this work, Zen and Christian monks and nuns have begun to teach each other and work together. Teilhard and Merton and their counterparts in Asia have devoted their lives to the nurture of the intellect and the spirit. We have scarcely begun to realize the implications of this work.

If we look at the surface of the institutionalized religious life of the twentieth century we scarcely see these tender sprouts. What we see is the affluence-supported array of imported "spiritualities," offering inward ease and a sense of being in touch with ultimate mysteries with relatively little effort; we see the great bureaucracies of Protestantism and Catholocism carrying on a staid and steady work of symbolically affirming an other reality while making it as comfortable as possible to live in this one. We also see valiant efforts within and between these bureaucracies to respond to the spiritual and social agonies of our time; we see bands of pentecostals, often excluded from middle-class security, protesting the mild spiritual comforts of the major denominations while they seek a contextless immediacy of spiritual presence. And outside these social networks of religiosity we see on the one hand the human potentials people, exploring altered states of consciousness through mind games and encounter rituals in their search for the inner


18 Robert Masters and Jean Houston, Mind Games (New York: Viking Press, 1972); Constance Holden, "Altered States of Consciousness: Mind Researchers Meet to Discuss Exploration and Mapping of 'Inner Space,'" Science, Vol. 179 (March 9, 1973) 982-3; and also see the descriptive literature issued by the ARICA Institute in America, headquartered in New York City!
understanding and control, and the experiences of spiritual-social encounter they have missed both in their exposure to secular schooling and to religious training. On the other hand we see the small band of faithful humanists, determined to make reason produce humankind's salvation. Most professional futurists belong to that band. And beyond that, stand the multitudes of the "religiously deprived"--apparently uncaring.

As people concerned with the planetary future, what are we to make of all this, and how are we to respond to it? Some of us will continue to belong to that small band of hope--the humanists relying on reason alone. Others will explore the human potentials movement, pinning their faith on what the human being can do when presently undeveloped faculties are more fully developed. And some of us will ponder the tender new shoots pushing up through the old cracks in the world's religions. The experience of epiphany lies outside all human constructions. Christians call it grace. Other religions have other words for it. But it cannot be harnessed or molded like a "resource." It cannot be directed to other ends. Yet it is a resource and it is an end. Spiritual disciplines of prayer and meditation open one to grace, yet grace invades human life over and over unasked for. Unreasonably, it comes to the unprepared household of the soul. This offends all our concepts of social justice and good planning.

Oral and recorded history in all cultures from all times repeatedly describe or hint about eruptions of "grace" into the human event stream. My own conclusion from the historical record is that humanity keeps arriving at thresholds where both intellectual and spiritual capacities are apparently heightened, and yet society each time slides away from its own possibilities. This has led me to feel that the most important business
before us at this particular threshold moment is to explore carefully how contemplative spirituality might inform the life of reason and action. Since contemplative spirituality cannot be used for other ends, it will evade us when we seek to grasp it. This means that some of us at least must be willing to open ourselves to kinds of learnings that are not offered in the educational complexes of school or church or civic life. We need teachers, but it will not be easy to find them. They will be found both inside and outside monasteries, but the monastic tradition itself does not guarantee a living spirituality, and has little skill in communicating outside the walls of the cloister. Furthermore, each of us must seek these learnings first within our own culture. A westerner cannot expect to be nurtured by the wisdom of Zen when all her culture has prepared her for different ways of organizing reality. She will get the trappings of religious experience, but only the shadow of the substance.

Conversely, easterners have had ample experience of the limitations of western Christian teaching uncarefully deposited in Asia and Africa. Later, much later, when we have learned the spiritual disciplines of our own culture, we will have a capacity for attunement that will make us open to other kinds of learning from other cultures. You say we have no time? Time is all we have. We have nothing else.

In order to make this paper an illustration of the new ways of knowing\textsuperscript{19} that will draw on both cognitive and spiritual dimensions, I will not end with an exhortation, but rather turn to a mapping out of the potentials in our "cosmic" network capability for responding to the needs

\textsuperscript{19}Also see Elise Boulding, "The Child and Nonviolent Social Change," in Design for Nonviolent Change, edited by Israel Charny, in press.
for new kinds of growth. As futurists, we are all network conscious, and realize the importance for humankind's future of the fullest possible development of existing and new transnational networks that enable people to work together on common goals with shared resources over vast distances, unimpeded by nation state barriers.

Most of our studies of systems capabilities of networks have focused on networks providing human services of various kinds in the health, education and welfare fields, or networks with peace-keeping functions at the intergovernmental and UN level, or economic development and multi-national business corporation networks. Transnational religious networks have been largely ignored, perhaps because they are seen as vestigeal institutions from a former era, of little importance as we move towards the twenty-first century. In strict communication channel terms, these are probably the most far-reaching networks available in our society, since they touch all the world's villages as well as the major centers of population. No other transnational networks have the "grass-roots capacity" that religious networks have. The fact that the networks have chiefly been used for secondary maintenance-type activities should not blind us to the fact that some vital parts of the human knowledge stock lie hidden in these networks, and have undreamed of potentials.

The major world faiths which are the repositories (though not necessarily the transmitters) of the type of knowledge our technological civilization is weakest in, are listed in Table 1 (following page) with an indication of the percentage of the world's population represented in each religion. These are rough approximations, since reporting of religious affiliations and/or identification is done very unsystematically and is
### Table 1. Distribution of Religious Faiths in World Population and in Transnational Networks.20

<table>
<thead>
<tr>
<th></th>
<th>Percent of World Population</th>
<th>Percent of Transnational Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christianity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant</td>
<td>28.0</td>
<td>69</td>
</tr>
<tr>
<td>Catholic and Eastern Orthodox</td>
<td>9.0</td>
<td>39</td>
</tr>
<tr>
<td>Judaism</td>
<td>0.4</td>
<td>0.003</td>
</tr>
<tr>
<td>Muslim</td>
<td>13.0</td>
<td>9</td>
</tr>
<tr>
<td>Zoroastrian</td>
<td>1.0</td>
<td>0.003</td>
</tr>
<tr>
<td>Shinto</td>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>Taoist</td>
<td>1.0</td>
<td>0.003</td>
</tr>
<tr>
<td>Confucian</td>
<td>9.0</td>
<td>0.003</td>
</tr>
<tr>
<td>Buddhist</td>
<td>8.0</td>
<td>0.003</td>
</tr>
<tr>
<td>Hindu</td>
<td>13.0</td>
<td>0.003</td>
</tr>
<tr>
<td>Other (animist, atheist, Humanist, no religion)</td>
<td>25.0</td>
<td>0.003</td>
</tr>
<tr>
<td>(Humanist, Interfaith, etc.)</td>
<td>19</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>98.5</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

subject to great bias depending on the institutional and political interests of reporting entities. Table 1 also indicates how many separate transnational networks are available to each religious faith.

It will be easily seen that Christianity and Judaism lead the field, and that most eastern religions have no transnational networks as defined by the compilers of the Yearbook of International Organizations. A group of worshipping assemblies of people of the same faith in different countries do not per se constitute a network. In order to be defined as a transnational network they must have a supporting institutional structure that carries out activities beyond the act of worship itself, have national structures in at least three countries, and an international headquarters

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with democratically elected officers, defined purposes, and activities
which are carried out on behalf of constituent members.

The capability to support transnational networks is obviously in
part a function of urbanization and industrialization. Third world
countries have only recently begun to participate in transnational networks,
and most international headquarters will be found in Euro-North America.
But this is changing, and it can be predicted that religious networks
based in Asia and Africa, representing religious faiths in this part of
the world, will be developing rapidly in the next ten years. Buddhists
have been very much plunged into world networks as a result first of the
U.S. war with Japan and then of U.S. action in Indochina, and will bring
some major changes into our conceptions of what transnational networks can
do. The movement of gurus from East to West, such as the Maharishi with
his Transcendental Meditation training enterprise, is also right now
creating new transnational networks.

A separate study of these networks is underway which will report
on the extent of the transnational reach of each network and on the types
of purposes pursued by each. Table 2 (on following page) organizes the
information from Table 1 somewhat differently, based on a categorization
that lists humanist-ethical and humanist-religious transnational organiza-
tions and interfaith organizations separately. It also gives an idea of
the actual distribution of organizations. Since each network represents
a separate set of activities, the fact that the Catholic church has 69
transnational associations tells us that the Catholic church carries out
a very large number of different types of activities all within the
context of the Catholic faith. It will be noted that humanist transnational
Table 2. Transnational Religious-Ethical Networks.

<table>
<thead>
<tr>
<th>Network</th>
<th>Percent</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian, Protestant</td>
<td>39</td>
<td>91</td>
</tr>
<tr>
<td>Christian, Catholic</td>
<td>30</td>
<td>69</td>
</tr>
<tr>
<td>Jewish</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Humanist, Social-Ethical</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Humanist, Religious</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>All Faiths</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Federations of Federations</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Professional Religious Studies</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Interfaith, Christian/Jew</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Muslim</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Buddhist</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Hindu</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>100</strong></td>
<td><strong>232</strong></td>
</tr>
</tbody>
</table>

associations with a strictly ethical focus represent 7 percent of all networks—a small percentage for those who expected that this development was the trend of the future, large for those who are not aware of the vigor of international humanist movements. Most of them are not new, but date back to the beginning or middle of the century. The appendix provides a list of organizations by title for each category.

What do these 232 transnational associations do? And how far does each reach? Some reach as few as four countries, some as many as over 200 countries and territories. Most of them engage in educational and social service activities, and a surprising—to some—number are concerned with issues of social justice, equality of races (and sexes), economic development in the third world and the ghettos of the first world.

Do the people who work in these transnational networks work

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21 Data taken from *Yearbook of International Associations, 1972-73*, op. cit.
differently because they are working within the context—at least in a formal sense—of a religious faith? Some do, probably many don't. The fact that they are working in that context only tells us that they are not hostile to religion, not how committed they are to it.

Some of these networks are informed by a powerful vision of an earthly society motivated by love and a spirit of sharing. The whole issue of the images of the future within the churches cannot be dealt with here, but there are live images which powerfully move many people and lead them to a life of action. Those interested in an examination of images of the future within the Christian church are referred to "The Contributions of Religion to Contemporary Futurism: Religion, Futurism and Models of Social Change."\(^{22}\) The place to look for the combinations of a deep spirituality, well-trained intellectual capabilities, and commitment to a life of action, is in some of these networks. The contemplative orders within the Catholic church are themselves stirring in surprising ways, and reaching into other networks from which they were formerly closed off.

One important line of development to watch, and to work with, in the coming decades, is the activation of more and more of the potentials, sometimes long dormant, of these transnational religious networks on behalf of world community. I am in conflict about drawing too much attention to them, because if they are "tapped" too fast and too soon, they may not be able to develop their own spiritual resources (often dormant) which are precisely what the world community so urgently needs from them. On the

\(^{22}\) By Elise Boulding, for *The Humanist*, November/December 1973 (in press).
other hand, if they are not tapped at all, we face the continuation of the sterile divorce of reason and spirit that we have suffered from too long in the human experience.

The spiritual eruptions, the epiphanies I have spoken of, will hardly be confined to the channels of transnational religious networks. But neither will they be absent from them. The greatest tragedy would be for us to be so highly trained in traditions of intellectual aridity that we wouldn't notice when new doors opened for humankind.
APPENDIX

TRANSPORTATIONAL RELIGIOUS NETWORKS
Yearbook of International Associations, 1972-73

Christian Protestant (ChP)

All Africa Church Music Association
All Africa Conference of Churches
Asian Church Women's Conference
Baptist World Alliance
Christian Democratic Organization of America
Christian Democratic Union of Central Europe
Christian Democratic World Union
Christian Democratic Youth of Latin America
Christian Esperanto International Association
Christian Family Movement
Christian Medical Commission
Christian Movement for Peace
Christian Peace Conference
Christian Rural Fellowship of East Africa
Church and Society in Latin America
Church of Christ, Scientist
Churches Committee on Migrant Workers in Western Europe
Commission of the Churches on International Affairs
Committee on the Christian Responsibility for European Cooperation
Confederation of YMCAs of South America
Conference of European Churches
Continuation of the Pacific Conference of Churches
Conservative and Christian Democratic Youth Community
Council of the Methodist Central Conferences in Europe
East Asia Christian Conference
Eirene—International Christian Service for Peace
European Baptist Federation
European Christian Democratic Union
European Evangelical Alliance
European Union of Young Christian Democrats
Evangelical Latin American Commission on Christian Education
Friends World Committee for Consultation (Quakers)
General Conference of Seventh Day Adventists
General Conference of the New Church (Swedenborgian)
International Association for Religious Freedom
International Association for Temperance Education
International Band of Hope Council
International Bible Reading Association
International Christian Broadeners
International Christian Democratic Research and Documentation Centre
Christian Protestant [ChP], continued

International Christian Police Association
International Christian Social Union
International Committee for the Defence of Christian Civilization
International Committee on Christian Literature for Africa
International Committee on World Day of Prayer
International Council of Christian Churches
International Council of Christian Churches European Alliance
International Federation of Christian Workers in Exile
International Federation of Christian Workers Movements
International Federation of the Temperance Blue Cross Societies
International Fellowship for Christian Revival
International Fellowship of Evangelical Students
International Hebrew Christian Alliance
International Institute of Social Christianity
International Inter-Church Film Centre
International League of Religious Socialists
International Society of Christian Artists
International Union of Liberal Christian Women
International Union of Young Christian Democrats
International Young Christian Workers
Lutheran World Federation
Movement of Christian Workers in Europe
Near East Council of Churches
Peace Association of Christian Scientists
Pro Mundi Vita—International Research and Information Centre
Quaker Esperanto Society
Salvation Army, The
Symposium of Episcopal Conferences of Africa and Madagascar
Toc H
Union of Latin American Evangelical Youth
United Bible Societies
Watch Tower Bible and Tract Society
World Alliance for International Friendship through the Churches
World Alliance of Reformed Churches (Presbyterian and Congregational)
World Alliance of Young Men's Christian Associations
World Assembly for Moral Re-armament
World Association for Christian Communication
World Association of Methodist Radio Amateurs and Clubs
World Christian Endeavor Union
World Convention of Churches of Christ
World Council of Christian Education
World Council of Churches
World Evangelical Fellowship
World Federation of Associations of Secretaries of YMCAs
World Federation of Methodist Women
World Methodist Council
World Movement of Christian Workers
World Student Christian Association
World Young Women's Christian Association
World's Women's Christian Temperance Union
Christian Catholic [ChC]

Caritas Internationalis (International Conference of Catholic Charities
Catholic Committee for Intra-European Migration
Catholic Co-ordinating Committee for the Sending of Technicians
Catholic International Education Office
Catholic International Federation for Physical and Sports Education
Catholic Latin American Press Union
Catholic Media Council
Catholic Secretariat for European Problems
Catholic Union for Ído
Catholic Union of International Study
Central Office for the National Societies of Roman Catholic Doctors
Conference of International Catholic Organizations
Crux—International Catholic Federation of Total Abstainers
European Association for Catholic Adult Education
Inter-American Catholic Social Action Confederation
Inter-American Confederation of Catholic Education
International Association of Builder Companions
International Association of Catholics for the Progress of Science
International Catholic and Pedagogical Federation
International Catholic Association for Radio and Television
International Catholic Child Bureau
International Catholic Confederation of Hospitals
International Catholic Co-operative Centre
International Catholic Film Office
International Catholic Girls' Society
International Catholic League Sobrietas
International Catholic Migration Commission
International Catholic Rural Association
International Catholic Union of the Press
International Catholic Union for the Study of Private Law
International Catholic Union for the Study of the Rights of Man According
to Christian Principles
International Catholic Union of the Middle Classes
International Catholic Work IKA
International Centre for Studies in Religious Education
International Centre "Humanae Vitae"
International Christian Union of Business Executives
International Committee of Catholic Nurses
International Confederation of Catholic Rural People's Schools
International Conference of Catholic Scouting
International Council of Catholic Men
International Federation of Adult Rural Catholic Movements
International Federation of Associations of Catholic Doctors
International Federation of Catholic Chemists
International Federation of Catholic Parochial Youth Committees
International Federation of Catholic Schools of Journalism
International Federation of Catholic Universities
International League of Catholic Pacifists
International Movement of Apostolate of Children
Christian Catholic [ChC], continued

International Movement of Catholic Agricultural and Rural Youth
International Secretariat of Catholic Technologists, Agriculturists
   and Economists
International Society for the Renewal of Sacred Catholic Music
International Union for Moral and Social Action
International Union of Catholic Esperantists
International Union of Old Catholics
International Young Catholic Students
Latin American Confederation of Religious Orders
Latin American Episcopal Council
Organization of Catholic Universities in Latin America
Pax Christi, International
Pax Romana, International Catholic Movement for Intellectual and
   Cultural Affairs
Pax Romana, International Movement of Catholic Students
Roman Catholic Center for Peace
St. Joans International Alliance
Service for Documentation and Study
World Catholic Federation for the Biblical Apostolate
World Federation of Catholic Youth
World Union of Catholic Philosophical Societies
World Union of Catholic Teachers
World Union of Catholic Women's Organizations

Jewish [J]

Agudath Israel World Organization
Conference of European Rabbis and Associated Religious Organizations
Consultative Council of Jewish Organizations
Co-ordinating Board of Jewish Organizations
International Council of Jewish Women
International Council on Jewish Social and Welfare Services
International Jewish Labor Bund
Jewish Agency for Israel—World Zionist Organization
Jewish Territorial Organization
League of Jewish Women
Maccabi World Union
Scandinavian Jewish Youth Federation
Universal Israeliite Alliance
Women's International Zionist Organization
World Federation of YMHAs and Jewish Community Centres
World Jewish Congress
World ORT Union
World OSE Union—World Wide Organization for Child Care, Health and
   Hygiene among Jews
Jewish [J], continued

World Sephardi Federation
World Union for Progressive Judaism
World Union of Jewish Students
World Federation of Jewish Fighters, Camp Inmates and Nazi Victims

Humanist, Social-Ethical [HSo]

Amnesty International
General Federation of Women's Clubs
International Abolitionist Federation
International Abstaining Motorists Association
International Commission for the Prevention of Alcoholism
International Council of Alcohol and Addictions
International Federation for the Rights of Man
International Federation of Mazdaznan Women
International Good Templar Youth Federation
International League for the Rights of Man
International Organization of Good Templars
International Railway Temperance Union
Middle European Good Templar Youth Council
Scandinavian Union for Non-Alcoholic Traffic (Motorists Association)
World Movement of Mothers
World Prohibition Federation

Humanist, Religious [HRe]

Baha'i International Community
General Anthroposophical Society
International Humanist and Ethical Union
International Spiritualist Federation
Pythagorean Philosophica Society (International)
Roscicrucian Order
Theosophical Society
Theosophical Society in Europe (Federation of National Societies)
United Lodge of Theosophists
World Goodwill
World Union of Pythagorean Organizations

All Faiths [AF]

International Fellowship of Reconciliation
World Conference of Religion for Peace
World Congress of Faiths
World Fellowship of Religions
World Spiritual Council
Federations of Federations [FP]

Ecumenical Satellite Commission
Ecumenical Youth Council in Europe
World Christian Temperance Federation
World Federation of Christian Life Communities

Professional Religious Studies [PRS]

International Organization for the Study of the Old Testament
Societas Liturgica—International Society for Liturgical Study and Renewal
Society for African Church History
Society for the Study of the New Testament

Interfaith, Christian/Jew [E]

Committee on Society, Development and Peace of the World Council of Churches
and the Pontifical Commission Justice and Peace
International Consultative Committee of Organizations for Christian-
Jewish Co-operation
International Council of Christians and Jews

Muslim [M]

Congress of Arab and Islamic Studies
Organizing Committee of the International Muslim Academy of Sciences,
Letters and Arts
World Muslim Congress

Buddhist [B]

Buddhist League of Esperantists
World Fellowship of Buddhists

Hindu [Hi]

Ramakrishna Mission Association
Vedanta Movement
HOLISTIC DEVELOPMENT OF MAN IN THE SCIENTIFIC-TECHNOLOGICAL AGE:
A PHILOSOPHICAL CONTRIBUTION

By Enrico Cantore
Director, Institute for Scientific
Humanism
New York

The topic assigned to our discussion involves a twofold totality. We are to think of a socio-cultural situation that may enable the totality of people to develop according to the totality of their beings. In addition, we are to situate properly the role of religion within the framework of holistic human development. To help meet this staggering assignment I wish to present here some insights I have attained by investigating for a number of years the humanistic message of science.

By humanistic message of science I mean the understanding of the whole man that can be obtained by reflecting philosophically on science. Humanism as taken here, therefore, bears directly on the holistic character of our topic. As for the justification of stressing scientific humanism in connection with our topic, it seems to me obvious. For we live in a period which is inherently characterized by science, in the form both of new discoveries and new technological implementations. In particular, the futuristic issues
with which deals our Conference are clearly the outcome of the influence of science on contemporary society. Thus, if we want to foster the holistic development of man in our time, we must necessarily strive after a humanism which takes science systematically into account -- that is, scientific humanism.

To contribute to the holistic development of man in the scientific-technological age I wish to submit the following considerations. In the first place, I shall outline my methodological approach to science. In the second place, I shall summarize the humanistic indications that arise from the approach itself. In the third place, I shall suggest the reasons for cooperation between science and religion. Finally, I shall list some conclusive inferences which appear important for fostering universal and integral humanization in the society of the foreseeable future.

1. EXPERIENTIAL-REFLECTIVE APPROACH TO SCIENCE

The need for developing an original philosophical approach with regard to science has dawned upon me by reflecting on the so-called two-culture phenomenon. It is an unquestionable historical fact that philosophers have repeatedly tried to understand the meaning of science for man, from Descarts onward. But it is just as unquestionable that, at least as groups, scientists and philosophers have so far been unable to agree on what constitutes the proper meaning of science for man. Hence my reason for facing the methodological problem once again. Here are in brief the main aspects of the approach I found to be promising.
To begin with, I deemed it necessary to focus the attention on science proper — that is, natural or experimental science. The reason is that, historically and psychologically, natural science manifests features that distinguish it from related enterprises, for instance mathematics and technology. In addition, it seemed necessary to me that one should take science concretely — that is, as a lived activity of its practitioners rather than an abstract body of knowledge or a set of methodological procedures. The reason is that lived science is an activity of the whole person and this is precisely what we want to explore in order to understand the meaning of science for man.

If we adopt the above starting point it is clear why one can think of an experiential-reflective approach to science as humanistically enlightening. Real or concrete science is an experiential process that involves the totality of man. In fact, it comes about as a result of the engagement of the whole person and its message affects the entire self-understanding of man. But the humanistic implications of the scientific experience cannot be understood unambiguously unless the investigator reflects on them explicitly, critically and systematically. Consequently I was led to the conviction that the experiential-reflective approach to science is a promising procedure for the development of a genuine scientific humanism, and that this approach is of typically philosophical kind. Reflection on experience, in fact, is the characteristic procedure of the philosophical endeavor.

At this point a word should be said about the effective way to carry out the approach described. I adopted what I call the inductive-genetic procedure. My reason for this step has been the concrete and developmental nature of human experience in general and of scientific experience in particular. Consequently, I tried to understand the humanistic meaning of science by reflecting philosophically on some their specific areas of science which I investigated in its developmental unfolding. My main effort was spent on atomic physics (4) but I also considered briefly some
questions of optics (1). °°

Before going over to outlining the results I obtained, I wish to reply to a preliminary critical question. The approach I have presented sounds complicated and difficult. Is it feasible and worthwhile? To answer I can only cite my experience. The studies quoted were the basis for extended philosophical conversations with outstanding philosopher-scientists who are widely acknowledged as authoritative interpreters of science. I refer to such persons as Werner Heisenberg, Jean Piaget, Vasco Ronchi and Ferdinand Gonseth. In turn, the conversations I had with them served to mold my entire philosophical outlook. The results of these conversations found expression in all my subsequent essays and books.

The fruitfulness I derived from my approach found a most encouraging, because unexpected, confirmation on the part of the scientific community at large. Ordinarily, philosophers and scientists are unable to communicate with each other. My surprise therefore was great at the widespread favorable reaction of scientists practicing in all areas of research and scattered throughout the world to a brief presentation of my approach which appeared in a philosophical journal (7). To sum up, therefore, it seems reasonable to infer that the experiential-reflective approach outlined constitutes a workable basis for the humanistic understanding of science and, at least indirectly, for the development of a genuine scientific humanism.

2. HUMANISTIC PERSPECTIVE AND CHALLENGE OF SCIENCE

My overall concern is the development of a comprehensive humanism which takes science systematically into account. I shall summarize here the data which

°° The numbers in the text refer to the Appendix.
supplied to this end by the approach outlined. Details and documentation are contained in two forthcoming books, one of scholarly and another of popular kind (9, 10). For the sake of clarity and completeness I shall adopt a schematic presentation based on the tripartite division of philosophy into epistemology, ontology and ethics. For each of these divisions I shall say a word about the new perspectives disclosed by science for the self-understanding of man and the problems that stand in the way to such an understanding.

Beginning from the epistemological realm, it is easy to detect a humanistic perspective of science. Science, as an original experience of cognition, is essentially an awareness of personal creativity as well as dependency relative to observable reality. It follows therefrom that the person molded by science has a heightened sense of the dignity of the human mind. But, if he is thoughtful, he is also more aware than the ordinary person of his inherent submission to reality. For science is essentially an objective undertaking, the investigation of what is given to man. Hence arises the modesty which is so typical of the great scientist, but also the openness to philosophy which ordinarily characterizes the great creator. The modesty of the scientist stems from his awareness of being dependent. The openness to philosophy stems from the difficulty of reconciling with each other the two main traits of the scientific experience, namely its creativity and dependency. This situation clarifies why outstanding creators—from Galileo onward—have formally taken philosophical discussions very seriously. The basic reason is the problematic nature of science as a form of cognition.

Passing over to the ontological or metaphysical realm, it is not difficult to notice another important humanistic perspective disclosed by science. Science is founded on the metaphysical presupposition of the universal and intrinsic orderliness of nature— an orderliness which is assumed to be detectable in principle by
the human mind. It follows therefrom that the scientific person has a heightened sense of the accessibility of reality to the mind of man. Moreover, he perceives more strongly than his prescientific counterpart— the entire reality as an intrinsically interconnected whole. And yet, the scientist who is thoughtful cannot help wondering about the profound significance of such all-encompassing orderliness and interconnectedness. For, after all, these features of reality cannot be taken for granted since nature is not just orderly but also unforeseeable and random in its behavior. Hence profound metaphysical questions present themselves to the mind of the thoughtful scientist. He asks with new earnestness what nature is. He wants to know what he himself is. For man is the only being that stands out in the universal interconnectedness of reality through his unique ability to understand consciously and creatively. Finally, scientific man poses more urgently than ever the question concerning the ultimate source which accounts for the universal orderliness which makes his science possible in the first place.

Concerning ethics, the humanistic novelty of the scientific perspective is obvious. In fact, science operates entirely on the strength of an ethical conviction which was unknown to prescientific man. The conviction is that not only nature is intrinsically intelligible, but the pursuit of this intelligibility ought to be seen by man as an end in itself. Hence the general ethical attitude which characterizes the person molded by science. It can be designated as a heightened sense of creative coresponsibility. This sense of ethical creativeness stems from the creative attitude typical of science in general. But the creative awareness of the scientist is tempered by his awareness of being dependent on an objective reality which is normative for him. Hence his sense of coresponsibility — that is, responsibility as a creator. However, in the ethical realm, too, the thoughtful scientist acknowledges the inescapable problematicity of science. For science, while permeated by value, is unable to understand, let alone vindicate, the validity of value and its binding character.
To synthesize, it is clear even from our rapid sketch that there is objective ground for speaking of a humanistic message of science. Such a message is fundamentally a new outlook involving the totality of man as a self-understanding being. This outlook affects all areas relevant to man as a person: the significance of his knowing, the significance of the universe in which he lives, the very goal of his ethical striving. However, the humanistic outlook disclosed by science is not yet a humanism as such, but rather a humanistic challenge. For, as has been seen, science by itself cannot do anything more than present unexpected points of view which, in turn, entail serious humanistic questions. Hence the need for a systematic philosophical investigation which should strive to transform the new outlook into a full-fledged scientific humanism. In brief, one could speak of science as being so unrestrictedly human as to exhibit the typical ambiguity of human undertakings in its results. Thus the very success of science should be seen as a summons to man to live up to the dignity of his calling with renewed determination (8).

3. **COMPLEMENTARY ROLES OF SCIENCE AND RELIGION**

In the light of the preceding it is now possible to face the vexed question of the relations between science and religion without danger of falling into prejudicial and self-defeating extremisms. As is well known, a harmonious synthesis of science and religion is most difficult to achieve. In the past the tendency has been to exaggerate by excess -- that is, to give in to the inclination to ascribe too much importance to either science or religion. But nowadays the tendency is to exaggerate by defect -- up to the point of making science and religion appear so much irrelevant to each other as to make them both appear irrelevant to man as a whole.

To summarize what I have discussed at some length elsewhere (11) here too I see
a promising methodological attitude in the adoption of the experiential-reflective approach. This approach, in fact, clarifies at once that science and religion, far from being irrelevant to each other, have actually much in common. The commonality involved is, of course, the one that can be detected by reflecting on both science and religion from the experiential point of view. In brief we can say that both science and religion bear a mutual intrinsic connection at least because, experientially speaking, both affect the whole man in his most profound convictions and aspirations. Religion is man's lived conviction about the absolute as the objectively ultimate and normative source of meaning and value. But science, as effectively pursued by its most dedicated practitioners, is nothing less that a search for ultimate meaning and final value. This is indeed the reason why thoughtful scientists keep protesting against the social tendency that lumps together science and technology. They reject the identification because, in their experience, science is the pursuit of ultimates.

But the experiential-reflective approach does not manifest only that science and religion have much in common. At the same it discloses their basic distinctness. For it manifests that each has its own specific goal and method in the pursuit of ultimates. Science envisages ultimates as embodied in the observable regularities of nature. The whole thrust of science is aimed at detecting and explaining such regularities. Religion envisages ultimates as embodied in the immediate self-manifestation and self-communication of the absolute to man. The whole thrust of religion is aimed at personal communion with the absolute.

The experiential-reflective approach provides at least an indication of principle for a humanly harmonious synthesis of science and religion. The key is respect for the data—especially, an earnest desire to do justice to the wholeness of man. Accordingly, it is clear that in a genuine scientific humanism there must be room for both science and religion, as legitimate pursuits in their
own rights. But, on the other hand, science and religion should not be viewed as totally disparate and completely disconnected. For it is the same whole being, man, who pursues both in order to attain to ultimate meaning and value.

Possibly the most enlightening way to express the humanistic roles of science and religion is that of speaking in terms of complementarity. By definition, two aspects or situations are complementary when — despite their seeming incompatibility — both are needed to take into account a complex objective reality. But this definition obviously applies to the relations of science and religion. In fact, both are needed to take into account the complex objective reality which is the wholeness of man — of man as a being who strives after meaning and value through both science and religion. It is illuminating to note in this connection that the great theoretician of complementarity, Niels Bohr, was also a great propounder of the need for a complementary understanding of science and religion. But, of course, by so doing he was just restating in contemporary terms a traditional conviction which is widely documented in the history of science — from Galileo and Newton to Einstein and Heisenberg.

To sum up, it can be said that — at least from the theoretical-valuational point of view — the humanistic challenge raised by science culminates in the challenge to understand and practice the complementarity of science and religion. For both pursuits touch upon what is most meaningful for man. Hence the failure to integrate science and religion satisfactorily can only lead to the dehumanization of man. This can take place through universal pragmatization that effectively suppresses all meaning and value. Or it can take place through the brutalizing impositions of a technicalized science which falsely claims to possess the salvational features of religion. In both cases man would be severely harmed and science and religion would be dealt a mortal blow. These dangers must be taken quite seriously. After all it is revealing that utopist and anti-utopist writers seem to agree on
only one point about the society of the future -- the absence of both genuine science and genuine religion. This message can be gathered clearly by comparing among themselves such works as Brave New World, 1984 and Walden Two.

4. RECOMMENDATIONS FOR INTEGRAL AND UNIVERSAL HUMANIZATION

To close, I wish to indicate a set of humanistic recommendations that promise to lead man to the twofold totality of humanization -- integral and universal -- he aspires after.

(1) Work toward scientific humanism. If we want to foster the development of the whole man in the age of science, we must face up to the problem of the whole man, particularly as affected by science. That is, we must formulate anew a comprehensive doctrine of man which takes into account the totality of his being, including explicitly his deepest aspirations after meaning and value.

(2) Promote philosophical reflection and systematization. The formulation of the new humanism is essentially the task of philosophy. There is no sensible alternative to philosophy. An attempt to bypass philosophy would jeopardize the futurist enterprise. For philosophy alone can deal with the totality of man as a reflectively self-cognizing being.

(3) Cultivate dialogical collaboration between futurists and philosophers. Futuristic problems are urgent. It is not possible to wait for their study and incipient solution until philosophers have completed the humanistic synthesis. Hence futurists and philosophers must work simultaneously. But, for the success of their endeavors, they must learn to collaborate continually with each other, with a genuinely dialogical attitude.
(4) Popularize humanizing solutions to futuristic issues. Futurists and philosophers should not merely strive to develop a new humanism and embody it in the society of the future. They should also foster the convinced participation of the masses in the process. In particular, they should popularize their humanizing insights so that the ordinary man may live up to his dignity in a more conscious manner.

(5) Contribute to humanization through personal consistency. Authentic futurism is not merely forecasting and planning, but the total humanization of man. Hence, given the inherent wholeness of man, there can be no authentic futurism unless futurists and philosophers have the courage and the patience, the honesty and the determination, to engage all their personality --through theory and praxis-- in the process of humanization. The ancient sapiential requirement of personal consistency while striving after the ideal and leading others to it applies more than ever to the present situation. Through its observance we can expect to create the better society to which we are all looking forward.

---APPENDIX on the next page---
APPENDIX - Writings by E. Cantore discussing Scientific Humanism


10. Science and Dignity: The Challenge to Man (forthcoming; publisher and date to be announced)

THE PERSON IN WORLD COMMUNITY

By John Lawrence Daly
Sociologist; poet
University of Chicago

This essay is an introduction to the relationship between concepts of personality and social forms of civilizations. This introduction assumes the fact that living religious traditions, such as the world religions, provide a means of social memory that makes possible the initiation of man into a condition of authenticity if the individual so intends. In a fully elaborated way of life both individual and collective elements contribute to the authenticity and intentionality of the human agent.

Because each cultural moment in 20th century history calls for a heightened sensitivity to the parameters of inauthenticity and a lack of adequate communal intentionality in human collectivities, this paper will briefly transverse major indicies of the social pathology of modernity. On such an evidential basis the importance of the connection between concepts of personality and social forms of civilization is more clearly seen. This clarity in turn will aid the process of deciding and actualizing
with greater effectiveness the form and content of goals, objectives, policies, and practices of a more consciously articulated and constructive rationalization of social human development. Such an expectation assumes a high degree of awareness of generic limitations in the human condition, individual and collective, and not denying the surprising technological and symbolic inventiveness of children, youth, adult men and women not within our contemporary horizon. I mention the children with purpose in mind. There is in world community today a new freshness of spirit that suggest the opposite of Marx's "appropriation as estrangement, alienation", where the keen observer can sense at least a partial answer to the lines:

Where among us does the spirit reside
That restores the land to productive order?

1. Major Indicies of Social Pathology in Modernity.

There is in the world today a certain will to power unencumbered the devotedness of a compassionate conscience that truth in living and reflection require if persons are not going to be crushed. The sense of truth has become so relativised that the heart of man is only recognized in its most desperate forms. The man of peace, the poet of the human condition, the prophet of a human responsibility are enigmas who are to be hushed and without not too much gentle dispatch sequestered in obscure social locations so as not to disturb the military business of the day or the pleasure of graft of the night. For parasitic business and irresponsible pleasure are not to be disordered or questioned effectively, for then, organized criminality would be threatened and the shallowness of inauthentic legitimating symbolic structures undermined if not destroyed by the subservient vassels whose stark alienation would be re-
sealed and whose resources of money and devotion would be allocated according to new loyalties. These new loyalties, as indicated by the enthusiasm of youth, and led and inspired by mature men and women that are world aware and often related to religious traditions in an overt way, are very syncronic with a sense of authentic effective caring and its intergenerational consequence of a legitimate authority that makes for the stability of a human community.

Years of forgetfulness of a wholesome conscience by men of thought responsible for the education of peoples has bred generations of support for the systematic misunderstanding, misapplication, and in time the very destruction of the means of rationality so that terror reigns, first by infliction on alien peoples, then upon the educators themselves and their clients. This self destroying and communal disintegrating terror has now begun leaving the compassionate conscience a victim like others except for the additional pain of a certain kind of knowing why.
Our most developed nations as well as the third world know well this self-destructive process in detail, if not most recently, then, in living memory of the survivors.

Remembering of pasts can be a whetting stone to further cruelties as well as stimulents to kindness. Yet today the outcome of unremembered pasts in unholy indifference marks the character of many. The collective expressions of mass bombing, mass pollution, mass maiming, mass murder is a mass forgetfulness of the life of man himself. The social pathology of war has roots in the very origins of madness, expressed in the common symptoms of man forgetting his own self as he forgets his brothers and sisters. The destruction caused by the absence of symbols of self-reference to the other (historically religious in character, that by their use intends a caring human community), suggests a profound human need for personal and collective identification with intergenerational symbolic traditions for the viable future for man. Authentic religious ritual
especially rites of initiations have this very function as a human event that intends community.

There is a living in the post Hiroshima world that awaits a total destruction that does not seem to come. What is forgotten is that massive social deterioration is now a fact in the urban world of many nations; terror being the code of the night and public lying the rhetoric of the day. I wish it were all fictitious imagined in a mood of antipathy. Instead it is a warm blooded recording of everyday life. On reflection such conditions are as total as atomic war or revolution.

Reflection of itself does not demand a recording of its path through the social pathology of modernity yet the proper triangulation of the attenuation of individual and collective structures of religious imagination needs a reporter who surveys man's interior landscapes or 'inscapes' (Hopkins). Such surveying contributes to a more precise
indentification of the uses to which man puts the natural world; and the meaning of his material technological culture, and the possibility of a legitimate power to actualize one's destiny according to personal and communal intentions. The present and future victims of our social pathology perhaps can be supported by this recording as it can be used as an exercise in reality testing that may help distinguish the real pain and spiritual meaning for human community from the false anxieties caused by the illusions of manufactured mirages of conscious conceit and their outcomes in boredom and death.

When awe is the rite of expression at the holiness of personal existence as at a revered shrine, then perhaps a history and effective planning of a future of peace that is constructive developing harmony can be reported on. In the meantime, the respites from carnage are cause for thanksgiving, however fleeting in character. The present urgent search for a viable traditions of mediation for global development and not irreversible destruction underscores the seriousness of our world cultural situation. This conference is part of that search. For many of us we live as Hui-
zinga did in 1936 when he wrote *The Shadow of Tomorrow*. Perhaps we have the opportunity for a more constructive immediate future than he did but consciousness is not enough. The demands of practice, of guiding into an actuality a productive human order not destructive essentially presses us on to the task at hand. The present exercise in reflection in this conference’s discussion of religion as a human need is all the more necessary because of the inadequacy of utilitarian or organic process models of human development especially in their consequences in social policies that diminish men and women.

What is needed is an understanding in which the symbolic structure of meaning refers to an intentional center that legitimizes authentically individual and collective action that effects a human future in which both technological and aesthetic dimensions are present but subordinated in a encompassing intentionality of human friendship in community. Such a depth of understanding is necessary to comprehend the crucial connections between
concepts of personality, those archetypal metaphors of the self that inform the meaning and rationals of behavior of individual qua individuals, as well as their relationships in community of a given cultures. These crucial connections are seen dramatically in religious education in both children and adults in various religious traditions.

2. The Person in World Community as Site of Nexus.

The person in world community can be understood as the site of nexus of religious mediation with other social forms of integration such as art, sciences, and law with their supporting technologies in future human development.

World religion traditions provide just such metaphors of self and so educates peoples through their rituals of social memory in rites of passage to a authentic humanity, individual and collective.

In gathering evidence for such a case one has a number of available resources. This paper will conclude with reference to only two, namely E. Durkheim and M. Mauss's "Note on

The empirical references of Mauss's study of the phenomenology of the Person as a cross-civilizational structure include discussions of Pueblos, Kwakiutl, Zuni, Australian Aborigines, Brahmin and Buddhist India, ancient China, "Persona" of the Romans, the development in Western Civilization of the Person as Moral Fact, the Christian Person, and the modern transformation of the category as psychological being in the expression of the ego. The emergent character of the Person in this social history is stated in his conclusion: "From simple masquerade, to mask, from personage to person, to a name, to a individual; from that to a being of metaphysical and moral value, from a moral conscience to a sacred being; from that to a fundamental form of thought and action, the course is completed." (See M.Mauss above p.479.). The usefulness of Mauss's contribution for the understanding of the development of urban society, the cultural-historic events of Western Civilization, and intercultural encounters recommends it for further study in the problematics of religious mediation in the future. The importance of Mauss's essay for further research in the anthropology of law, cross-psychological and sociological studies, and the problematics of the person as a universal cultural emergent being embedded in various ways in the world religious traditions, is increased when the aim of a discussion
is understanding religion as a human need and point of integration. Implications of Mauss's essay for Group 7 include the following concerns: (1) the possibility and identification of the irreversible in cultural development; (2) as a means of comparative study of religious institutions and symbolic designs; (3) in the study of actual cases of intercivilizational relations and encounters whether historically or in the ethnographic present; (4) in the understanding of the religious subjectivity of the participant observer; (5) the criticality of the category of the person in applied anthropology in issues of conduct where the knowledge and actions of students of the human effect social development particularly religious mediation.

Through the study of the phenomenology of the person on non-literate and literate social settings an emergent cultural universal is indicated for the future in which the person as a site of nexus for religious mediation, individual and collective, will be further elaborated.

"After all not to create only, or found only,
But to bring perhaps from afar what is already founded,
To give it our own identity, average, limitless, free,
To fill the gross the torpid bulk with vital religious fore,
Not to repel or destroy so much as to accept, fuse, rehabilitate,
To obey as well as command, to follow more than to lead,—

....................
Long and long has the grass been growing,
Long and long has the rain been falling,
Long has the globe been rolling round."

Walt Whitman
1871 Version of Leaves of Grass
In pamphlet, After all, Not to Create Only,
(Boston, 1871)
THE RELIGIOUS ASPECTS OF THE GLOBAL PROBLEMS OF THE FUTURE

By L. G. Hewage
Professor of Education

World appears to be divided due to religious differences and may remain so even in the future unless appropriate solutions are found to these problems by frequent meetings of world religious leaders to exchange views in concord. Following is a basis for such discussion based on the experience of a Buddhist in Sri Lanka, and taking into consideration the views and experiences of the other Buddhist of this Region too. It may be called a Lankasian Approach because it is based on the experience of Asia with special emphasis on Lanka (Ceylon). It may also be called Buddhist Approach because it is based on the experience of Asia with special emphasis on Lanka (Ceylon). It may also be called Buddhist Approach because it does reflect the Buddhist point of view to a very great extent as far as the writer understands it. It may also be called a Sarvodaya approach, because it is directed towards the awakening of all or the welfare of all. It is undoubtedly HUMANISTIC approach, because it is the message of a human being (Superb human being no doubt) communicated by a human being for the welfare of all human beings according to the experiences of human beings. It may also be called a Middle Path Approach because it is an attempt to present a middle path point of view by avoiding all extremes as far as possible in solving human problems both religious and otherwise.

All people in the world appear to be divided in the following manner according to their points of view towards religions or religious beliefs.

1.) At one extreme there appear to be those who say that they are quite sure about the truth of their religious beliefs which include a belief in God, and that they are therefore prepared to do anything possible right or wrong, to propagate their brand of religious beliefs, because they appear to consider such line of action and thinking as the most effective method of solving all human problems by winning Divine Grace for themselves as well as for others who are not yet converted to their faith.

2.) Those who say or think they believe in a Personal Creator God with whose Grace world can be saved if man is prepared to obey that God according to the guidance provided by the Church.

3.) ..... that God according to one’s own personal experience of that God dependent on and/or independent of the guidance offered by the church or temple or mosque.

4.) Those who believe in some supernatural or supernormal power or powers about which man’s knowledge appears to be not quite perfect as yet, according to the information available to them.
5.) Those who say they are prepared to accept the possibility of the existence of divine beings of different type having different degrees of power to help humans if they have developed the necessary knowledge, skills and attitudes as a preliminary qualification to benefit from such assistance.

6.) Those who say they are not quite sure about the supernatural or supernormal powers that others take for granted, and therefore they suspend their judgement on such matters while having an open mind unless and until convincing proof is provided to do otherwise.

7.) Those who say, that they do not believe in anything beyond what comes within their sensory perception here and now, but that they are prepared to tolerate others who believe otherwise, may be due to their own experience or attitude.

8.) Those who say that they categorically deny the existence of any power or powers beyond the operation of the material energies that are observable and even measurable by the use of scientific methods and technological devices now available to man.

9.) At the other extreme there appears to be those who are quite sure about the truth of their (religious) belief which does not recognize anything supernatural or supernormal and that they are therefore prepared to do anything and everything possible right or wrong to propagate and perpetuate their brand of (religious) belief, because they appear to consider such line of thinking and action as the most effective method of solving all human problem arising out of religious differences.

**CAN A RELIGIOUS SOLUTION TO MAN'S GLOBAL PROBLEMS BE FOUND EVEN IN THE FUTURE WITHOUT RECOGNIZING THE TRUTH OF THESE CONFLICTING SITUATION IN THE WORLD IN REGARD TO RELIGIOUS BELIEFS? THIS IS PERHAPS THE CRUX OF THE PROBLEM IF NOT THE WHOLE PROBLEM, FOR CONSIDERATION BY THE FUTURISTS INTERESTED IN RELIGIOUS ASPECTS OF THE GLOBAL HUMAN PROBLEMS. Any of our effective solutions must appeal to as many of them as possible. This same or a similar division may be generally applied with slight modifications even in relation to man's beliefs in re-birth or life after death, moral law and order in the world, nature of man and the universe, moral judgement and ethical values etc.

History clearly shows how mankind has been suffering the results of some extreme religious views in the past, although by and by the number of those who believe in such extreme views appear to be not increasing as it did in the past, when means of communication was not so developed. This hopeful tendency is undoubtedly due to the facilities now available for communicating relevant knowledge relating to all these forms of (religious) beliefs among all peoples of the world, along with criticisms levelled against all of them. Although modern techniques of communication have their disadvantages too, due to the mental pollution that can result from some such free communication material, we cannot expect to solve global human problems by perpetuating ignorance and restricting the spread of knowledge.

Therefore an organized international effort may be planned for the future to communicate all religious knowledge, skills, attitudes, experiences and beliefs particularly in relation to man and his environment, with special
emphasis on the nature, structure, development and control of the human mind where wars of all type begin, and where defences of peace too must be constructed. Dissemination of the so-called scientific knowledge alone, may not go a long way in this attempt as has been clearly proved within the past quarter century after the last world war. Knowledge available to man from direct human experience has to be undoubtedly given preference over the experience gained from animal experience or even experiments with undeveloped human beings in primitive cultures. Religious knowledge from all parts of the world from all periods of human history has to go hand in hand with the so-called scientific knowledge, so "sacred" to modern man in some parts of the world where scientists play the role of monks or wizards propagating new superstitions in place of the so-called 'old superstions' some of the former more dangerous to man's survival than the latter.

There appears to be every possibility of finding an integrative, solution or approach to this problem if we explore the Middle Path Philosophy contained in the teachings of the Buddha, as experienced in Sri Lanka ever since Buddhism was introduced to this island during the third century before Christ. As this point will be elaborated in more detail later in this paper, let me only introduce a personal note at this stage in order to throw some light on what I mean by a Middle Path of avoiding the extremes as a Buddhist. Neither of the extremes referred to above has ever appealed to us as a nation although there may have been and there still appears to be minority groups that move closer to one of them. As a nation Sri Lanka's people on the whole have kept closer to the middle of the above scale of nine points rather than moving to the extremes. This applies to most spheres of national life. Whenever this fact was not given due recognition and ignored the country had to face its consequences and return to normal only after a better realization of this truth by direct experience. National life is in general, the sum total of the life of the individuals that constitute the nation, although it is true that this sum total has to be considered as something more than the arithmetical sum of the parts. A belief in some forms of non-human beings was always a part of the popular Buddhism all through out its history and complete materialism which does not recognize the mind was never true Buddhism in Sri Lanka. An increase or emphasis on one extreme eventually appear to lead to an increase or emphasis on the other as a balancing process.

This reminds me of two interesting conversations I happened to have with two foreigners who visited Ceylon (now Sri Lanka) a couple of years ago. One of these dialogues was at the foot of the SIGIRIYA Rock when I met an old American couple who stayed back at the base of the rock while others of their group of tourists climbed the peak. This old couple and I were not able to climb the rock due to reasons of health and therefore, we were forced to enter into a friendly conversation after a formal self introduction. When I said that I was a Buddhist in response to their question, the immediate response from the old lady was the counter question; Then aren't you all communists? I asked her why she came to that conclusion. Her prompt reply was: Because you don't believe in a Creator God.

The second event that came to my mind was also another friendly dialogue I have had with a responsible gentleman of the diplomatic services, representing a socialist country as the ambassador in Ceylon. It was at a reception given by a High Commissioner of a Commonwealth country of the West. This gentleman and his wife too were keenly interested in understanding
Buddhism and Buddhist culture as found in our country. As the honorary Director of the Middle Path International, I was in the habit of leading weekly discussions on themes of interest to foreigners temporarily resident in Ceylon. A large number of members of the diplomatic services benefitted from this service. The High Commissioner referred to above was one of those who benefitted most. He, in his enthusiasm introduced me to his new colleague from the socialist country and suggested him also to join our group of the Middle Path International, if he would like to understand our culture. The loyal ambassador from the socialist country promptly said, "Oh, thank you. I am not interested, because Buddhists believe in divine power, while we socialists are materialists who don't believe in such powers."

RELOIGIOUS INTEGRATION IN SRI LANKA THEN AND NOW.

IN THE PAST.

History of Sri Lanka may be taken into consideration, perhaps, as the report of a model experiment in the process of religious integration. All the living world religions have had their direct impact on the cultural heritage of this country. During the earliest times before the introduction of Buddhism in the third century B.C., Hindu beliefs and the local forms of rituals and spirit worship constituted the national religion. Ever since the introduction of Buddhism, Sri Lanka has remained predominantly a Buddhist country enjoying the benefits of all other religions of the world. Arrival of the Portuguese in the early parts of the sixteenth century, (1505) brought the Roman Catholic Portuguese culture, perhaps, at its flowerY stage. Early 17th century saw the Protestant Dutch culture, also at its maturing period (1607-1796) Third Christian nation, the British, had its impact from 1815. Ceylon became a politically free country within the British Commonwealth in 1948. During this period, Christian Missionaries belonging to almost all sections, had adequate freedom to propagate their own brand of Christianity, through education, social services, and direct proselytization. All these religious cultures also had the government patronage during the periods that the rulers of the country belonged to their respective religious faiths.

Traders from the Arabian Regions and the Indian Sub-continent have been in the country from the very early times with full freedom to follow their religion in their own way. One outstanding feature of our cultural heritage is the extra-ordinary level of religious tolerance that all non-Buddhists enjoyed during the periods when Sinhalese Buddhists had their legitimate ruling power. On the other hand during almost all the periods that non-Buddhist ruled the country, religious intolerance has been the rule rather than the exception. Even after the Buddhist majority got back the ruling power the way how non-Buddhists have been treated, de jure and de facto, both, is relatively better than in most other countries, if not all other countries of the world. Even towards the various political philosophies and conflicting ideologies of the world, Buddhists of Sri Lanka in general, have had a very tolerant attitude often to their own disadvantage, allowing them freedom quite adequately to be patronized by any one willing to do so.

Some of the Christian Missionaries, often with the assistance of patronage of their governments, appear to have gone even to the extent of destroying Buddhist-Hindu places of worship and built Christian churches in their place, thinking that they were more religious than those who suffered
the consequences of such exploitation. One may even say that most of them certainly did more damage to the belief in God than even their alleged opponents who were not so manifestly enthusiastic about the efforts to save God at the expense of man.

AT PRESENT

However even when Buddhism was openly challenged by some newly converted and recently trained missionaries and catechists, a century ago, how the Buddhist leaders of that time responded by inviting them to friendly debates is worth recalling even today due to the tolerant attitude that resulted from such debate. It was only a month ago (26.8.73) that the centenary celebrations of one of these debates called the Panadure Controversy, was held at a national level with the President of the Republic as the chief guest and representatives of most religious groups participating in a very peaceful manner. This was given such recognition particularly because it brought Colonel Steel Olcott and other Westerner to Ceylon in search of the Middle Path to meet the religious needs of that time.

Strangely enough, the democratically elected member of the National Assembly to represent the very electorate where the Panadure Controversy was held a century ago, happened to be a Christian and a grandson of the gentlemen who led the debate on behalf of the Christians. However this Parliamentarian has been elected not only by the Christians but also by the Buddhist voters, because this electorate still has a very large majority of Buddhists. The grandson of the Buddhist philanthropist who led the debate by providing the necessary funds and accommodation on behalf of the Buddhists, also happened to be a Buddhist and a close relation of the parliamentarian referred to above. Both these gentlemen took a leading part in these centenary celebrations and even addressed the public meeting held in that connection. The elected representatives of the National Assembly to represent several other electorates where such debates were held, but where a large majority of Buddhists live today, are also still Christians. These are just few examples indicating the religious tolerance in the political behaviour of the Buddhist masses of this country even today under very trying socio-economic conditions. Several of these Christians who are elected representatives from areas with a Buddhist majority are also leading ministers of state in the cabinet led by a Buddhist Prime Minister.

RELIGION IN SCHOOLS.

How the problem of religious education in schools has been solved in Sri Lanka, also may be of some interest to the futurologists. The education in the country during the time of the Sinhalese kings, appears to have been one based mainly on Buddhist philosophy, centred round the Buddhist temple and oriented towards employment and socially accepted behaviour. Some aspects of the Brahmanical culture of the Indian sub-continent also appear to have had an impact on this system. During the time of the Portugese, Dutch and the British, also an attempt has been made to introduce the Western type of schools based on the Greco-Roman religious philosophies. During the earlier period the Buddhist temple led by the Buddhist monks
was the center of all educational activities, while during this later colonial period, the Christian Churches led by Christian missionaries took their place. A few of the younger generation grew up as good Christians, but vast majority as bad Buddhists and very bad Christians. A very large number of Buddhists, Hindus, and even Muslims were educated without any religion at all. The country appears to be suffering the consequences of this education policy today.

After the political power came to the hands of the Ceylonese, some of those who received their education in the leading Christian schools, were the most militant and enthusiastic about Buddhist revival through Buddhist education and Buddhist culture, while those who were educated in the new Western model Buddhist schools and the remaining few temple schools were often found to be quite tolerant towards all religions. The Buddhists wanted all children of all religions to be given an education with their own respective religions as a part of the curriculum. Some of the Christian missionaries did not want this to happen. This resulted in a national campaign led by the Buddhists and Hindus alike, for the government to make over all the schools and create a national system where teaching of the religion of their parents was compulsory to all children.

TOWARDS A MIDDLE PATH RELIGIOUS POLICY

Today a minimum of fifteen children belonging to any religion in any school is entitled by law to receive a religious education relating to the religion of their parents unless they decide otherwise. All religions have their own Sunday schools to provide a special religious education to their children. A national advisory council consisting of religious leaders from all religions has been appointed by the government to provide the necessary guidance. This council works in committees to advise the government how best to provide the religious education to children of their own denomination in particular and to all children in general. One of the recent recommendations of this council to the government is to introduce a section on all religions to all children as a part of their syllabus and in addition to their own religious content there-in. However we cannot still say whether or not we have yet evolved the best solution to this problem, although it can be concluded that the religious education problem as found in many other countries does not exist in Sri Lanka now, and never existed as such before the introduction of the Western system.

Some countries have banned religion from all schools by law and have gone even to the extent of allowing anti-religious propaganda. This is one extreme. At the other extreme we have some countries that have made the religion of the majority, the state religion, which is taught compulsorily by law to all children in all schools, either directly or indirectly, irrespective of the wish of the parents or the children. In between we have some countries where no government funds can be used for any religious education, but private denominational schools are allowed to use their own funds for such purposes. Some countries do not allow any private denominational schools and no provision is made for any religious education at all except in their own homes. Some countries have the state system and the denominational system both, with a very favourable attitude towards all religions. What is found in Sri Lanka appears to be heading towards a system which may be a Middle Path approach to the problem while avoiding both extremes referred to above.
ATTITUDE OF MINORITIES

In the religious integration process of Sri Lanka the attitudes of the non-Buddhist minorities towards Buddhism, Buddhist culture, Buddhist institutions and Buddhism in general, also has been undergoing very favourable transformation with minimum tension and maximum tolerance towards each other. Even reverent fathers, brothers, sisters, bishops, cardinals and lay leaders of various Christian churches, have expressed a willingness to participate in friendly dialogues. They have also taken an active part in social, cultural, educational, and even religious activities of the Buddhists. Some of them have openly expressed their approval of some aspects of the fundamental teachings of the Buddha and the culture resulting therefrom. More and more non-Buddhists Sinhalese are directly or indirectly taking to the study of Buddhism, Buddhist culture, Buddhist philosophy, and the Eastern languages like Pali related to Buddhism. Most of the religiously inclined non-Buddhists appear to be interested in the Middle Path approach to the individual and social problems of the contemporary society. Among the listeners-in to the talks, discussions, and feature programmes related to Buddhism provided by the government owned Broadcasting Corporation, a large number is said to be non-Buddhists.

The Tooth Relic Temple (Dalada Maligawa) in Kandy, is considered as one of the most sacred Buddhist places of worship. It is also a place of cultural interest and the annual procession or pageant held there is now an international cultural event which is witnessed by thousands of foreign visitors. The Kelaniya Buddhist Temple (Kelani Rajamaha-Vihara) situated only about two miles out of Colombo, is yet another such place of worship with national cultural interest. Quite contrary to what happened to these places a century ago, in the hands of some misguided foreign religious fanatics today both these places are illuminated by electric plants donated by the government of a European Christian country, due to the good offices of an ambassador who was himself a devoted catholic from this Christian country.

A large number of such instances may be mentioned but for the limitations of space in the paper. A large number of the best English publications on Buddhism and related subjects have been possible in the past due to the scholarly labour and patience of Christians who worked in the Colonial Ceylon or who visited the Island for various other reasons. Most of the credit for the propagation of the Middle Path in the West, therefore goes to non-Buddhists, mainly Christians, particularly during the last two centuries. Even some Christian missionaries both local and foreign, have made useful contributions to the dissemination of relevant knowledge relating to Buddhism. Several articles and books have appeared of late particularly on the Middle Path contained in Buddhism. All these appear to indicate the integrative character of the Middle Path as found in Sri Lanka.

Hindus have had a very cordial relationship with the Buddhists particularly in Sri Lanka unlike even in India, from the very early times and the Muslims too have had no problem at all in enjoying their fundamental right of religious freedom. Even if a slight tension or disturbance is caused due to religious issues, it is invariably when democratically and internationally accepted fundamental freedoms of the majority group are openly ignored or denied by the ruling powers in order to satisfy some section or sections of the non-Buddhists. Compared to all other countries
of the world, one may even say that all those minority groups following non-Buddhist religions have enjoyed and do enjoy a very high level of religious freedom in spite of difficult socio-economic conditions that militate against such freedom. Middle Path outlined in Buddhism as practised in Sri Lanka therefore has had and still has, a great potential as an integrative force. This experience may be taken into consideration by all those concerned with the future of the world, and who are in search of ways and means of promoting integration through religions. This potential may be emphasized particularly because the present stage of its evolution has to withstand the strains of not only other opposing religions but also the anti-religious forces that appear to operate all over the world and will have to be taken into consideration by those concerned with the future.

The new constitution (1973) has pledged to protect and promote all religious cultures while working towards a socialist democracy. To what extent these words can be translated into action is yet to be seen in the future.

**IMPACT ON THE ASIAN REGION.**

Whichever way Sri Lanka moves in the future, it may have a tremendous impact on the future of the whole Asian region, if Ceylon's role in this part of the world in the past is taken as an indicator of the future too. Although the cultural heritage of the island owes much to India, Ceylon's identity as a cultural force that influenced the whole of Asia and even some parts of the world outside this region, cannot be denied. India was the very birth place of Buddhism and Buddhist culture and the Middle Path philosophy contained therein. However, their direct impact as a living cultural force has been predominant and continuing mainly if not only in Sri Lanka until now, in spite of all opposing forces that operated against it all throughout its history. The international cultural role that the island has played ever since this culture was introduced to the country, is too well known to be repeatedly emphasized here. Governments after governments, rulers, conquerors and forces come and go, but the people of the country (not necessarily the elite produced by the educational system of the last century) may remain true to this culture, protecting it, changing it, developing it, and popularising it for the welfare of all in the future too, provided adequate facilities are made available to the masses to be kept well informed of all dimensions of relevant affairs of this fast shrinking global village. A Peoples' University Movement to formulate and implement a life-long integrated system of education with special emphasis on youth and adult education, led by the religious leaders through the religious places of worship, may provide a model experiment of religious integration in the future for the welfare of all. A Middle Path Philosophy of Education for the future society may evolve from such an experiment which does not depend entirely on formal school education and scientific knowledge without recognising the potential role of religions in education.
MIDDLE PATH IN ACTION OR THE SARVODAYA EXPERIMENT IN SRI LANKA

An experiment is being made in Sri Lanka by a voluntary organization called the LANKA JATIKA SARVODAYA SHRAMADANA SANGAMAYA, which means when rendered loosely in English, a national association of Sri Lanka to organize the donation of free labour for the awakening or welfare of all (Sarvodaya). It is an adaptation of the Sarvodaya movement in India founded by Vinobhaji on Gandhī's inspiration and guidance. In its present form in Sri Lanka, all the basic principles of the Indian movement are included but with a cultural orientation to meet the local needs and render it more meaningful to the people in the present context. For its philosophical basis, it draws inspiration and guidance from the teachings contained in all religions, while communicating them in the idiom and concepts that can absorb within its fold, all that is acceptable to all huma, beings irrespective of their religious beliefs, or even anti-religious beliefs. The philosophical basis of the experiment contains eight principles linked together by the general principle of the Middle Path of avoiding all extremes. Out of the eight, METTA is considered as the basic one embracing all others in general.

METTA = Loving-kindness

Metta is a Pali word which is rendered in Sanskrit as MAITRI and means friendly feeling or loving-kindness or universal benevolence or amity. AGAPE may be considered closest Greek equivalent. In effect it means an attitude of mind which enables a person to consider all loving beings as equal irrespective of all their differences, whether man-made or natural. This quality of mind can be developed by any one who regularly practices the meditation by the same name. To the extent one has developed this quality, one will try to avoid harming others and discriminating towards anyone. Such person also will make a genuine effort to work for the welfare of all or awakening of all (SARVODAYA). Every worker in the Sarvodaya movement is expected to practice this meditation every day regularly. Every meeting of the Sarvodaya whether at the Centre or in the villages where it often operates, commences work with this meditation, often preceded by a few minutes talk explaining its significance to the individual and the movement both.

Ultimate goal towards which the Sarvodaya experiment works, is this quality of Metta to be developed in all its members as much as possible. This reduces the tendency of thinking in terms of one's party or caste, or creed, or colour, or race or nation at the most developed stage. Whether one believes in God or gods or not, one can accept this principle, because it is a complete humanistic and ethical concept which is necessary for the welfare of any society.

It builds defences of peace in the minds of men. It ultimately leads to the goal of a universal brotherhood or universal society or world community. It has also the inherent feature in it to promote mental health in the one who follows it, and also in others who associate him. Ahimsa or non-violence is a direct immediate result of Metta to the extent one practices this meditation and applies it to one’s day to day life. This is the first basic principle of the Sarvodaya movement in Sri Lanka which therefore works for the welfare of all, instead of for the welfare of the majority or the party to which one belongs. It eventually leads to a spiritual
enabling of the individual while providing him an access to powers
divine, making him one with all beings, terrestrial and celestial both.

This thought or ideal of Metta which motivates the individual and the
society to work individually and collectively in peace and concord, by
using the medium of discussion as frequently as possible, for the welfare
of all, by earnestly striving to remove the suffering of all through
Karupa (compassion rejoicing at the joy of others whose suffering has
been removed by Mudita (altruistic joy), and reacting to the changing
conditions of the world dispassionately accepting them as they come by
Upekkha (Equanimity), form the basis of a religious life according to
the Middle Path. A readiness to share one's abilities and acquisitions
(Dana), to use one's power of expression only in a socially desirable
manner (Priyavacana), to direct one's behaviour always for a useful
activity (Arthacariya), and to promote equality in the society (Samanatma)
are the other four main principles accepted by the Sarvodaya movement as a
basis for its social philosophy.

It has launched an island-wide campaign of community development for which
the free labour of volunteers is pooled at the national level and the
local level both. It directs all the educational aspects of this campaign
by an Educational institute which is experimenting an integrated life-long
education which will be job-oriented and activity-centred. More than two
hundred young men and women drawn from the villages are resident at the
central worksite where the head office is situated near Colombo. More than
two or three thousand youths, adults and children led by religious persons,
participate in work camps every weekend to render some economically useful
service to the people, while providing an opportunity to develop their own
personality. This may be cited as an attempt in modern Sri Lanka to re-
introduce the old traditions in a new form to meet the needs of the
contemporary society. Leaders of all religions are participating in this
project of religious integration, although main source of inspiration comes
from the Middle Path found in the cultural tradition of the Island.

ROLE OF INTERNATIONAL OR TRANSTATIONAL ORGANIZATIONS. ROLE OF UNESCO

International or transnational organizations will have to play a significant
role in making the world's future safe, secure, prosperous and peaceful
for mankind. This may not be possible unless an international organisation
like the UNESCO makes a re-appraisal and a re-discovery of itself leading
to a new policy most appropriate for the future of mankind for the survival
of which it exists. It was founded in 1946 for the specific purpose of
building defences of peace in the minds of men through education, science
and culture. Now after over twenty five years of experience, UNESCO
appears to have come out as the most efficient international organization
to promote education, science, culture and communication at a global level.
However, will mankind remain to take the full benefits of Unesco's
efficiency, unless its effectiveness in terms of its objectives, is also
adequately developed?
This point can be made clear if I refer to an apt but rather crude simile prevalent among our unsophisticated villagers. It says although the patient died, the doctor's treatment, after all, has caused the patient's bowels to be kept well cleaned.

In other words has the Unesco helped mankind (at least the educated minority of mankind) to build defences of peace in their own minds, in order to ensure at least the very survival of the human race? Yes indeed, because mankind has survived up to now inspite of its weaknesses. Like the efficiency and perhaps the efficacy of the village doctor's treatment to clean the patient's bowels quite well although patient died inspite of the treatments, there is no doubt at all now about the efficiency of the Unesco in developing education in quality and quantity both, but will the patient survive to enjoy its benefits? At the rate and the way Unesco appears to be going now, when evaluated in terms of the ultimate criterion of building defences of peace in the minds of men, the future does not appear to be at all bright. Following are some of the indicators that can be listed to do the evaluation of the effectiveness of the Unesco activities within the first 25 years. According to these can we say that Unesco will deliver the goods in the future too? Here are some relevant points for consideration.

1. Nuclear, chemical and biological warfare and the armament race.
2. Millions of innocent human beings slaughtered in the name of peace, freedom and/or justice.
3. Indiscriminate exploitation of the limited resources available to man.
4. Population exploitation and the one-way remedy Unesco appears to depend on.
5. Uncontrolled pollution of the human environment.
6. Excessive indulgence in sensual (and sexual) pleasures.
7. Ever-widening gap between the haves and the have-nots.
8. Failure to achieve the development targets and Aid targets to poor countries.
9. Education that multiplies the existing problems instead of reducing them.
10. Deterioration of the mental health conditions of the people.
11. Increase in the drug abuses and the social diseases, among the youth.
12. Youth unrest and the widening generation gap.
13. Knowledge explosion which leads to human disaster instead of human welfare.
14. Olympic games incident and the subsequent events of the same type here and there.
15. Conditions forcing the UNO to resort to security guards for each delegate, at its General Assembly Sessions.
16. Continuing wars or tensions in the Middle East and Indo-China.
17. UNESCO's inability to make it a peoples movement.
18. A ping-pong game did what UNESCO could not do for twenty five years to promote 'peace'? 
SOME PROPOSALS

If the Unesco is to be made more effective than it is now in its main role of building defences of peace, following remedies will have to be taken into serious consideration at the present conference and communicated to those responsible for the Unesco activities at the national as well as at the international levels.

1. All relevant knowledge found in all religious traditions relating to the nature, function, development and control of the human mind, will have to be disseminated among all peoples of the world by the Unesco.

2. The rather unholy relationship that Unesco appears to have maintained with the world religions in the past on the excuse that religions do not fall within the competence of the Unesco, will have to be reconsidered and revised in the light of the fact that all world religions taken together as a whole will have a very significant and effective role to play in promoting the Unesco objectives in the future, if the efficiency of the Unesco is harnessed to this moral and spiritual force appropriately.

3. The Club of Rome predictions, the growth debate that resulted therefrom, and the Stockholm Conference recommendations, have all established beyond any reasonable doubt, the disastrous future awaiting mankind, unless a radical change is caused to be brought about in man's way of life, particularly in the developed countries where greed has been successfully created instead of moderating it. Excessive indulgence in sensual (and sexual) pleasures, pollution of the human environment, indiscriminate exploitation of natural resources, population explosion, drug abuse, youth unrest, armaments race, are all clear symptoms of a disease resulting from one extreme specified in the first discourse of the Buddha, when he proclaimed the Middle Path at Benares. Whatever religion we follow in the future, this Middle Path or the Golden Mean, (as specified in the Noble Eight Fold Path), which inevitably leads to a moderation of greed, hatred and ignorance, has to be popularised as much as possible and as early as possible, particularly in the developed countries, if we wish to bring about the necessary transformation in the way of life appropriate for the future. This Path is an integral part of the common cultural heritage of mankind. It is the report of a scientific experiment made by a man, successfully repeated by other men and women, and subject to verification by scientists today, provided they are prepared to study it and try it out themselves as was done in the past. Its efficiency and effectiveness to promote moderation, contentment and peace, have been proved. It is the duty of the Unesco and other international organizations including religious groups, to study it and promote its application.

4. The present apparent tendency of the Unesco to develop into a world conference of the ruling political parties of the member state and its meetings to be a convenient attractive means of rewarding political "stooges" of the governing parties in the member states has to be arrested or even detected in good time. Instead it must be made truly a peoples movement having active and willing participation of the interested people who can make a substantial contribution irrespective of their political affiliations.
(5) Unesco will have to make a re-appraisal of its first twenty five years of experience not only as seen by those who have worked within and benefitted therefrom, but also as seen by those who have watched it from outside. This re-appraisal must be done not to evaluate its efficiency in terms of each project or program executed, or in terms of its organizational ability that it has very well mastered, but in terms of its effectiveness in building defences of peace in the minds of men, as seen from observable indicators acceptable to the common people whose very survival is at stake for no wrong of theirs.

(6) International non-governmental organizations, (NGO's) will have to be given a more effective and useful role to play in promoting and popularising Unesco ideals among all peoples of the world.

(7) A non-governmental world organization may be created or caused to be created by the Unesco to provide the necessary funds and the forum facilities for world religious leaders to meet in concord as frequently as possible to explore the possibility of evolving a world religious philosophy acceptable to as many as possible, if not all.

(8) Unesco and some others outside its fold too, appear to be nearly obsessed with the SUPERB SUPERSTITION of our age that Science and technology alone can save mankind from disaster. As a result of this MASTER SUPERSTITION, the so-called scientists and their allies at the Unesco appear to be taking the place of Monks or other religious people, as was rightly predicted by a Spanish educator about half a century ago when speaking on the mission of the University. This new brand of monks is said to be fighting against traditional 'superstitions' contained in our indigenous cultures built over the years by experience, most of which undoubtedly are less dangerous to mankind than some of the scientific superstitions created by the so-called scientists who appear to know neither science nor religion well. This divorce of true religion and true science appears to be the result of man's resorting to extremes of all type. A Middle Path solution will have to be evolved as early as possible. This Special World Conference on Futures Research may consider the possibility of meeting this need with the assistance of the UNESCO or in collaboration with the UNESCO.

9) A world conference may be convened to assess the relevance and the potentialities of the Middle Path in solving the individual and social problems of the future by chanelling all resources of the world religions along with those who oppose religions due to the ignorance resulting from a lack of mutual understanding and communication gaps. Sri Lanka may provide the value for such a conference in view of its past experience in the process of religious integration through the Middle Path approach, provided, of course, the funding can be undertaken by those who can afford to do so and who are found not in developing countries like Sri Lanka.

Mission of the N.G.O.'s and the Religious Groups

Most of the issues raised and the suggestions proposed for consideration at the Conference in relation to the role of the religions in the future, may be meaningful and practicable only to the extent that they are brought to bear on the thinking on the other groups of the Conference, and thereby eventually on the world's thinking people who are seriously concerned with the welfare of all, here and now, as well as in the future. The present and therefore the future mostly resulting therefrom, will depend mainly on
the vital decisions (or indecisions) taken by the political leaders of each country as well as of the whole world. If they do take full cognizance of the deliberations and conclusions of world Conferences of this nature and act accordingly, then the world could no doubt be a better, safer, and richer place to live in than it would otherwise be. Moreover one of the most effective remedies acceptable to most people to change the world for the better is also this power to influence their own respective governments, unless that popular power too is lost to a dictatorship of some sort or other.

In the way the world appears to be divided into power blocs at present, a third bloc of non-aligned smaller nations of the so-called third world, depending mainly on their lack of military strength and the related abilities to use violence of all types, and the presence of a non-violent moral strength to ask for justice and fair play in the interest of all, appears to be taken more-or-less for granted by them as the only solution.

If we accept the SARVODAYA or METTA principle of directing all our future work for the awakening of all and the welfare of all, then we will see that the above-mentioned principle of non-aligned nations, excludes all those people in the countries of the so-called aligned and leading countries of the power blocs. Most of these people get excluded thus for no fault of theirs although they are also a significant potential power for promoting the welfare of all. A solution has to be found for this inherent weakness in the policy of non-aligned small nations.

Every democratic country has its politically committed government and the opposition parties respectively. However, a very large majority of the so-called floating voters of the politically non-aligned persons is a group that is in fact present but ignored in this game of power politics except during the election time. This is perhaps the most ill-organized 'political group' which has to be well organized on a non-violent basis for the welfare of all, if the Middle Path is to be a reality. It should not get directly involved in making or marring governments but should certainly get involved in guiding them. This means that it should operate most actively not during the election times but between them.

If effectively and efficiently organized with some imaginative planning, this may constitute most people of the world who are not directly committed emotionally and/or militantly to any active political party, whether of the present government or of the alternative government in their respective countries. This may also invariably lead to an international organization of not the political parties of members states as in the case of the Unesco, but the free thinking, non-aligned followers of a Middle Path approach to all human problems. The main purpose of an international Middle Path organization of this nature should be not to get directly involved in party politics seeking power, but to show the Middle Path if and when the political parties move too much towards extreme and thereby err in their policies, plans, and programmes. All truly religious people will have to play a leading role in organizing this and making it a going concern not only in their own interest but also in the interest of even the politicians who can themselves prove to be very good people when guided by such powerful moral force as the one intended here.

If the future world is going to tolerate the present system of party politics even as a necessary evil if not as a desirable virtue, a Middle Path approach of this nature has to be evolved as early as possible without putting all
blame on the innocent helpless politicians. This will bring together not the non-aligned nations, but the non-aligned peoples of the whole world including both non-aligned the well-aligned who can well afford to help the non-aligned if we make the correct approach in the SARVODAYA WAY, for the SARVODAYA GOAL. I would submit that, working to achieve this goal is the most respectable and appropriate plan for thinking, talking and acting for all truly religious organizations of the world, where their traditional role appears to be fast degenerating into a NO-ROLE worth calling religious in the present context. This appears to be a humanistic and rational approach to a social and a spiritual goal too.

This suggestion accepts the need for a non-aligned Third Power in the world but at the same time it extends its general principle to the whole world without depending on an organization of the minority groups representing legally a majority group of each country outside the main power blocs, whose attitudes will eventually go a long way in the future too as it is today. It can be a world organization of all non-aligned people of all countries including the powerful, the rich and even the violent, rather than an organization of ruling people of the poor powerless countries who are groaning under the weight of the colonial past.

Sarvodaya principle is applied in Sri Lanka in an attempt to organize all the good of all the people for the welfare of all as an experiment. The principle of the Middle Path along with the Sarvodaya principle and the extended form of the non-aligned principle, if appropriately combined may push the world at least towards an effort to organize all the good of people in the first instance. Later there may be every possibility of ultimately achieving the SARVODAYA goal in due course depending on the experience gained and the moral-spiritual forces released in that process through those who participate in such a divine effort in a human form.

A consciousness that results from such an attitude of mind and pattern of behaviour in each individual growth and development that can exploit the full intellectual-spiritual potentiality of the individual and society both for the welfare of all. A society led by, and consisting of, such individuals will inevitably lead to a truly DYNAMIC and PROGRESSIVE society where PEACE and PROSPERITY may reign supreme. What Sri Lanka (Ceylon) has tried out in the past in a modest way, appears to be such an attitude of mind and pattern of behaviour in the nation as a whole.

An international or trans-national non-governmental organization in collaboration with all the religious organizations may consider this as their main mission in the future commencing from here and now, if they wish to justify their existence in this fast shrinking global village with tremendous potentialities and psychological readiness for a spiritual rejuvenation and a religious rediscovery to meet that need. Even the smallest in number, the poorest in the funding ability and the youngest in age, out of the existing N.G.O.'s may not fail to make a substantial contribution to achieve this noble goal, provided the others make their fair contribution in the areas where they can well afford to do better. First and the foremost step to be taken is to create a WORLD FORUM for the purpose without unnecessarily interfering with any of the religious affiliations that all voluntary organizations already have.

Let me assure you by interpreting in terms of the Niddla Path philosophy, that this very idea of uniting people and pooling all the good in all the people for the welfare of all, creates a psychological condition in the minds
of the participants, which is quite conducive to development of new insight and creative intelligence, in addition to its potential for spiritual progress.

SABEE SATTA SUKHI HONTU - May all beings be happy
RAJA BHAVATU DHAMMIKO - May the rulers be righteous
DEVO VASSATU KALENA - May the rains fall in due season
SASSA SAMPATTI NETUCA - May the harvest be a success.
AYUBOVAN - May you live long

"METTA"
SEMANTIC GAPS IN THE CONSTRUCTION OF ALTERNATIVE SOLUTIONS
FOR THE PRESENT; PERSONALIZATION DESPITE MODERNIZATION

THE UTOPIA OF ALTERNATE SOLUTIONS

By Candido Mendes de Almeida
Instituto Universitario de Pesquisas
Rio de Janeiro, Brazil

It is highly significant that the Rome Conference included on its agenda the imbalance between the search for alternative solutions to today's reality and the ideal goal of personalizing individual and collective life. We question the validity of such an attitude, implying the acritical presupposition that the possibility of such an alternative is viable.

To what degree have those who pose this question overlooked the dialectic block imposed upon us by the "Great Society" of the 70s? It is virtually impossible for us to formulate a viewpoint external to such a system which can appreciate its development and eventual contradictions.

Today we recognize our inability to evolve alternative solutions to advance man's development. This perilous dilemma begins with the limitations inherent in practically all questions pertaining to our era. Indeed, in the broad range of victories achieved in our process of civilization, we are confronting a sharp diachronic between the existing subjective scales of values and our aspirations in attaining them and the objective conditions of their origin and the business of realizing them. Here we eliminate the possibility of pinpointing the axiological problem's social ascendency — in other words, the possibility of establishing a perspective of its contents, which is removed from the society in which it is realized while yet transcending it. This condition, typical of modernization today, is the very built-in condition in which it is enclosed, or rather, the condition making possible the conquest of the person, cancelling the particular axiological formulation required by such a quest. Indeed, the dynamics of this modernization are dominated by the comparative emulation of the "effect of demonstration," hence indicating the replacement of the TELOS conquest by performance and mobility. Thus it is in a constant perspective of updating the ultimate perception level of its goals and
values -- paying exclusive attention to the comparative distances of growth and expansion -- that the whole range of our era's national collectives is being organized towards greater richness in life. Meanwhile, what we find today is a dwindling homogeneity in this scale of aspirations; thus, the axiological question is blocked and prevented from indicating the desirable bases required to achieve a better life: the conquest of the "plus-being of man and of all men." Development through "proportionality relationships" can only occur through guaranteed macro-social conditions of justice and balance in the division of national and world scales and the advantages of a change policy. Meanwhile, we have already submitted to the influence of varying rhythms in change and, indeed, the quantitative inequalities which have already been transformed into a qualitative confrontation.

The duality of our social era implies first of all a new ambiguity in the very formulation of personalization conditions, which in turn can spur the search for alternative solutions to our present reality.

BEYOND THE BUILT-IN

VISION OF MODERNIZATION

Today we know that the axiological guarantee, which modernization has practically assured for this fin de siècle evolution, has been virtually surpassed.

a) At the top, i.e. in the affluent societies, the problem is manifest from the standpoint of what can be, in fact, the search for better quality-of-life indices. The affluent societies have a surplus of time as well as the possibility for multiple utilizations, which devolve on them rapidly and simultaneously. They are traumatised by the new freedom, which their response translates by the manifestation of the luxury sub-culture, still in a state of shock.

b) In the development crisis, we have ceased to believe in the existence of concomitant change, to be found in all the economic, social, political and cultural sub-systems responsible for the basic conditions of man's "plus-being."
Thus, the full conditions of the individual's personalization would disappear when he profits by the perspective of differentiation and mobility which he could enjoy in a wholly functional society. The rejoinder of the 70s to the 50s amounts to a conflict, even to opposition, between economic development and political regression, between the expansion of national production and the reinforcement of mobility conditions, while economic prosperity clashes with cultural de-charaterization. The presupposition of fatally harmonious change, foreseen by the functional presupposition implicit in modernization, would vanish. Indeed, what would be the stage at which such collectives could thus assure the basis of their identity or their specificity in terms of collective personalization?

Modernization represents the most implicit ideal of collective personalization by assuming the obligation to ensure the limit-conditions of mobility and access to the benefits of civilization, forthwith delegating to individual competence the idea of personalization, built on the residual availability of time to enjoy it and actually to create it.

Thus we see the semantic breach crop up as a sequel to the break in the old spectrum of universal aspirations towards betterment in the conditions of life, vainly defined as the constitutive element in itself. All its dynamism remained thus, as we have said, in media res of the performances and correction of the comparative variations of expansion.

THE SHOCK OF SURPLUS TIME
AND THE LUXURY SUB-CULTURE

Leading the way towards improved conditions in contemporary life, the affluent societies demonstrate how leisure substantially increases, and how technological means are multiplying to satisfy new demands. The quality-of-life problem thus arises within a bewildering trauma without statute or ethics. Affirming the potentiality of doing revolves on every new definition of priorities, by which the "plus-being" is defined by a "progression," a methodology searching for a new scale of priorities.
DYSTROPHIC DEVELOPMENT AND
COLLECTIVE TRAUMATIC PERSONALIZATION

In nations exposed to modernization, the loss of identity implies the
search for conditions of personalization beginning with the conflict or
the confrontation with the former perspectives of this process. The
transparency, thanks to which the functional ideal of modernization can
only decant in conditions of realization assured all individuals,
disappears. Today, the vision of the collective and the patrimony of
group-life experiments as determining every particular axiological
realization, is once again taking form; but in more and more traumatic,
rather than perspective, terms; in this recall to social memory and the
patrimony of historical contexts, we should draw out the person from
within such societies.

Taking the recent experiment in Libya as an example, today we have the
means whereby every modernization process can be challenged by a basic
decision to find a nation's identity in a process capable of achieving
better life conditions in that nation. Thus, there are no means of
questioning the current development situation through the quest for
alternatives without proceeding to a critical analysis of modernization.
For lack of time, it can continue indefinitely without questioning its
axiological scope; it will hibernate its values and life styles to the
extent that it remains in the involucrum by which modernization has more
and more eliminated the research of goals by the mere visualization
of intermediate performance. In other words, this methodology entails a
veritable strategy of discovery, hence of identifying different mediations
which, in fact, make it possible to construct alternative scenarios and
research contrasting axiological systems. This involves:

QUALITY OF LIFE AND
EDUCATION FOR LEISURE

a) Concerning quality-of-life problems, we are now living the
proto-history of a new dimension in the realization of the person. But
we cannot delay it indefinitely. When shall we free ourselves from the
shock of changes brought about so abruptly to our "time budgets"? And
how long will this surplus manifest itself only in expressive and symbolical
do-nothing rituals? When shall we overcome every entropy of an action which has not been researched until now, except as a formal affirmation as the "status" of this new stage's conquest in founding an existence richly differentiated in terms of the values it can bring and realize? How shall we define the agon that makes possible a naturally "canonic" and athletic realization for this surplus of life which characterizes leisure? When shall we succeed in surpassing the simple symbolical enjoyment stage of the possibility of this usage?

REGRESSIVE COLLECTIVE PERSONALIZATION

b) The current loss of belief in the synchrony of change among all the different social sub-systems entails more and more the search for a national identity in conflict with the process to which the condition of promotion per se was initially attributed.

In the collective domain, the regressive conditions affirming a national identity are thus all linked to the explanation of the value and importance of this autonomous cultural sub-system as an intrinsic condition of the individual's personalization. The current historical reality already offers the example of different degrees to which this regression has arrived, as for example:

1) The rupture of the social continuities themselves through the diversification-limit of the cultural models of those collectives exposed to modernization, with interaction in enclaves of the most advanced regions, of metropolitan centers that mesmerize them.

2) The situations of defensive social Malthusianism, in which the search for a socio-cultural denominator against modernization brings privations to the collective body, to transpositions of entire sectors of the collective by social strata, to the search for a confined historical purism, as we see today in the cultural purges rampant in certain African countries.

3) The decisive rejection of the modernization process itself through the re-valorization of different life forms, such as the total re-dynamisation in the styles of collective life in Moslem societies, as is already the case in Lybia.
RELIGION AND ECONOMIC DEVELOPMENT FROM THE POINT OF VIEW OF THE GENERAL PRODUCTION FUNCTION

By Johann Millendorfer

I. A NEW TYPE OF PRODUCTION FUNCTION

1. CONCEPT

The development of the General Production Function is based on a certain understanding of the functioning of societal systems in general. Therefore, we think it will be useful to start with some remarks on the underlying concept. At first, it should be noted that society can be thought of as a complex, multi-hierarchal system. This system is characterized by the interaction of a great number of subsystems, and it is this interaction which enables the overall system to function. Economy is one of these subsystems. Therefore, if we want to understand how this subsystem works, we must go beyond the economic sphere proper and consider also the interrelations with other subsystems.

Society has another characteristic feature in common with other systems, namely its ability of processing energy and information. The economic output of a social system is therefore governed by its capacity to cope with these two fundamental processes. Argumenting in such a way we are applying a concept which clearly shows the influence of K.W. Deutsch who understands society as a self-developing cybernetic system: Superimposed on a control system, in which the material processes take place, there is a system of information receptors, information channels, information storing units and logical units. This network receives information on the actual situation, on environmental changes and on the internal structure of the system. It then processes this information using additional information stored in the past. This process gives
rise to new information which regulates the measures to be taken, that is to say the commands given to the control mechanism.

The energy processing capacity of a system as well as its capability of mastering information are not sufficient to determine a system's economic output. A third component is needed to describe adequately the complex processes just mentioned. On the one hand, this third factor reflects the objectives toward which the efforts of this system are directed. On the other hand, however, the way the system is organized, i.e. the regulation and coordination of the energy and, in particular, the information processing operations, also ought to play a certain role. These two components are the chief determinants of the third factor, i.e. structure. This factor, thus describes the objectives of the system and the organisation of its energy and data processing subsystems, that corresponds to these goals.

This model, of which only a short outline has been given here, has served as a basis for the investigation of the societal subsystem economy. The chapters which follow will show how a country's economic performance can be described as a function of its energy and data processing capacity and of its structure.

2. THE FACTORS INFLUENCING ECONOMIC DEVELOPMENT

Applying the concept described above to the study of economic development we are led to formulate the following hypothesis:

\[ y = F(m, b, p, r) \]
per capita income (y) = economic output
energy consumption (m)
(capital) = energy processing capacity
education (b) = data processing capacity
structure (p) = values, type of organisation, types of behavior
and mineral resources (r)

The use of some of the above mentioned production factors with exception of "structure".

2.1 Capital

The factor capital - which, as will be shown below, shows a close correlation with energy consumption - constitutes a common component of almost any economic production function. The relationship between capital input and economic performance has been dealt with in a great number of previous studies, and we find also attempts to measure this relation on the basis of international comparisons. A study by Galenson and Pyatt (15) is such an attempt to test the assumptions underlying the theory of growth by means of an international comparison. Thereby it has become apparent that too simple assumptions are not suited to explain the international differences in economic growth.

![Graph](image)

*Fig. 1: Investments and growth rates in the countries of the world*
Obviously this study has run into difficulties. The authors are confronted with problems which are very similar to those encountered in many other studies, relying on international comparison as a means of testing their hypotheses. For the most part these studies have not succeeded in taking account of the great number of geographical, cultural, climatic and political differences among the individual countries of their sample. In other words, the observed differences in income (dependent variable) result from heterogeneous influences which cannot be adequately explained by differences in capital inputs. They must be explicitly controlled and entered separately into the study. Not taking care of these influences corresponds to a non-fulfilment of the ceteris-paribus-condition.

2.2 Structure

This gives rise to the demand for an efficient methodology which takes account of these various influences. One such method would undoubtedly consist of forming groups of countries within which the combined effect of these non-observed but relevant influences on each country is nearly constant.

An important clue for the formation of such groups of countries could be provided by observing the health development in the different countries of the world since the beginning of this century. The time series from all countries of the world for which figures are available have shown, that the development of health is fairly uniform within groups of countries, these groups being at the same time sensible geographical aggregates. The differences between
the groups are big enough to decide to which group a specific country actually belongs.

Without going into details of the problems encountered here, we may interpret this observation as follows: Health statistics provide one very fundamental indicator of the development of a society. Here we are measuring the "pulsation" rate of the societal system as it were. It is governed by many factors which cannot adequately be measured directly. We may consider the adoption of medical innovations as one part of innovations in general and which we call "learning process". Thus, the regions differ as to their readiness and capability of adopting innovations. This general statement is based on the observations made in one subsystem of the society, namely the health system. For it is the greater or smaller readiness to adopt medical innovations that is responsible for a more rapid or slower improvement of health conditions.

We can assume, that the "structure", i.e. the value system, the patterns of behaviour and the types of organisations constitute is an important factor responsible for the differences observed with regard to the development of health.

Using this methodology we found 14 groups of countries with different "structure". The European countries can be classified into 3 zones according to their different health development.
Fig. 2: Health development in Europe

There are three zones, Northwestern Europe, Southern Europe and Eastern Europe. Southern Europe and Eastern Europe show much the same development.

Applying the classification in groups of countries as presented in Fig. 4 to the data of Fig. 1 in order to separate the two groups of European countries we arrive at a meaningful relationship:

Fig. 3: Investments and growth rates in two groups of European countries

The observations in this diagram are data taken from Fig. 1. They show that meaningful relationships exist within groups of similar countries.
The regression lines showing economic growth per unit of investment lie on different levels in countries with different political and cultural systems. This observation suggests, that the differences of the political and cultural structure affect the effectiveness with which capital is used, thus the energy processing capacity. In addition to this factual finding, the evidence presented gives rise to the methodological remark, that reliable results in international comparisons can only be obtained if due account is taken of the ceteris-paribus-condition.

2.3 Education

The majority of the studies made so far have considered man as an element of an undifferentiated factor "Labor" and have used just the number of people in the working force as one of the input factors. Various abilities, differences in the level of education (which correspond to differences in information processing capacity) have so far been neglected or have not been examined in relation to the other factors. But if we take a look at Fig. 6 we find, that it is obviously a country's level of education which happens to be very significantly correlated with its economic performance and that, therefore, this factor has to be included in a production function.
**Fig. 4**: Per capita income and literacy rates in groups of countries with similar structure

The diagram shows the close fit to the exponential relation between the economic output and level of education.

Closer examination of the relationship between education and income in a cross-section of countries reveals that the aggregation of countries according to the criterion of similar health development is also a good criterion for this purpose. The regression coefficient of the education is practically the same in all the regions. The intercepts of the regression lines however differ from one zone to the other. Significant differences however do occur only between five large zones of the world.

The evidence presented thus far can be summarized as follows: There is sufficient empirical support for concluding that a country's economic performance is mainly determined by three factors, namely capital (energy), education (information) and structure.

* Regions are defined by the criterion of equal health development.
2.4 Natural resources

Examination of the output differences among the countries of the world reveals, that, apart from the factors discussed so far, the occurrence of mineral resources is an additional relevant factor.

Fig. 5: The special position of Venezuela, Trinidad and Tobago in the comparison of per capita income and literacy in South America

Venezuela's large deviation from the regression line is very striking and can be explained, even quantitatively, by this country's important oil production.

The important influence of mineral resources on the level of economic output is supported by observations in other regions, in particular in the countries of the Near East and in Africa.

2.5 Combining the factors

If we now combine all the individual factors mentioned separately so far we end up by getting a functional relation-
ship which explains the international differences in economic performance very well. The combination of capital, education, structure and natural resources has a much higher explanatory power than the simple regression on a single factor. This is demonstrated graphically in Fig. 8.

![Graph showing observed income vs. calculated income in US-$.]

**Fig. 6:** Comparison of observed per capita income and its estimated as calculated value when account is being taken of all the factors

All factors combined yield a much higher explanatory power. Discrepancies between observed and calculated values are insignificant.

### 2.6 Mathematical expression of the "General Production Function"

The individual factors are combined by means of the so-called General Production Function, which has the following mathematical form:

\[
y = p_{t,z} m^4 a^4 e^b \left[ \frac{1}{2} \left( \frac{m^{0.25}}{e^b} \right)^{-\gamma} + \frac{1}{2} \left( \frac{e^b}{m^{0.25}} \right)^{-\gamma} \right] - \frac{1}{2} + 0.8 r
\]

- \( y \) ... per capita income, measured in US-dollars per inhabitant (annual)
- \( p_{t,z} \) ... efficiency parameters
- \( a \) ... employment ratio
- \( m \) ... per capita capital input, measured by means of energy indicators
b ... qualification of labor, measured by using educational indicators

r ... natural resources index, measured by the value produced by mining operations, etc.

Expression in parenthesis: limitationality parameter. This describes the diminishing efficiency of additional input units of capital or educational effort when departing from the optimal relationship (see below).

The exponent of \( m \) and the coefficient of \( b \) have been estimated in a cross-section of countries by econometric means. While the parameters are not exactly \( 1/4 \) or \( 1 \), respectively, they do not depart statistically significantly from these values used for the sake of simplicity.

II. RELIGION FROM THE POINT OF VIEW OF THE NEW PRODUCTION FUNCTION

1. STRUCTURE AS A FACTOR INFLUENCING THE PRODUCTION

Measured in a cross-section, the efficiency parameter \( p_{z,t} \) of the General Production Function is the same for all countries belonging to one group at a given time. As previously stated, analizing efforts in the field of health makes a division of countries in 14 distinct groups possible. Some of these groups have very similar efficiency parameters and thus can be aggregated into Greater Zones. The characteristic trait
common to all component states of each Greater Zone is a constant relationship between capital and education effort on one and economic performance on the other hand. Countries within each zone are using capital and education with equal efficiency.

In the mid-sixties, using these criteria, the world could be divided into five Greater Zones with differing efficiency parameters.

![Map of Greater Zones]

**Fig. 7: A map of Greater Zones**

It is interesting to note that Greater Zones with differing efficiency parameters - which were calculated using only the data for per capita income, education, capital and natural resources - strongly resemble the various groups of countries and areas of a map showing dominant religions. The zone of maximum efficiency consists almost exclusively of Protestant nations, the one ranking just below it of Catholic countries - including Greek Orthodox and formerly Christian countries of the Mediterranean region.

The delineation of these Greater Zones of varying efficiency leads one to suspect that religion is of decisive importance when it comes to economic development, i.e. that marked differences in efficiency are determined by cultural behaviour patterns and their appropriate structure of social organisation.
2. INTERPRETING HYPOTHESIS IN CONNECTION TO RESULTS OF OTHER AUTHORS

The results shown in Fig. 7 seems to indicate that Max Weber's theories could be to some extend empirically verified. Max Weber stated that a certain Christian ethic is an important factor of economic development. If we try to understand what the appropriate basic feature of the human behaviour created by this Christian ethic could be, we will get from the studies of David McClelland interesting informations: McClelland observed on the one hand, that achievement motivation is a deciding factor of economic development, and on the other hand, that this achievement motivation is very high if an immediate contact to a personal god is combined with responsibility for the world.

The best precondition for societal development is there, where this polarity governs the human behaviour and due to this the societal structures. We find this polarity in the ethic of the gospel.

3. CONCLUSIONS

The economic support to the fact, that religion is an important factor not only of personal but also of societal development, gives us a better understanding of the process of societal development; a first application could be a new consideration of the interdependencies between development aid and missio.
BELIEFS THAT CAN LINK MEN TOGETHER

By John Platt
Biologist

I think it cannot be said too often that the human race is now passing through the greatest transformation in history. Since World War II, our inventions and discoveries in almost every field have gone far beyond the most important achievements in all previous history. We have gone from coal and steam to nuclear energy and nuclear weapons, from airplanes to ICBM rockets and space travel, from newspapers to satellite television, from hand calculators to electronic computers with data processing and automation, from hybrid corn to the Green Revolution, from the old insecticides to DDT, from mechanical contraceptives to oral contraceptives, and so on and on. Some of these inventions have gone so fast and so far that they are approaching their physical and biological limits, but their social consequences are now transforming the world. In every country they are changing the structure of information and education, the farms and the cities, resources and energy consumption, armies and police, business and government, banking and international money and trade, the church and the family.

This transformation is as enormous as ten industrial revolutions and Protestant Reformations all rolled into one and all occurring within a single generation. All of our old institutions are being restructured, either by intelligent design or by crisis and accident. In this process, the world of the Twenty-First Century and of many centuries to come is being created, if we can respond in time and can make new social structures and new worldwide institutions that will actually enable us to survive through this period of stress.

(*) Already presented at Walgreen Conference, Ann Arbor, April 4-6, 1973
Under these circumstances, it is clear that we need to begin thinking about the philosophical and religious foundation on which this world ahead will be built. True believers in the established religions will say, of course, that such a rethinking is unnecessary because the basic truths have already been revealed and can be found in one church or another. But I think the more modern theologians of every faith would agree today that the great religions created in primitive societies fall far short of meeting the intellectual and moral demands and the personal and social needs of life in a democratic and scientific and worldwide society that is already reaching out into space.

The problem is not just the old controversies between science and religion, such as the conflict over astronomy between the Church and Galileo or the conflict over evolution between the Church and Darwin — although strong fundamentalist sects are still able to prevent the teaching of evolution as a fact in the school textbooks of California. The problem is not only the miracles or the obscurantism or the idea of the infallibility of a prophet or a book or the church itself, the ideas that were so opposed by the Eighteenth-Century Enlightenment. The problem is not just the Articles of Religion in the established churches, a belief system that their own theological students commonly laugh at. The problem is not the rather absurd food taboos and dress taboos and Sabbath taboos, such as those that are now legally enforced in the State of Israel. The problem is not just the social and political oppression of the organized churches and temples and priesthoods, supported by the promises of "pie in the sky by and by", which the Marxists have so strongly attacked. It is not just the disgraceful and immoral treatment of women and blacks and lower castes and the unChosen people by all the old patriarchal and sectarian religions. It is not just the punishment psychology or the sexual hang-ups of the religious moralists.
The problem is all these things together. There are deep and noble insights in the older religions, such as the brotherhood of man, or the Eightfold Way, or the sense of God working in history, or the goal of building the City of God or the New Jerusalem. These religions have given us a sense of personal meaning, structures for the family, consolation in times of death or sorrow, and some intelligent rules of conduct for helping the sick and the poor, dealing fairly with each other, and building a good society. They have given us great visions and poetry and art and music. But the question for mankind today, as we move toward this new society in the world ahead, is how to keep these valuable contributions of the older philosophies and religions while getting rid of all the other false and dangerous and immoral rubbish.

The question is how to create a new basis for belief and hope and for personal and social life. For it is clear that men and societies need a belief system. Our sense of meaninglessness and alienation, in capitalist and communist societies alike, is tearing us apart. A real faith is essential not only for great art but even for survival. We need to know who we are, where we came from and where we may be going, and to feel that we are not cogs or machines but that we have a personal role to play in the evolutionary process in the world. This is what gives us consolation and hope and endurance and collective effort and self-sacrifice in times of great trouble.

But it must be a system that the intelligent and well-educated men and women of the world today can actually believe in without serious doubts and reservations. Yes, some beliefs can differ from one tradition or one economic system to another, but others need to be worldwide, such as our belief in the family of man and our common destiny on the planet together, and the ethical need for mutual restraint in matters of population, pollution, consumption of resources, and nuclear war.
A belief system for the world ahead needs to be experimental rather than dogmatic, but it needs to be consistent with what we now know about the world and man. Yet it also needs to deal with aspects of life outside of objective science, with love and grief and peak experiences, and with the existential basis of awareness and action. And it needs to give us personal and social rules of interaction in working together on our great problems and building a more decent world for all of mankind.

The Ecological Basis

I think the basis of such a new belief system will need to be fitted together out of four major components, an ecological component, a psychological or human-potential component, a philosophical or existential component, and a cybernetic or problem-solving component.

The ecological component concerns man's place and his responsibility in the biosphere, the on-going evolutionary network of life. We need to know in a general way about our relation to the universe, the starry heavens, the galaxy, and our position on a planet circling the sun. We also need to know what is known about the origin of life, and the evolution and diversification of the plants and animals and the origin and development of man. In its sweep of cosmic distances and billions of years, it is in many ways more magnificent and inspiring than the account in Genesis or any of the other creation stories.

What the ecological picture emphasizes, however, is the interconnected networks of the plants and animals today, the life in the oceans, the food chains, the effects of man's activities, problems of population growth and pollution, the need for conservation of resources and recycling, the need to preserve diversity, and the absolute need to protect this whole fragile system that we are on the verge of destroying.
The result is that ecology provides us with a basis for ethics — the "ethics of survival" — such as none of our other sciences have ever given us. It gives us both a global ethic and a personal ethic. On the global scale, we are reminded of the seamless web of life, and of the fact that all men are brothers. We multiply the same crops, pursue the same animals, mine the same resources, suffer from the same pollution and fallout, and press against all the limits with our multiplying population and consumption of goods. The global ethics of survival will force us to prevent nuclear war, and to control population and pollution and energy use and resource consumption. It will force us to set up effective local and national and international structures that can actually manage these problems. It will force us to set up global scientific organizations for research and forecasting and warning in all these areas. It will force us to turn individual governments away from nationalism and war-making and away from the exploitation of poor nations by rich ones and towards balanced trade and development, if we are to avoid the continual danger of escalating conflicts. It is obvious that this is a far more complex, large-scale and long-range ethics than any of our older religions have given us, and it specifies all the differentiated things that need to be done in surprising detail.

On the personal side, the ecological viewpoint is almost equally specific. It counsels each couple not to "be fruitful and multiply," as the older religions commanded, but to have two children, or one child, or none, so as not to increase population and steal the resources of others. But it agrees with the inward contemplative religions that urged living simply and not laying up treasures on this earth; except that for modern man this means using less consumer goods and less transportation, reducing waste and pollution, and recycling our bottles. And it means leaving each plot of land in better ecological health and biological balance than we found it.
The stimulus of ecology also leads us to great inspirational and peak experiences as we search out and cherish all the forms of nature, and as we savor alone or with others the great moments of mountains and oceans and sunsets. The woods and mountains were God’s first temples, and the ecologists may be leading the world once more back to this holy thinking. That photograph of the earth taken from the moon by the astronauts, showing its blue oceans and white clouds, is a great poem that may have done more to make us cherish our small and precious planet than anything else that has happened in this century.

The Psychological Basis

I see the psychological component of a new belief system as revolving around the many facets of the so-called human potential movement. One side of this is concerned with meditation and awareness, as represented by the transcendental meditation groups and by the new Western interest in the practices of Yoga and of Zen Buddhism. Another side is concerned with personal development of more openness and more responsive relationships. This is represented by group therapy and Esalen and Synanon techniques, used sometimes in attempts to cure sexual hang-ups or more serious drug addictions and sometimes just for the group’s enjoyment of greater sympathy and responsiveness. In addition, there are all the experiments in new forms of group living, in open dormitories and in longer-range communes or family clusters.

The communes represent a wide variety of explorations. There are not only the hippie groups, dropping out from all the ways of established society, but there are also fundamentalist religious communes, experimental psychology and therapy groups, groups oriented around meditation or ecology or alternative technologies, and upper-class family clusters in converted apartment houses.
From a general religious point of view, the role of the communes may be surprisingly like that of the monasteries in the Middle Ages. They tend to be short-lived and weak on doctrine and discipline — as all our new movements are — but they represent a similar dropping-out from society and they are often similarly supported from the outside, even though their poverty and their values and their commitment are a living moral critique of the established system. In many cases, they represent a more positive crystallization of the ethic of awareness and affection and openness and inward growth that has generally characterized the youth movement since the 1960's.

In a time of change, these various human potential groups are inventing their own new religious practices. They create their own poetry and music, with self-taught flutes and guitars, echoing the new folk-music and rock-music themes of awareness and love. They create meditation practices and their own rituals and rites of passage, and methods of consolation and mutual help in times of trouble, and an easy welcoming and sharing with strangers who show the same values. In these positive values, as well as in their very real negative problems — of personal property and selfishness and community management, and even sick members on ego-trips — they are surprisingly reminiscent of the small early Christian churches. If they could solve some of their organizational problems so as to become more permanently rewarding, they could conceivably spread to transform society in much the same way in the next few decades.

It will be said that I am describing practices rather than a belief system. It is true that there has been no single prophet or saint or martyr with an authoritarian book or moral code guiding all these groups. In a high-education high-information society, all our new structures and movements tend to be collective and participatory, mutually organized rather than directed by a Pope or General or a Central Committee. This has been almost
as true of the Apollo project with its interacting teams of advisers for the moon landings, as it has been for the student movement or the Black Power movement or Women's Lib.

Nevertheless, the human potential movement has been built on the recent laboratory and academic studies and therapeutic findings of psychologists and psychiatrists like Abraham Maslow, Carl Rogers, Erich Fromm, and Eric Berne, as well as religious philosophers of human interaction like Martin Buber. Their writings are commonly used in the movement in addition to the more classical religious and meditative and inspirational writings from many faiths. Maslow's list of human needs and his emphasis on "eupyschian behavior" — not the psychology of animal responses and of sick people but the psychology of high-level wellness, of awareness and love and creativity and peak experiences — have been particularly influential.

B. F. Skinner's Utopian commune in his book Walden Two has also been imitated in several experimental communities. His powerful methods of mutual behavioral shaping by positive reinforcements have been widely attacked as anti-humanistic, but I think closer examination will show them to be surprisingly like the methods of "loving your enemies" in the early Christian church as well as the methods of mutual support in underground Communist cells. I personally expect them to become part of the belief system and practice system of many groups working effectively for social change in the next few years.
We therefore have, in the human potential movement, what could be called proto-religious elements of group practice and ritual and organization growing for the first time around a scientific picture of the nature of man and his development and behavior and relations with his fellowmen. And when I say "man", I mean it in the neutral and generic sense of "Mensch", including both men and women, because both the beliefs and the practices of these groups are consistent with the sexual revolution of our times. The new scientific studies have torpedoed many of the old sexual myths and taboos, and the new contraceptives have decoupled sexual love from procreation and parental and legal responsibility. The new tide is changing all our legal and moral sanctions — even in the churches — on marriage, virginity, adultery, divorce, homosexuality, pornography, and the rights of women. In this respect, the human potential groups are in line with the new laws and the new theology and with what much of the public has long been practicing — the idea that sexual love between consenting adults should no longer be governed by Mosaic taboos but simply by desire, tenderness and responsibility. Thus we prepare the Commandments for the Twenty-First Century. It is the greatest change in Western attitudes toward sex in two thousand years, and yet it simply takes us back to St. Augustine's summary of all morals: "Ama et fac quod vis." Love and do what thou wilt.

This personal and psychological belief system, with its emphasis on inward development and interpersonal relations, fits well together with the ecological belief system, with its emphasis on living simply and in harmony with the whole interconnected web of nature and mankind. It is no accident that in Stanford, California, the ecological bookstore called "The Plowshare" is under the same roof with the meditation bookstore called "The Seed Center." The same moral and concerned builders of a new world need both.
The Existential Component

In addition to these important components for guidance derived from scientific knowledge, an adequate belief system for the world ahead will need some components that stand outside of science. Certain necessary underpinnings for personal confidence and choice and action are even more subjective than awareness and love and creativity, which after all have an objective scientific basis in modern psychology, as we have seen.

What I have in mind is the philosophical basis, the phenomenological or existential basis, which precedes and underlies everything that can be said about objective science. It is this element which the successes of modern science have made us forget, because for many it simply seemed to be part of the old discredited anti-scientific superstitions and religions. Our loss of this factor in our public discourse and in the teaching of our children is largely responsible for our feelings of alienation everywhere; far more so, I believe, than the impact of assembly lines or bureaucracies or the pursuit of consumer goods. All these things would be unimportant, managed or kept in their proper subordinate place in the scheme of things, if we were automatically and continually aware of our personal existential independence and responsibility for what we do and the life we lead.

But this component, far from being anti-scientific, is the necessary precondition for science. What each of us is, first of all, is a center of awareness and action. This is speaking phenomenologically, that is, in terms limited to the primary phenomena of immediate personal knowledge at every instant. The existentialist statement is, Existence precedes essence. That is, our existence as a center of awareness and action precedes anything else that can be said about the world.
The nature of this relationship to ourselves and to the world can be amplified with the help of the new psychological findings about perception. It is now fairly well proven that perception and learning both involve a transactional relationship to the world. A kitten kept in a dark room or moved about only passively in a basket in the light is functionally blind. Richard Held has shown that animals and human beings must have "reafferent stimulation" — that is, inputs from their environment produced by the action of their own muscles — in order to be able to see or to organize or correct their visual perceptions. The response from the environment is necessary in order to close the feedback loop, not only for goal-directed behavior or cybernetic behavior, as Norbert Wiener emphasized, but for any accurate perception at all. Awareness requires action, just as directed action requires awareness.

The result is that we, as centers of awareness and action, can be seen objectively to be interacting all the time with the environment around us. We are centers of manipulation and amplification of the private signals that come into our eyes or our other senses. In fact from an operational point of view there is no clear boundary between the self and the world. Is it at the ends of my nerves, where they stimulate my muscles? Or where the muscles act on the bones? Or where the bones through the skin touch the flashlight? Or where the flashlight beam hits the wall, or the mountainside, or shines in the burglar's eyes?

Is the boundary of the self where the muscles act on my voice box, or where the vibrations of my voice move the molecules of the walls, or of your eardrums? Just the movement of a finger or the blink of your eye changes all the holograms, all the electromagnetic fields, out to the most distant hills with the speed of light — which is why someone out there with a telescope could watch you blink.
In fact a satellite camera a hundred miles in space, which can photograph things down to the size of a golf ball, could photograph your eye-blink if the camera were large enough. Sleeping or awake, you are manipulating the fields throughout all your environment and far out into space with the speed of light, just as the universe out there, with its stars and planets and cosmic rays and gravitational waves is continually influencing you. In the same way we are continually manipulating each other, with our voices, our cries for help, or our ideas that represent our amplified private perceptions and insights. Fellow human beings, we interpenetrate each other and the universe. Or as the ancient Hindus said it, Atman equals Brahman. Tat tvam asi. That art Thou. This is not mysticism but science.

But from the point of view of ourselves as such centers of awareness and action, where is objective science in all this? The answer has been given by physicists and philosophers such as Ernst Mach, Erwin Schrödinger, Percy Bridgman, David Bohm, and Michael Polanyi. The titles of their books show the direction of their thinking — Polanyi's is called Personal Knowledge, and Bridgman's is called The Way Things Are, almost a paraphrase of the Tao Te Ching.

These men, along with more traditional philosophers such as Husserl and Whitehead, saw the external world of objective science as something created and organized within our total field of subjective perception. The decision to be objective is a subjective decision. Science, as Polanyi emphasized, depends on our personal choice of what we know and what we want to know, what experiments to do, how to set them up reliably, how to prepare the initial state, how to observe, how to draw the conclusions and decide what they mean and how to use them.
Science is first of all a personal operation on the world. Or, as Bohm puts it, physics is an amplification of our perceptions. Its experiments must be manipulable by our fingers, perceivable by our eyes, and understandable by our understanding, or they are meaningless. Man stands at the center and science is his slave, and not the other way around. The atoms and molecules and fields that we infer from our observations and believe in, with our changing models of them from one decade to the next, are not the basic material of the real universe; the basic material is our observations and our inferences and beliefs that precede and underlie everything else that can be said. Damage these and you damage everything.

So we ourselves, as centers of awareness and action, are not deterministic or indeterministic. The question does not even apply to this subjective universe, because determinism is something that we decide or determine (in a different sense) about the world, out of our own subjective choice or free-will, which precedes it. The objective world of science or determinism and indeterminism is only a part-world which lies within the subjective world of knowledge, values, decisions, and acts. And this is a world which is continually changing its awarenesses and insights and its manipulations, amplifying its effects into the larger environment which is only an extension of itself, and continually changing the future closer to its own desires.

This puts the existential focus of awareness and action and responsibility in the here and now. We are responsible anew at every moment for what we believe and what we do, and we reaffirm anew every day our belief in any belief system, regardless of whether it came from a prophet or from a book or from science and regardless of whether we believed in it yesterday. This attitude frees us from the mistakes and guilt of the past and frees us to be creative in shaping the future.
It frees us to stand up and be men. I suspect that for each of us, the most intense and interacting persons we have ever known — the kind of persons who change the world — took a positive delight in this directness and immediacy and freedom. This is the basic message of Zen Buddhism and I think it is the central personal way of Jesus. Thornton Wilder has Julius Caesar saying, "The crown of life is the exercise of choice." Emerson says that Thoreau put his mind into every step. We feel their power across the centuries.

I think this is the attitude that we must teach each other, and teach our children, to believe in and to practice, or the world is lost. We must teach each other, and act as though, we are each one the integrative center, savoring and choosing and interacting at every moment, around whom everything else revolves. And, yes, because we are in the world together, influencing and transacting with each other, we do not act just as individuals but as collective groups, couples and neighborhoods and nations, choosing and acting with a higher unity together.

It will be clear that I think these elements of a personal philosophy are an absolutely necessary part of a belief system for survival, regardless of what other philosophical or religious beliefs we may be taught. I think they are not inconsistent with what we know about science, although they underlie science itself and have always underlain it, as philosophers and mystics have known for three thousand years. And I think they fit well together with that transactional view of personal psychological relations and with that transactional view of ecology that we have already described.
Finally we need to put these components of a belief system together with a cybernetic view of how we plan the future, correct our difficulties, and change the world. This is the point at which we come back to scientific knowledge as part of our belief system. The scientific method is a way of understanding the universe so we can manipulate it more effectively for our purposes. It is never finished and should never be dogmatic, because, as Karl Popper has emphasized, it never discovers the final truth but only what is false. This means that science is primarily a program of continually correcting the mistakes or inadequacies that we have already found out about. Nevertheless this program over the last few hundred years has given us an enormous body of tested knowledge, in this sense. Most of this knowledge can be incorporated in a belief system, or a system of practical planning and action, with much more confidence than we can have in any knowledge taken from ancient pre-scientific or pseudo-scientific books or from the most inspired prophets. This is of course the reason for the continual defeats of traditional religious ideas of the universe and man when confronted with science. They failed to retain belief because they could not stand against the overwhelming evidence.

What has all this to do with cybernetics? The answer is that the creation of a changed world for us individually or collectively is an on-going cybernetic process in which we do the best we know how, to move toward our goals, and then if the results are not working out as expected, we change and try again. It is like the cybernetic process of driving a car, in which we continually adjust the steering wheel to stay on the road we have chosen. The behavior of individuals or societies, like the behavior of a car, is not to be predicted by the physics of inanimate bodies but by the cybernetics of goal-directed behavior.
Or, to change the analogy, the guidance of society toward a more desirable future is like the guidance of a wagon-train of pioneers moving into unknown country. They stick together because of the hazards of separation, but they collectively argue and choose the route, on the basis of their knowledge of where they are and of what their lookouts and their maps tell them about the dangers or advantages of the different trails ahead, all in the light of whatever mutual goals they have agreed upon. The process can properly be called collective cybernetics. In extending this analogy to the cybernetics of our whole society, we see that science is what provides our knowledge of where we are, our maps and forecasting and warnings about the hazards of the alternative trails, and the more effective design of the mechanisms for steering our social vehicle, that is, for implementing policy choices.

Science, used in this way, especially in areas of social exploration where we have never traveled before, has to be experimental and non-dogmatic, and patient in reserving judgment and waiting for the outcome when the evidence is not all in. And it is clear that these attitudes have to be taught to children and politicians and businessmen and newspaper men and the public, as part of a belief system in any society that is to use science effectively. We are beginning to accept these attitudes now in the nation, as we begin deliberate social experimentation in such fields as education and housing and a guaranteed annual income. Skinner emphasized this experimental attitude, with an open belief system, in Walden Two, perhaps for the first time in any Utopian plan since the U.S. Constitution. The critics who thought, scientifically or not, that his behavioral system was in error, failed to notice this necessary openness for further exploration and the detection of undiscovered errors.
Obviously a further necessary element in the experimental attitude toward life and toward personal and social change is the tolerance and positive encouragement of diversity. We need to create and sustain as many diverse styles of life as possible without destroying each other, for several reasons. Even when we dislike them, when they seem undesirable or unpromising to many of us, we need the actual evidence over lifetimes or generations to know whether different lifestyles will work. Or they may have elements that work and that can be combined with elements from other social experiments to make a combined pattern better than any one. We need the exploration of all the directions of the social map, like the scouts sent out by a wagon train, to make sure that we are not neglecting any important possibility. And we need diversity for general ecological reasons, because a "monoculture" is basically unstable against unexpected catastrophes or slow corrosion, which might take the form of genetic decay or political or economic or educational erosion. In the long run, a viable society must be a society that believes in, and generally practices, tolerance, dissidence, and diversity. Or in Jefferson's words, it will demonstrate "the safety with which error may be tolerated when the truth is left free to combat it."

It should be added that such a society, which has trained its children well for this kind of self-reliance and openness and tolerance and experimentation, will have a confidence about its values and its future such as we can scarcely imagine today. These attitudes and this confidence characterized the Eighteenth-Century rationalists and the founders of the Constitution, but we see them today only in societies that are still experimental, like Communist China, or in the kibbutzim of Israel and in some experimental schools. They are lost in the dogmatic dictatorships and in much of the confused West.
This cybernetic approach is, more generally speaking, a "dynamic systems-approach" to our total situation in society and nature and to our problems and the on-going search for solutions. The complexities of modern scientific knowledge, as well as ecological thinking, have made it almost necessary to have such a general systems framework upholding any further discussion of man's cooperation, his planning, his ethics, or his philosophy. The teaching of such a systems view to our children and to the public would help us appreciate several aspects of our life together that are hard to see from any more piecemeal approach.

One is the fact that every cell and every person benefits from a better-organized and more smoothly running system, with its blocks and malfunctions removed and with its corrective feedbacks operating well. The stomach, the muscles, the heart, the brain, all benefit. The difference between our present malfunctioning societies and a good society is like the difference between sickness and health, in feelings of justice and satisfaction, in well-being and creativity. And the prospect of such humane improvements provides its own motivation and power for change. The difference between what is and what might be is the greatest power in the world. It is why men work and save and invest and vote and risk their jail sentences and their lives in the hope of a better world. This is the power that pulls the cart of history.

A systems view also helps us to see the world and its evolution as a historical process, with sequences of steps, direction, and responsibility. Thesis to synthesis. An engine to be designed and built, and a catalytic spark then to ignite the fuel before it will run. Sometimes one program has to be used to start things up and give men hope and momentum, although it may be at odds with the long-run program that is needed. Our present great world transformation is a historical process with many such catalytic steps, and emergency programs that will have to be phased out later.
Needless to say, I think this cybernetic and experimental attitude toward the world again fits very well into the self-reliant and responsible interaction system we have described from the other three sides of ecology, psychology, and existential philosophy. The table stands well upon four legs. One might ask if there are other components of a belief system of equal importance that may have been left out, but I do not think there are. The system I am suggesting includes a scientific and workable world view of man in nature, a personal view of man in relationship, an existential view of man as the subjective center, and a cybernetic view of the on-going process of effective action. This gives us the basic structure out of which specific counsels and moral principles can be drawn, and into which diverse new knowledge and the other diverse beliefs and practices of different groups can be accommodated.

It is worth emphasizing that these components can be found in the deepest and loftiest insights of every religion and in all the writings of the mystics that Aldous Huxley collected in his book *The Perennial Philosophy*. Yet from a scientific point of view, they have become acceptable or even understandable only in the last thirty years with the growth of general systems thinking, and new sciences like cybernetics and ecology, and new ideas in psychology and perception and behavior and in the philosophy of science. It is an intellectual and philosophical transformation as impressive in its way as all the other technological and social transformations through which we are passing. It is a collective and participatory construction, experimental and diverse, without a prophet or a church or a creed, but it seems possible that this cluster of ideas about the world and man will play the same central and organizing role in the global society of the world ahead that Christianity, Islam, and Marxism have played in their own societies. In fact, in terms of its scale and universality, it could be vaster than any of them.
What happens to God in all this? Clearly in this system, the creative principle of the universe — or God, for those who find that short name familiar and convenient — is not an external principle but an internal one. It is an evolutionary principle of growth and learning operating continuously through history, with man now becoming its image and agent on earth, planning and shaping and hopefully learning from his mistakes. This has not been the view of the more primitive religions, but the Judeo-Christian tradition has seen God as working through man and man's responsibility for the future in this way, and it is even closer to the view of many saints and mystics. Saint Teresa thought of herself, like Jesus, as being one with God, and Meister Eckhart said "The eye with which I see God is the same eye with which God sees me." Tat tvam asi.

What happens to good and evil in such a system? It is obviously not a Manichean system, with good and evil opposed like positive and negative, or with God opposed by an active Devil force of evil. Being built on systems theory and biology, it has no absolute negatives, but only greater and lesser degrees of organization and growth. It is interesting to reflect on how many fundamental entities of science have this property, although it is not often emphasized. There are no negative trees, just as there is no negative energy, or mass, or absolute temperature, or light, or money.

In such a system, there are no evil men because every man is a system with some valuable elements of organization that can be corrected or improved. Men are short-sighted or they are pursuing different goals from ours, goals of cleverness or strength or addictive needs, but no man is evil to himself in any present moment of decision. So Jesus eats with sinners and tries to convert them and says, "Love your enemies."
Often, of course, we find ourselves individually or collectively in "social traps." These are situations where we get immediate reinforcements or rewards for behavior or habits that produce damaging personal or group consequences in the long run. This happens with smoking and overeating and with hostility and in situations like Garret Hardin's "Tragedy of the Commons" where each man's desire to graze more cows or to have more babies or to consume more resources damages the group in the long run.

Conversely, the immediate present difficulties may prevent certain behaviors which would have great personal or social value in the long run. This happens with our failure to save money or to do acts of kindness or to make personal efforts to heal disputes. But in all these cases, we are now learning many things we can do to reinforce differently and change our present "wicked" behavior. By "bringing the long-range consequences to bear," we can often make good behavior easy. So we have Social Security to help our improvident selves save money for old age. We feed the poor and we educate working-class children instead of relying on Christian charity to do it, as we had to do two hundred years ago. We invest in highways instead of having to build them with collective coercion or with slaves.

It seems to be this kind of trap that Saint Paul is referring to when he says, "The good that I would, I do not; the evil that I would not, that I do...Who shall deliver me from the body of this death?...With the mind I myself serve the law of God; but with the flesh the law of sin." Paul's remedy was to attempt to root out Old short-range Adam by punishing this sinful flesh. The Church, following this mistaken psychology, has given us two thousand years of punishment and war, "converting with the sword," and a hatred of the flesh and of biological man that is self-defeating, with its legacy of sexual fanaticism and crippling psychosis for whole cultures.
As Skinner says, these are the expected consequences of punishment; positive reinforcement, that integrates the whole system instead of making it a house divided against itself, is far more effective in the long run. Today we can certainly do better with the problem of sex or evil, and even with conflict and war; and perhaps we are beginning to.

Death and Destiny

What happens to the afterlife? An experimental and biological belief system has no room for such an idea and obviously must regard it as primitive and wishful thinking. As the Christians and others have held at various times, the body is nothing, a mere shell, after the spirit is gone, and it should be recycled back to the biological soil from which it came. As the Jews have held, we live on only in the memory of our friends and those we have influenced, and in our works that have changed the world by some degree. And do we not create such an afterlife at every moment?

What is perhaps more important is to emphasize the agreement of these views with the very different "eternal life" of which the mystics spoke, which does not have to be waited for but which represents an intensity of identification with the universe in every instant, in the on-going Eternal Now. It is "outside of time" because it contains all our objective and mathematical concepts of calendars and years, past, present and future, within this immediate center of awareness and action. Eternal Life often means this, in spite of the misunderstandings of the commentators, who have never experienced the immediacy. This is the point of view of the Zen masters and Traherne and Thoreau and Huxley and Schrödinger. Shakesppear, never losing sight of immediacy, says "Eternity was in our lips and eyes."

And there is no birth and no death in this immediacy of Eternal Life. Schrödinger says "There is no loss of consciousness to deplore. Nor will there ever be."
This is not a "consolation" for those who are able to continually experience the immediacy — for they need no consolation. But for those who have not made this jump of personal awareness, such a belief-system can still offer honest and believable consolations in times of trouble or grief or death. It offers the savoring of every immediate experience in the totality of human experience as a value. It offers the supports of openness and affection, and the consciousness of peak experiences and creative moments and a complex and fascinating world worth living and well-lived. But what is most important of all, it offers the sense of biological continuity in which each of us takes part in the on-going pageant of life, playing his role with the grasses and stars in the flowing process of creative evolution. This is what gives meaning to birth and growth and marriage and sex and death. This is the great theme on which all rites of passage should be based. In this case, the evolutionary and ecological theme is a Hindu theme, of the on-goingness of life and the oneness of life. Each of us, in his passage, becomes the eyes and ears and the mind of the universe becoming aware of itself and in love with itself.

But then, what of the destiny of man? Are we to "build a New Jerusalem?"

The answer is, undoubtedly. Recently Russian and American spacemen and radioastronomers have been looking and listening for signs of intelligent life elsewhere in our galaxy, within a range of, say, 10 to 1000 light-years away. A great number of strange astronomical phenomena have been discovered in the last few years, but all of them appear to have natural explanations, even though bizarre. On the other hand, we are dealing with cosmic times and distances, and it might be necessary to search and listen for hundreds or thousands of years before detecting any real signals, even if intelligent civilizations are fairly numerous.
The point is that it is now believed by many scientists that other living systems may be common. Other suns with planets like ours are predicted to be common, and the hydrogen, carbon, nitrogen, and oxygen needed for life are among the most abundant elements in the universe. All of the steps in the build-up from small molecules to cells to large organisms to communicating societies are believed to be fairly probable and most of them are believed to be almost inevitable in the field of radiation from a star, given our time span of several billion years. If such societies achieve great powers over nature very rapidly, as we have, many of them may destroy themselves before they learn how to control these powers. But some fraction may get past this watershed, and it is not just science fiction to say that they will move out into space, as we are doing, with space ships and radiocommunication. In fact, after a few million years, they may link up into galactic networks of communications, directing or educating each other.

Whether such civilizations are numerous or not, our own development is so recent on this time scale that it is certain we are the youngest "baby" in this corner of the galaxy. Obviously the receipt of any clear and undoubted message from "out there" would start a new era in our history of vastly greater significance than Columbus's discovery of America.

Our destiny, then? The possibilities call us forward. We are at the stage for organizing our own planet and taking responsibility for its welfare and for the welfare and future of mankind. This is the task that is outlined by Warren Wagar in his recent book, Building the City of Man. If we survive our present crises, and move from our stormy adolescence to the steady state of a mature and responsible adulthood, the development of our full creative potential and the exploration of the brain and of our untapped biological and social potentialities will keep us busy for hundreds or thousands of years.
The Humanist Values

It will be objected that I have described this elaborate belief system without saying anything about values. True; because I think that values can only be wisely discussed after we have understood this existential framework of who and what we are, just as our daily goals can only be discussed intelligently after we have eaten and drunk and slept and sampled the morning. The synthesis presented here is evidently humanist, existentialist, transcendentalist, and pantheist in its essentials. Their different perspectives complement each other, especially when refracted through these recent scientific findings. As Sartre says, "Existentialism is a humanism."

So the values in this system would be drawn out of the idea that we are now one family, one planet, and one enterprise. Morality consists in applying the family principle — or the self principle, loving our neighbors as ourselves — in every human relationship, or social or political problem. "What would I do if he were my brother, or my child?" This does not eliminate conflicts of values, or the practical problems of reaching some particular end, but it provides an immediate human touchstone as to how to make the decision. It immediately shows the direction of answers to today's new problems of population control, contraception, and abortion, which are often discussed as though they only have to be managed by some disliked and alien group. It offers answers in the controversies over eugenics, biomedical experimentation, and the care of the dying.
And that two-thirds of the world which is left out of our affluence by accidents of birth or color must come to be treated as members of a rich man's family would be treated. This is not only because it is right but because it is necessary for survival. If this is not done, their resentments will fester and become a seed-bed for worldwide revolutions, with rapid destruction of our remaining resources or our ecological balance or our precarious nuclear balance. Love your neighbor as yourself; and quickly so, if you are in the same small spaceship together.

The test of long-run survival for the whole human potentiality is a powerful test and corrective in any discussion of humanist values. No, survival is not a moral or adequate criterion in many short-run problems. Fathers and mothers must sometimes plunge into the fire to save their children and men must often fight to the death against tyranny if the larger group and the larger values are to survive. But it is now widely believed that the moral and religious systems we have now may have been selected because of their contribution to the survival of our ancestral tribes and nations. C. H. Waddington, the evolutionist, proposed this in his book, *The Ethical Animal*. Jacques Monod has emphasized in his *Chance and Necessity* the survival value of a creation myth, which gives men the assurance that the universe created them and is watching over them. And it is obvious that the idea of one God produced fierce and uncompromising peoples who survived when oppressed and conquered when on top, and drove out polytheism on four continents. The moral and idealistic component in Marxism, the image of brotherhood and of a better world in birth, may also be responsible, far more than self-interest, for its world-conquering power. Men do not fight for themselves so much as for structures and concepts that will guarantee fair treatment for their children.
Skinner has developed this theme at some length in his book, *Beyond Freedom and Dignity*, where he emphasizes that our long-run survival today depends on our choice and use of behavior-shaping beliefs and practices that will prevent our society from either becoming rigid and sterile or tearing itself apart, and our ability also to induce these beliefs and practices in our children so that they will induce them in their children. If the experiment does not survive, no morality is worth anything, so this is a minimum condition for any further discussion of morality. Among the practices he emphasizes are specific ways to foster tolerance and diversity and experimentation, so as to avoid getting into an evolutionary sub-optimum or dead end, as we have discussed here. He also emphasizes the dangers of permissiveness in raising children, and the need for an affluent society to shape its young for the lifelong enjoyment of personal development and creativity, to avoid imminent decay into anomie, spectatoritis, gambling, and the drugs and violence of boredom.

The moralities of long-range survival are evidently a theme deserving serious and urgent study from many points of view, experimental and theoretical, by scholars, anthropologists, psychologists, and philosophers. It is time for this branch of humanist ethics to become an experimental science.
Existential Confidence

Such a basis for morality in terms of survival may seem cheap and merely human to many atheist existentialists who are proud to have cut themselves off from the wishful consolations of religion and to have accepted the meaninglessness of the universe. They are proud to have accepted the cosmic view of existential despair.

Yet to alienation and existential despair, there are several personal and operational answers. They come out of what I call "the four participations" in the universe, which none of us can help taking part in, from the four directions of creative evolution, of love, of ecology, and of awareness:

— Participation in life, in creativity, and in evolutionary development. Life is to live.

— Participation in human love and relationships, and in language and the great intellectual network of human meaning.

— Participation in the global network of the biosphere, in the seamless web of nature.

— Participation in awareness, in being one with this totality around us that we continually manipulate and share in.

We are participants in an ongoing transactional relationship, with feedback and response, in every aspect of the world. How can we despair of this universe that sustains us and responds to us, any more than of breathing?

The only meaning or purpose in the world is the meaning we ourselves create, moment by moment, by our own choices and acts. But this is a message of creation and life, not of despair. The mistake is in taking it negatively, as though we created and participated in nothing.
This is what leads to that existential despair which is the ultimate and most dangerous error of rational objectivism — the treatment of the self as though it were just an onlooker having no part in the world.

A culture that does not support and reinforce all these participatory satisfactions for its children, to give them a long-run congruence with life and with each other and with "the way things are", will not survive. The result is that these four participations are the hard rock on which all other satisfactions are founded, as well as survival itself. The additional beliefs and flourishes that different men or different religions may add on top are unimportant by comparison.

Are not these the directions in which we must search in building a philosophy and a religion that can again link men together for the future?
THE REVIVAL OF RELIGION IN YOGA EXPERIENCE AS A TECHNOLOGY OF THE FUTURE FOR THE INTEGRAL DEVELOPMENT OF MAN IN URBAN-INDUSTRIAL SOCIETY.

By Gopal Puri
Human ecologist; biologist

INTRODUCTION

As a Biologist - Human Ecologist I regard man as one of the 14 natural resources in common with animals, plants, minerals, rock, water and air and sun. These are factors of the environment. In fact, man is composed of 5 units of the environment. Earth, water, air, sun, ether.

This discovery became the first human religion and answered "who am I?" and "what I am?" The harmony and balance between these five inside and outside of man had always been the concern of Religion, which, as more knowledge of their nature was acquired, became the visible scientific concern. All that can be objectively weighed and measured began to be accepted as science. The remaining was left as Religion - which was, often, regarded as myth, symbol, mysterious, etc.

I, as a biologist, however, see no contradiction in the belief that Religion in its original sense is a technology - a super technology - basically persuasive, somewhat authoritative, at others submissive and/or aggressive. Renunciation, Yoga, chanting, Juju, ritual, etc. are all the high sophisticated tools of Religious technology in creating a balanced harmonious state within man, in human society and human environment.

Just as in medicine and law one can heal and reform a person only if he wills it - similarly faith in Religion is the supreme must in the success of Religious technology.

Early technology used the power of wind, water and sun most economically. Modern technology has done much the same, but relying entirely on fossil sun, wind, water in the form of fuel and minerals.

It has far developed the body extensions of man - in microscope, telescope, justs, etc., etc.

But this has failed in developing the inner realm of man by the use of external drugs. LSD, POT, etc. etc.
Religious technology is the only means by which the inner strength of man has been developed and Yoga has been and is the best possible tool, known both in science and religion today.

Yoga is the basis of all religious experience, Buddhism, Hinduism, Islam, Christianity, etc. It is an all inclusive technology for the integral development of man - body, mind and soul. It is used in peace and war to inspire to victory over the self and over others.

It has been adopted on TV, in classroom, in the street. As a body building exercise, philosophy, religion, or in reaching the highest state of perfection, and so on. It appeals to all - any age, and both sexes.

Mr. Chairman, Ladies and Gentlemen, let me recommend to you the Religious technology in Yoga as a new technology for the 'Future Research and Development of man as individual and as society. If you prefer this modern name, yoga is the ecology of man for his integral development.

The note appended here is circulated to all members of the conference for their consideration, criticism and suggestions, I would be happy to enter into discussion/correspondence with interested persons now or in the future.
Ancient name for human ecology

Yoga in essence is an ancient name for the modern science of human ecology, that was perfected by ancient Indians long before the word ecology, in its present meaning, was even coined in Western science. Ecology was first developed in the last century as a nature study of plants; and then plants and animals were both considered later as a part of the biome. In character it remained floristic, geographical or descriptive part of Botany or Zoology for a long time. Energy relation-study is very recent. The various definitions of ecology coined in the last century seems to show that the extension of ecology to the study of man is of recent origin. Man has always been thought as an intruder, a destroyer or plunderer of the natural system. Sociology, psychology, human behaviour, etc. have been more commonly used in the case of man and society, than ecology. But looking deep into the philosophy of yoga one is tempted to suggest that even sociology and psychology and such other social and psychic sciences had their roots in yoga, the ancient Hindu science of the phenomenon of man, God and nature. Absolute is Real, Universe is Unreal — the yogic sermon is intelligible in human ecology.

Yoga, as human ecology, treats the total man in ecological relationship with the total environment. It does not pick man out and away from other forms of life, but human life's inter-dependency on the nature and natural phenomenon is inherent in yoga. Man is body, mind and soul; and man, God and nature constitute a single entity, both in the Universe as well as in the mind of man. Yoga makes use of all the usual methodology of ecology, namely observation, analysis, synthesis and experimentation in the study of the phenomenon of man. In this study, even thoughts of man, as energy manifestations are dissected, vivisected and implanted. This technique is both subjective and objective and the experimenter, the experiment and the content of the experiment are one and the same person in a continuum. The yogic experiments are experiential and even when the subject and the object differ, methods and techniques used are subtle, rather than gross. Yoga is applied to both individual as well as to
groups or communities of people. As human ecology it encompasses the whole
range of phenomenon and noumenon and in certain stages philosophy, religion
and science, as distinct disciplines of knowledge, lose their entity and get
merged, as a single ocean of knowledge of the whole, within and outside the
whole. Yoga is thus truly holistic, and human ecology must assimilate this
philosophy, rather than diverge from it in insisting upon experimentation alone.
Experience is certainly an experiment and it encompasses the total man - with
blood, bones, emotions, measurable and immeasurable reactions inside and in the
outer environment. Yogis do not distinguish between the outer and the inner
environments in man.

The ecology of living

Whereas Biology is the science of life, yoga is the science of the way of
living. As the ancient Indian system of science and technology, yoga concerns
with man living within its resources that constitute human life. It is not
standing on one's head, gymnastics, keep-fit or body-twisting into different
shapes. It is the way of full living - not merely vegetating - but flowering
and fruiting in the physical, mental and spiritual senses, combined together,
into one whole, but balanced state. This way of living does not permit the
development of any stresses - physical, physiological or environmental (external
or internal) in man, that may suppress the normal functioning of his body, mind
and soul. But only when a person neglects to follow the yogic way of living
then the stresses from within and without develop into a depression, with the
resultant ailments as insomnia, migraine, tiredness, lethargy, weakness, loss
of energy, etc. If neglected, this depression may deepen into a phobia,
resulting in the person experiencing temporary or permanent bouts of fear of
people, of crowded places, of road crossings, of alighting on stairs, etc.
This makes one house-tied, room-tied or even bed-tied. Further neglect of
these states of disorder makes serious irreparable or sometimes irreversible
impressions on the mind of man. Various names, such as psychosis, schizophrenia, neurosis, etc. are given by psychiatrists to these mental disorders and it is within the range of the science of yoga to keep a person free from these in normal living.

Sick Society

Nearly 60% of hospital population in some of the industrial countries is suffering from such like stress-disorders. Mind of man gets disturbed and complete nervous breakdown or madness is not the uncommon end of stresses that start in a simple way.

In another case, stresses may induce a person to smoke or hard drinks or take drugs. These do give relief in early stages, but addiction makes the body crave for more and more medication. Excessive smoking and unrestricted alcohol often result in bronchitis, bronch-asthma, alcoholism, cancer and the like. These diseases are merely symptoms and not causes of maladies in the yogic sense. People under extreme conditions of stress may be tempted to find relief in crime, sex indulgence, rape, murder or suicide. Such violent responses in thought, speech or action may sometimes relieve the tension for a while. The number of persons with such mental disorders and their percentages in the population vary directly with the density of human settlement, diminishing facilities of recreation, unhappy state of family relationship and unsatisfactory job fulfilment. Social, economic, communal and/or personal factors could act as trigger factors and make the seeds of tension in a person flower overnight.

Mental Health Association estimate that every two minutes one another person in this country needs help from mental health services, and goes further to warn the reader that this another person could be you. We are living in a sick and phobic society, where medication alone cannot set the tone to perfect mental health. Nearly 1/4th of all the prescriptions given by G.P's under the National Health Services are for opiates. Leaving the old, sick and very young
population out, it follows that every other person in this country is a victim of one or the other form of stress and tension. For some unexplainable reasons, North-West-Mersey area is one of the worst in this connection.

**Medication Versus Meditation**

Members of the medical profession and others warn repeatedly of the dangers of pill-box living. The opiates, when taken in over-doses, bring about permanent damage to mind and memory, and in some cases death from poisoning. The incidence of legal and illegal drugs taken is on the increase in industrial countries for stress-relief purpose, with not too happy results. People are now looking more towards meditation and similar natural techniques for rest, recreation and stress-free living. The revival of yogic living in what looks like new sects and missions are emerging in our society today. These range from Hippyism, Diving Light, Hare Krishna to Pop Festivals. These are all one or the other forms of meditation. The mysticism and sometimes commercialism in the form of Gurudom or Rishi-ism attached to the science of meditation, unfortunately, makes people suspicious of this simple, yet effective, therapy for mental health development.

**Meditation is not a religion or mysticism**

Many people think that meditation bears the label of one or the other religion. Although, all world religions are eastern in origin, Christianity and Judaism have had a traditionally Western approach to life. In the society engineered by the mechanistic development of Western science and technology, these religions are now losing hold on the mind of the young people; and other Eastern religions like Buddhism, Sufi-ism, and particularly Vedanta, contained in Gita, are becoming somewhat more popular in Western urban societies. The essence of all these is yoga. Yogic meditation learnt through the stages of Dhyana, Dharana and Samadhi energises the body-mind-soul system and so long as
one meditates regularly one is able to bear the strains and stresses of living in the fast-moving society. But meditation can not be learnt from books or television; for this is a master-based science. A teacher or a Guru is absolutely a must. The cult of Gurudom is new to the West and it does not appeal to the scientific mind. It is, therefore, necessary that if yoga is to be applied in stress analysis and release, it must be purged of all mystic jargon or commercialism and keep the mind free from all dogmas.

Yoga - Eco - Psychica - a new concept:

An effort is made to present yoga as a simple therapy for the first time in this book, so that it appeals to the scientifically trained mind. In order to energise oneself through the techniques of Pranayama, Pratihara, and meditation, one need not have any religious or even ethical belief. Thus these appeal to a wide range of people with or without a philosophy of life. One proceeds from measurable, visible exercises to techniques embracing subjective experiential, invisible and subtle reactions that follow one another in strict ecological principles of succession and the climax. Each exercise as a cause produces in the body-mind-soul complex an effect, which in turn becomes the beginning of yet another cause and a series of progressive changes that set in, go on energising and filling the mind of the person on the one end with purity and emptying it on the other of impurities. The pattern can be called a positive Love-fulfilment, giving in the process the person the courage to forgive and energy to give. The give-take sequence in yogic love is the cycling and re-cycling of energy resource produced within. In addition to yogic exercises mentioned above, herbal therapy, manipulation, diet changes, fasting, etc. are used in combination at different stages of the treatment. The object is the treatment of the total man to whatever thing he responds. As in ecological development, change is taken note of all the time to avoid any retrogressional symptoms.
(i) **Energy is internal**

The energy produced in yogic exercises is of internal origin. It does not need any more food from outside. In fact, nothing is produced, only the latent form of energy in the system becomes available and in passing through various psychic points, called in yogic terminology, Cakras (centres), activates the whole system. These centres are the seats of biological processes, such as the sex organs, kidneys, heart, lung, larynx and the brain. In addition to the respiratory, vascular and nervous systems, yoga recognises the existence of the fourth, namely the conscious system, in which psychic or cosmic energy flow through three channels - Ida, Pingla and Sushumana - from the base of the spinal cord to the brain of the person is experienced. The activation of this latent energy can take place only if the physical part of the system is reasonably freed from respiratory and vascular disorders - or in other words, the yogic energy first goes to remove physical stress symptoms and relieves disorders before it can activate the conscious in the person. Then mental and spiritual disorders disappear at a later stage to make the whole person stress-free, healthy, happy and holy, within and without. This person develops most powerful perception powers that may look magical.

(ii) **Vision of the Energy or Yogic experience**

The yogic energy so produced in the body manifests itself as electromagnetic waves, light or sound waves, or all of these in various combinations. These manifestations to the person are entirely at experiential level. This experience confers a feeling of complete relaxation - the experience of Nirvana, a blissful living to the person. This is the realisation of the self, in the self, through the self. In religious language this is called the Vision of God, or the union of
of the individual self with the Universal Self - the merging of the microcosm in the Macrocosm. Different religions have expressed this experience in different ways, but scientifically this is the release of all tension from the system and relaxing it to the optimum level.

(iii) The cure of mental disorders

Most of the stress disorders that normally do not respond to medication or pill-box therapy are cured by meditation-therapy developed as Yoga - Eco - Psychica. Even a number of psycho-somatic disorders, like hay fever, asthma, migraine, bronchitis, sinusitis, etc. are cured by these techniques. This of course is the ideal cure for nervous breakdown, and perhaps also for certain cases of insanity that are nervous in origin. Some religions would go as far as to say that meditation, especially in which one gets the sound - Naam (word) manifestation, is the cure of all ills. Illness, in some religious beliefs, is considered as sin; in others it is ignorance - avidya or illusion. The role of Guru in removing the ignorance or in granting of forgiveness to the repenting soul is of the paramount importance in this relationship. There is nothing non-ecological about it, although, one may not be able to explain it fully at present.

(iv) Ways of living

There are four yogic paths or ways of living in accordance with the yogic science, and one can follow any one or more of these for a stress-free living. The simplest and more common one is called the path of selfless service, Karma Yoga. It is ordained that one must do one's duty in a dedicated manner, offering the actions to God. One has to renounce the idea of a reward for one's labours. The fact that one is chosen to perform the certain acts is in itself a reward of the action. Thus the duty follows the reward again on the ecological principles of
cause and effect and succession. The climax is the inaction in action and action in inaction. One's living and duty become one - this is Dharama.

The second path is the path of love, devotion - the Bhakti yoga. Love is to give and to forgive, unselfishly. Those who love with devotion are loved as beloved. This way of living is not restricted to man, animals or plants, but to all the various phenomenon of the Universe. To love in amazement and as expression of gratitude make the person always youthful in experience. Again, the aim is the merging of the personality of the lover and the beloved in one indivisible whole.

The third path is of knowledge - the Jnan yoga - the knowledge of man, nature and God. The living thus is the life of wisdom.

The fourth path is the path in which one uses all the knowledge in human fulfilment - the Raja yoga. In this, one lives in accordance with the laws of the functioning of cosmic energy at Universe level and of psychic energy at human level. All the four paths are like ecological spheres, like the Litho, Hydro-, Atmo- and Biospheres. Just as they merge in the Universe, so in the mind of Man - the Noosphere - the four yogic paths of living merge into one.

Yoga-Eco-Psychica is the study of the whole.
Summary

Yoga is the awakening and strengthening of MIND - the totality of functions in THOUGHT, SPEECH and ACTION. It is the discovery of the SELF in the SELF through the SELF. An experience of the transcendent state of being one of Body, Mind and Soul. A feeling of blissful existence.

As a way of life, it teaches how to breath, eat, sleep, wake-up, love and to recreate so as to transcend the duality of pain and pleasure and to remain unperturbed. It calms the nerves, cures and prevents stresses and tensions in urban society.

Our society is described as sick and phobic, where pollution of the body, mind and soul have disturbed mental equilibrium. 60% of beds in hospitals are occupied by those suffering from obsession, Depression, Schizophrenia, Psychosis, Neurosis, Migraine or other mental disorders. There are 5 million agoraphobics in our society. In the last decade there has been an increase of 150% in men and 340% in women, of mental distresses.

It is predicted that 1 in 6 women and 1 in 9 men will need care in mental hospitals at one time or other in their lives. Mental illness has a social stigma attached to it. The day to day life's stresses and tensions affect by distorting the judgement and disturbing the equilibrium of the mind - sapping away energy, leaving people with a split personality.

Yoga-Eco-Psychica techniques developed by us are both curative and preventive. A natural control of breathing and senses helps people to regain and maintain a relaxed Healthy, Happy and Holy life. Yoga is not standing on one's head nor gymnastics. It is neither hypnosis nor magic. It is a scientific technique of stress analysis, stress eradication and life fulfilment. Within a few weeks with us, people experience more energy, are more relaxed and calm; give up smoking; throw away tranquillisers, sedatives and drugs. The Yoga-Eco-Psychica techniques have produced very encouraging results in improvement of mental health disorders. We have pleasure in presenting here a few random brief comments:-
"Feeling of lightness and great calm after breathing. Ability to see light with closed eyes...." A.H.

"Generally healthier and more relaxed". M.B.

"Greater feeling of relaxation......and calm......" A.M.

"......breathing exercises relieve a lot of tension......" M.L.

"......relaxing......breathing helps tremendously......" G.L.

"......I am a more relaxed person - perhaps even more pleasant to myself". M.A.

"After five weeks I find myself with more energy to cope with my work......feel more calm......" B.M.

"A wonderful feeling of being able to cope with whatever might turn up in a day". J.R.

"Reduced smoking, eyesight improving, weight down to desired level". M.K.

"......Became calm in myself, sleep more restful and feel completely refreshed". F.G.

"Desire to smoke has gone altogether, also not taken any tablets, am much more calm". A.G.

Asthma......"I don't have to take tablets or sprays now, sleeping better...." R.I.

Asthma......"Feel more relaxed, sleeping very well, no waking in the middle of the night, my appetite is much better......signs of strains have gone......I have no qualms in recommending anyone to this form of treatment". D.F.

"Everything is much improved, sleeping better and feeling refreshed. I am able to control all the nervous tensions that I suffered with before". A.C.

"More energy, less tense and definitely happier". J.B.

"After three weeks I have become extremely calm......can cope with life feeling more energetic". M.M.

"More relaxed - less tired". J.H.

"More energy and more relaxed". J.K.

"Feel stronger, fitter, more energetic......feel calmer, more tranquil". T.L.

"I am now very calm and can sleep well and relaxed. Full of energy during the day and life is wonderful". J.W.

"......sleep has improved and anxiety has lessened". E.L.

"......Breathing exercises relieve tension. General feeling is more relaxed and feeling healthy". J.B.
"Yoga has certainly been a wonderful way to reach peace of mind and extra sensory experiences". C.F.

"At peace, carefree, more efficient at work and play. Improved character, improved will power". S.M.

"I find my senses are more acute......more healthy in body as well as mind". C.M.

"After exercises I have a most wonderful taste in my mouth". F.G.

"......clears headache and improved headcold". W.D.

"Gave up smoking......completely lost the desire to smoke at all". M.D.

"......more relaxing sleep, after a few weeks hearing seems better". J.F.

"It is a de-ageing process - younger every day". E.W.

"I now experience the 'light' sensation with the breathing exercises". C.A.

"I have experienced 'light', control of body and mind......and have become aware of the aura around people and things". H.H.

"Seeing the 'light' - a novel and wonderful experience". G.S.

"I feel a calm pure stillness before my eyes - a 'light' of changing form and intensity hold me in thrall. It is like an experience I had as a child of seeing a jewelled room......" E.L.

"At the end of breathing exercises find singing in ears with body warmth and peaceful vibrating feelings. More serene in tension filled job". M.S.

"......have stopped the tablets (anti-depressant) completely". C.C.

"......eating a lot less - more energy and more relaxed......" I.K.

"I can now see the purpose of my life more clearly - the path towards self realisation and perfection......" J.K.

"The breathing exercises taught to me by Dr.Puri have set me on the path of light to self realisation". F.W.
THE NEED TO FIND LEVELS OF MUTUAL UNDERSTANDING
BETWEEN RELIGIONS AND THE NECESSITY FOR A HARMONIZING
MEDIATION BETWEEN SCIENCE AND RELIGION.

By Ibrahim Re-Beth
Social scientist

The theme of this working group touches the present crisis situation, which various institutionalized religions of the world are experiencing in differing degrees. Increasing numbers of people are turning away from those religions and taking to "mind-expanding" drugs instead and in their daily lives more and more disregard the values those religions are supposed to teach. Is this just a crisis of institutionalized religions loosing their appeal or grip on man in this present age? Or is it a symptom of a still more complex cause in a larger societal context?

The immediate cause of the crisis, seen from the institutional angle, seems to lie in adjustment difficulties to meet the challenges of social and technological developments. Analysis of the larger context itself however, of the many causes underlying the complexities of modern society, shows that the process of industrialization and the ever increasing acceleration of automation and specialization produces this and many other symptoms. They appear in differing degrees of societal and mental anomaly in many countries of the world. The interrelationship encompassing more or less all of these problems and the growing interdependence of the nations and cultures of the world lead to the present pathological situation; e.g. ecological balance versus mass over-consumption, the need to provide food for billions of hungry people versus inadequate methods of production and possible harmful effects of massive fertilizer use.

As a logical consequence of this world situation, which is sketched here in a very few lines only, it is legitimate to raise the question of solution possibilities or of an alternative way of development for mankind. This does not necessarily mean the formulation of a new ideology as so much more a new approach and a new attitude towards finding an answer to the present needs of man.

What comes to mind is whether it is now feasible to conceptualize a General Field Theory of Social Development. This pertains to investigation and research into the basic laws underlying societal and human evolution. Whether such an undertaking warrants success depends on the systematic construction of the elements of such a theoretical frame.
There are many useful aspects in this method of approach, since it potentially is capable of integrating more "goal centered ideologies" (idealistic) and more "way centered ideologies" (material oriented). These two kinds of ideologies, if understood as complementary to each other, do contain an inherent integrative capacity with respect to human relations. The flaws of such an approach is also apparent enough, since it can be an assistant to rigidity of thought, i.e. an obsession to defend a cherished avenue of thought at all cost in spite of falsifying facts for example.

It is not the purpose of this paper to deal in detail with the theoretical and methodological facets of such a Field Theory. On the other hand it is difficult to envisage the development of such a theory without making an assessment of the functioning or disfunctioning of presently known ideologies of both types. A developing General Field Theory of Social Development (GFTSD) however, must be characterized by possessing enough absorptive elements, since it in no way interferes or discriminates against existing beliefs and ideologies.

Only the "goal centered ideologies", i.e. religions here, will be the focal point of this paper. In talking about societal and human evolution the question of the purpose of human evolution automatically becomes the central point of attention. Inevitably, this leads to the necessity of a holistic approach towards that question. Otherwise that poses an immediate obstacle, e.g. when just trying to postulate "social stability" as a basic law of GFTSD. What is social stability? Is it maintained by a sufficient contingency of a police force? Or is it perhaps the liberation of man from all material want, so as to enable him to attain higher and ever higher planes of creative expression on an individual as well as on a societal scale? What will then follow? How should such a system of a stable world society be realized? Such types of difficulties make it essential that a fusion of the two types or dimensions of ideologies can only be effected by continually being preceded by a gradual closing of the discrepancy gap between the substantial "intrinsic values" (Bahm) of religion and the facts of science. Here experiential philosophy can play a harmonizing mediaton. But even before this step is taken, it can be argued, whether the different religions should begin a dialogue with each other about what they have in common and where they disagree in their various value systems. Again the purpose here should not be to downgrade any religion or belief, but the reduction of interreligious barriers should provide a basis of finding "resonating levels" of intrinsic values and thereby enhance interracial and intercultural respect and understanding, which could give rise to a new ethic of cooperation and solidarity.

How can this be accomplished? Is the crisis situation in which the institutionalized religions find themselves so serious as to be compelling enough to motivate them to embark on the path of finding levels of mutual understanding? Will that appear promising to their disillusioned expectations? Is it at all necessary to rely on them alone to start an investigation into these realms?

Defining ...
Defining levels of mutual understanding or "resonating levels" of intrinsic values of the different religions can only be successful when as a precondition also there is an insight (in contrast to defensive reaction resulting from an adverse situation) in the necessity to correlate the various religious teachings. Perhaps such an attitude is one of experiential drive as a citizen of this spaceship earth to penetrate deeper into the mysteries of the cosmos and thereby gain in knowledge. Through reflection between these two, outer and self motivation, perhaps action may follow.

For a better comprehension in correlating these "levels of resonance" a division (to be used as a research tool) in evolutionary and revelatory categories of religion may be helpful. Concern is centered not on the institutional structure but on the substantial contents of religion. The evolutionary aspect pertains to the animistic, superstitious facets of early religious development, whereas the revelatory aspect, as understood by the respective believer, is a direct complementary to these beginnings. The revelatory part enhances the religion enormously in spiritual expression, e.g. in overcoming the worship of an angry God and replacing it with an image of a God of love and an appeal to the brotherhood of men, as well as ethical richness. One may theorize why such strange revelations happen in history. Is it because an upstepping of spiritual and social knowledge was called for, which could not be achieved by evolutionary religion because it lacked something? Or was it just a developmental jump as a result of man's new acquired knowledge on the evolutionary ladder causing such an aggregate mind potential to take a leap? Or was revelatory religion the very vital link itself between two stages of human development?

The main concentration of the search for levels of resonance should be directed at both categories, but especially at the revelatory aspects of religions.

The holistic approach to the question of the purpose of human evolution can only be effected through a cooperation between religion and science. This balanced approach of "inner space" and "outer space", between spiritual and material, in the investigation of religious teachings and its subsequent translation into the thought-stream of science will certainly also exert a modifying effect on religion as a feedback impulse. In a sense this method can become a mechanism of balanced or gradual adjustment in religious teachings to the progress of human society as well as to reduce social pathological situations, since the scientific curiosity and social/psychological needs of its supporting society can be satisfied more appropriately and is always relative to the achievement capabilities of the sciences of that particular age besides being conditioned by societal needs.

Of course ...
Of course scientific assessment of various levels of religious value systems require the inclusion of all scientific disciplines, which means that the frontiers of scientific research, in any branch of science, must also take part in the process of socializing religious meanings.

As examples for research projects can be mentioned: Biological and physical research of meditation (brain research), bioplastic (plasma understood as the fourth state of matter) research of such ancient teachings as "prana", research into a possible biological basis of religious experience.

Proposals for a continuing coordination of work after the conference in Rome are always subject to the outcome of the group work and also what the conference as a whole will achieve.

The necessarily fragmentary discussion in this paper nevertheless touches a few points where further studies can take off. One thing seems clear though and that is the necessity for a new way of seeing and assessing realities.
People sharing a fundamental concern for the safe-guarding and upgrading of the standard of living of those who will inherit the earth and life in the world to come, must scrutinize anew every facet of life today in order to avoid perpetuating that which has become outdated, together with those past assumptions which remain invalid guidelines for the future. Nothing pertaining to human life thereafter should be considered either as sacrosanct or as unworthy by recognition.

**Theme**

The emphasis of this group is on the integral development of the person as an individual and as a member of society, and those integrative factors which may support such development — particular reference being made to religion.

*Human development* implies a potential to be realized in the course of time, and *integral* the co-ordination and harmony of function in a complex organism.

Mental health normally involves the development of the sense of identity; of the affections, conscience; the function of intellect; capacity for memory, reflection and anticipation; sense of personal responsibility; and the co-ordination of all these facets, and more, in the capacity for decision, will and application. Integral development may not be so immediately apparent as are the behavioral traits displayed as a consequence of uncoordination, disorientation, and disintegration.

At the social level integral development involves the ordering of production, exchange, interchange, security, etc., between the individuals comprising a society and between their group and other groups. The public policies developed for these purposes become incorporated in the
customs and laws governing a society and are inherited and amended as a result of the needs and experience of its members through the course of time.

Frustration and friction are inevitable in the clash of individual and collective needs and interests - any undue suppression of the needs of the person resulting, maybe, in orderly uniformity, while an undue neglect of the needs of society leads to disorderly anarchy.

The resulting conflicts may be overt or covert, directly or indirectly expressed, and the interchangeability in the manifestation of conflict as between the mental, physical, micro-social and macro-social fields of action must become more readily recognised. Success in blocking the expression of conflict in one area promotes its expression in another, if the underlying source of conflict is not alleviated. The present trend is toward driving conflict undercover and out of sight where it becomes less easy to locate and less accessible to remedial action.

In all constructive development the trend is from the uniform to the multiform, from unity to community, from union to communion. This necessarily involves an intermediate stage wherein separation and differentiation occur in due time, and where disintegration competes with re-integration.

As experienced by the individual, the disintegrative aspects associated with necessary developmental growth in the course of establishing an identity apart from the undifferentiated mass are countered by unity preservers, such as association with others in some readily identifiable group, and refuge from isolation by means of various forms of containment.

Furthermore it is suggested that evolutionary development takes place from within outwards, transforming left, right and centre at the periphery. This distinguishes it from all forms of revolutionary or merely fashionable change which involve a substitution of this for that, or vice-versa.

Thus, the underlying necessity in development, is the acceptance of an increasing degree of tension in relationship. Failure here results either in hysterical impotence or schizoid omnipotence; the failure to develop any separate self-reliant existence (tied to the apron-strings of the 'welfare state') or failure to transcend isolationist self-centredness (everyman for himself alone).
So what may be the relevance of Religion in our concern for life in the world to come? This aspect of life continues to evoke the love and loyalty of vast numbers of people through their membership of the many forms of religion extant today, despite the undermining effect of scientific investigation into the mysteries of the universe and of human nature, may be seen as concerned with the interpretation of the very reality of existence itself.

The search for reality, as a compass-bearing by the aid of which to invest ones values and steer a meaningful and purposeful course through life seems to be one of man's central and continuing needs. Extreme solutions would have us believe that this world is totally illusory and that only by detaching ourselves from it may we come to adhere to the only reality, which is not of this world. Conversely, there are those who would have us believe that this world is itself the only reality and that any other vision is illusory, serving only as an escape from the miseries and injustices of life on earth here and now. To them religion is an opium, and revolution a religion, while for others opium promises instant access to the ultimate reality. Between these extremes there are those who would have us pay our dues to God (their God, of course) and to Caesar (or his taxation department) thereby hoping to keep the right side of all the powers that be while isolating them in two separate cells in their minds. Thus they may attend divine service in a church and pay their taxes to the revenue, but see this as marking the limit of their responsibility to their neighbour and to their own development as human beings.

Reference to the concise version of the Oxford English dictionary, however, gives the following definition of the word RELIGION (abbreviated by the author).

Monastic condition; practice of sacred rites; one of the prevalent systems of faith and worship; human recognition of superhuman controlling power, especially of a personal God entitled to obedience; effect of such recognition on conduct and mental attitude; action that one is bound to do.
(from Latin religio, perhaps connected with re (ligare - bind).
a/. As to the practice of sacred rites these days, there seems to be a proliferation of activities which are in effect 'sacred' to the extent that they are invested with basic values, expectations, and defensive taboos by their practitioners, aspects which were previously more safely and recognisably housed in expressly religious rituals. These are to be found in the realms of national narcissistic idolatries, revolutionary cults of personality, drug-oriented medical practices, socio-political demonism, scientific numbo-jumbo and claims of infallibility, outer-space hi-jinks, futuristic imaginings and arcadian nostalgia, to mention but a few.

b/. The person today may not readily recognise the presence of a super-human controlling power to be worshipped as Creator, but he certainly recognises (and in his own image) the existence of inhuman controlling powers which he knows not how to placate. His resultant paranoid mental attitude finds expression in strikes, demonstrations, civil disobedience and all manner of violent outbursts, or, bound and gagged in impotent inactivity, his life withers away before the force of inertia.

c/. The end result of the 'monastic condition' was the development of the capacity of the person concerned to live alone. (as indicated by the greek word - monazo). This condition is personified in the popular image of the hermit, which depicts him as a person principally engaged in prayer and fasting in isolation from the ordinary everyday activities of life.

Contrary to popular belief, however, the hermit (as distinct from the psychotic drop-out) only lived in apparent isolation the better to concentrate, released from the distractions of 'peripheral' life - his activity and influence being of another order.

d/. As to "action that one is bound to do", this is most commonly experienced today by all those who have to commit their attention and energies to an activity in exchange for which they may derive sufficient means of exchange (the pay-pocket) to support their life and that of their dependents.

e/. The derivation from the Latin 're-ligare - to bind together again - very clearly indicates the integrative effect believed to result from the discipline of religion, however, - the re-integration of all component aspects of the person, following their differentiation and development into the whole or 'holy' man.
But what relevance has this for life in the future — wherein, as is becoming increasingly apparent, conflicting individual and group interests increasingly tend to result in the suppression of the person; where survival itself depends on an increasing degree of cooperation and sharing of resources; where world-community comes to be seen as a vital necessity in fact, not just as a well-meaning and good-neighbourly ideal?

While having no wish to promote any resurgence of magical thinking, it is surely vital for our continuing survival, and basic to any quality of life interpretation of 'standard of living', to counteract the pernicious blinkered vision of our off-centre times which only recognises the material, measurable, demonstrable and repeatable aspects of existence as having any substance in fact; only values 'worth' in terms of production and possession; and only recognises one dimension of time, as measured by clock and calendar.

I x YOU being the basic equation of subjective personal existence, and I x IT, of objective impersonal existence, whichever the perspective each of the three component aspects of the equation is subject to change, but new life (rebirth) enters into being through x — the relationship between the two, in the midst.

The heart of Christian faith is founded on recognition of this central 'fact of life' — the final recognition by the Christ, as the human exemplar par excellence, of the centre of all possible opposites as the crucial existential reality, upon the self-giving acceptance of which by everyman all human futures ultimately depend. But such personal involvement (the role and function of the mediator, as distinct from that of the mediocrat or meritocrat) requires the renunciation of power as violence and the acceptance of the tension, uncertainty and ambiguity of relationship.

If the participants at this conference are to "strive towards an active search for a new consciousness and logic", as it is suggested they should in Memorandum 4, then I believe we will have to approach this by recognising the necessity of surpassing both religion as an opium of people gathered together in their denominational sanctuaries, and revolution as the opium of the masses gathered in their petrified solidarity, and strive for evolution in consciousness founded upon the standpoint and viewpoint of the
inte-grated
inter-active
inter-related
inter-dependent
inter-changeable
inter-mediate
inter-val between

- the only sure rock at the centre of change, and the only release from the closed cycles of invalid reaction to invalid action in which we exhaust our energies today. But the implications of so doing are extremely onerous. No longer may we hide behind the habit of external authority; no longer may we avoid the issue by leaving it to another, supposedly better qualified than ourselves. The trail and trials of the Hero must be ours. Our mission commits us to the depths. Who knows whether we shall ever rise again?

Societal development depends basically on the stage of individual development attained and this, in turn, on personal experience -- for which there can be no substitute finally, though the experience of others as preserved and embodied in cultural forms, ceremonies and rituals provides a valid and necessary interim supportive system and source of confirmation, to be outgrown eventually. No standing on the side-lines of the field of life or experience-by-proxy (as mediated by television today, in particular) can of itself nourish the personal development which is the sine qua non of any viable world community -- surely the ultimate goal in societal development. Nor is it only a question of 'women's lib', but rather that of the liberation of the person as a whole.

Such development will necessitate our incorporating our own shadows -- the final confrontation and assimilation of those aspects of our own personalities which we have managed to avoid in the past by projecting them onto some 'other' over there who is not 'one of us', and who we subsequently revile for all our sins and blame for our own failings -- the scapegoat.

The time has surely come to outgrow our inflated and shallow self-centredness and accept (if only as an ecological hypothesis) the implications of LIFE being one organic whole, and the only transmigrator. Physically
we are inextricably interwoven one with another; essentially we are one. Thus the burden not borne by one member will have to be suffered by another. Conversely, the greater the extent to which I indwell the situation I inherit, the greater will be the burden I voluntarily accept. (The Christos bears the sins of the world). Finally, there can be no individual salvation.

PROPOSALS

At a time when the sense of meaninglessness, hopelessness and worthlessness is intensifying into a state of negative emptiness which can no longer be assuaged by recourse to artificial sweeteners, stimulating shocks, distractive pursuits, or futuristic hopes, interest in religion is increasing while institutionalised churchianity is increasingly rejected as an empty husk.

For those who do not retreat into depression, bitter recrimination, violence and death, the search is on. For who or what?

Authenticity instead of authority? Acceptance instead of projection?
Compassion instead of sentiment? Communion instead of communications?
Conscience instead of science? Community instead of unity (for or against)? Concentration instead of adoration and supplication? Comprehension of rationalism and moralism? Us instead of them? I instead of me? Or perhaps just a longing for I know not what, save that which is missing here and now, in the absence of which the present lacks the joy of liberation?

A. The primary need is for human development. Any valid concentration of life itself into a system for promoting such development must provide support for the separation out from the original undifferentiated unity of different sensitivities, faculties, capabilities, aptitudes, and for their re-integration into an organic whole co-ordinate with mankind - the potential world citizen, as a fact of evolution rather than as a hypermanic flight of fancy.

Such development can only come into being as a consequence of direct personal experience. Any human developmental system (or integrative discipline) then, must needs be designed as an experiential setting
(environmentally, fundamentally and sacramentally - circumstantial, radical, essential) to promote personal discovery by evoking individual potential and by reflecting the initiate back to himself without avoidance or distortion, and without pre-empting the value of direct personal experience by describing it all beforehand (the growth of wisdom in place of accumulation of incremental knowledge).

The overall aim of such a process is to bring a person home to himself finally ("the truth will set you free" -- and others free from you, it should be added) the practical outcome of the exercise being to enable any person to make his maximum contribution to society in accordance with his stage of development (time of life).

Such an involvement would constitute a real challenge to the individual in contrast to the undemanding expectations of 'popular' religions today.

Present-day religious, academic and penal institutions and other asylums might well review their purpose and contribution to the collective well-being with a view to providing centres of concentration for human development -- not as alternative life-styles, but as alternate rhythms of life which people may participate periodically, the more effectively to re-engage with the problems manifest in their daily lives.

B. Consonant with this is the need to encourage the channelling of the insights and skills gained through personal development into the present situation to best effect.

Here the most important recognition is that of caring for human needs in terms of service, and the most obviously desirable development the transformation of egoic self-service and nationalistic military service into community service and conservation.

C. Taxation should be levied on greeds instead of needs -- i.e. on non-essential purchases rather than on 'income' (to encourage saving, and investment in public needs services). This should be combined with guaranteed life-wage for everyone born into this world, varying according to the time of life, need, and record of service to the community, together with a forum of representatives, from different occupations and age sections of the population, to agree wage differentials.
D. Investigation of socially acceptable means for the expenditure of surplus energy and the expression of frustration tensions. How to let off steam without destroying one's neighbour or the world.

E. Those having access to modern means of mass-communication gain the capacity to influence, sub-consciously, vast audiences. The injection of false images and values into the mind's eye is a far more insidious and life-destroying form of pollution than the environmental pollution presently recognised. Theirs then is a form of power, entailing the greatest responsibility, which must be allied to a constant re-evaluation of the validity and consequences of what is broadcast. Otherwise, television screens in particular, may so readily become distorting mirrors — falsifying and misinterpreting events by projecting an unduly limited, distorted, or merely peripheral focus, thereby perverting, if not actually unhinging, the human mind.

F. Re-association of religious rites with the relevant stages in human development, as a mark of public recognition of the societal value of personal experience.

G. Research into the psychology of health on the basis of which supportive and preventative measures may be introduced, as the necessary alternative to the present day emphasis on treatment following breakdown.

CONCLUSIONS.

1/. A truly human civilization engages man not to abdicate from his own responsibility in order to rely on technical means (Pope Paul VI -- with reference to the 1970 World Fair at Osaka, the theme of which was 'Progress and Harmony for Mankind').

2/. In any societal system where the person is not the ultimate beneficiary, he becomes an unreliable and inadequate means. If, additionally, he is displaced from contributing in to society he will become actively destructive, (homicidal or suicidal).
3/. Increase in 'leisure' time and consumption (whether of goods, news, views or data) cannot fill the 'void' and nourish the vital need of the person -- timely development.

4/. How a person spends his time and energy throughout the duration of his life constitutes the meaning, purpose, and point of living. There is a lack of comprehensive meaning and purpose today, but at the same time, it is suggested, the person is the most underdeveloped resource in the world system -- if not the most warped.

5/. Fulfilment of one's own nature leads to the knowledge of what is to come and the capacity to act now accordingly.

6/. The outcome of human development has been expressed before as -

- contribution without possession;
- action without self-assertion;
- development without domination;
- to cultivate our receptivity;
- to abjure all force and coercion.

(LAO TZU)

7/. The way of Christ is Life, Light and Love -- the equivalent 'eastern' realization being Sat, Cit, Ananda. So the consumation of human development in Christian terms is seen to be the development of the 'Christ-consciousness' potential in every man -- which liberates the person from past attachments, present hook-ups, and future wishful-thinking, in order to die into this world now, "that the kingdom of God may come on earth".

Essentially, "as it was in the beginning is now and ever shall be" - there's nothing old or new about this. However, a willingness to accept the certain uncertainty of LIFE, as the changeless constant amid constant change, would appear the necessary pre-condition for human fulfilment.
TECHNOLOGICAL ABSTRACTION AND RELIGIOUS LIMINALITY

By Dario Zadra
Professor Gregorian University, Rome
" University of Chicago

1.1 The technological system, inserted or not in the economic system, is a constructive part of a 'vital milieu'. As the technological system becomes more and more abstract from an institutional point of view, it becomes progressively more articulated within itself.

We define 'Technological Abstraction' as (1) a grade of autonomy of the structures and processes of the technological system according to a substantially uniform model, and (2) its capacity of generalization and (3) diffusion. 'System' here indicates the tendency toward generalization, autonomy and diffusion; it includes a simple mechanism as well as a modern urban artifact with its processes for producing and controlling energy and information.

The point of analysis: The modality of the fundamental vital milieu (with the eventual connections to social structures) and the modality of a religious liminality and/or Communitas are crucial points of a viable system, directly correlated among each other as well themselves in a positive or negative sense.

1.2. Line of development (even taking into account that the actual situation of the technological system and of the cultural system is of a relative polivalence): With the development of the abstraction of the technological system, there also occurs the differentiation of this system in relation to the individual system and to social structure. Correlatively, the individual system tends toward the maximum of variability in its relation to the basic vital milieu and to the same measure there develops a state of individual and collective 'liminality'. Liminality here indicates a state
of absence of structures, of concrete structures of the vital milieu, capable of connecting and defining the structural identity of the subject, individual and collective, with their unitary identity and intentionality. Liminality could be the intermediate state of a ritual process of change, between two states, deconstruction and restructuration (V. Turner, *The Ritual Process, Structure and Antistructure*. Chicago: Aldine, 1969, pag. 94 ss. Ital. Trans. 1972), or the consequence of a diffused state of deconstruction of a new kind. This second case refers to a human system unable to recover an adequately differentiated intentional dynamic principle, that is without a synthetic symbolic structure and without an adequate initiatory process. In their absence the intentional nucleous is unable to sustain a human universe at the individual and collective level and to mediate the process of constant change in the natural and human ecology. Such inability contributes in major ways to social disorder.

2. Possible trends of modification:

a. Reduce the process of abstraction and variability by stopping or reducing the 'movement' (of the system) which is growing with the process of abstraction and tending toward an entropic point of equilibrium of maximum variability. This tendency can attempt to return to the 'orthodox' socio-cultural matrix, even if it will be improbable that an intervention against the tendency toward abstraction will have any substantial effect.

From the religious point of view, this tendency can assume the aspect of a complete detachment, not only from the social system, but also from the technological system in its terms of high abstraction and movement. This detachment may be sought through the quest for a system of interiority progressively and radically separated from the outside systems and tending meanwhile toward a maximum of external interaction in terms of *communitas* (a relation outside any structural differentiation of autonomous persons in terms of I/You/We. See V. Turner, *ibid.* pag. I32 ss.).
We would have in this case a religion purely and constantly liminal, without any direct mediatory function within a collective system of action.

b. Modify the "quality of the movement" (the only possibility to vary the total situation) by "reformulating the problem", starting from a new definition of the individual and identity, giving it a capacity of a new type of synthesis qualitatively different from that specifically technological. This type of modification does not exclude the trend toward abstraction of the system and consequent development of variability at the individual level in relation with the system. (There remains apart, as an axiom, the principle of a development of a technological milieu that is human; that among other things can be progressively resolved by "new" individuals capable of changing the existing technological milieu).

3.1. A mediating and synthetic principle, which would be qualitatively modifying, can only be of a symbolic type and must operate on a symbolic level. It is only by its multivocal and dynamic nature that it operates at the root of the system of action and has the capacity to lay the foundation and rebuild the intentional °° and dynamic unity of the individual and of the comunitas. It sustains the creation of the structures of conscience of a system of political and religious interaction.

There are two structural situations, which in a different manner, constantly involve the individual in the cosmos of life, both having a passive and active trend. (1) One is the "individual intentional center", the ground to which the universe of life relates, (2) the other is the differentiated universe of social life with its symbolic-synthetic structures and institutional articulations.

The relations between the two structural situations (the grade of differentiation and autonomy of the individual system of structures

°° Intentionality: the structural quality of relation.
of conscience, the way of structural and dynamic synthesis; the modality of transmission, etc.) follow different principles (the structural elements in themselves principles of variation and not rigid modalities).

Both structural intentional situations have a passive and active trend, inside a unified intentional universe, each trend with specific structures and processes: a trend toward action and a trend toward recollection; a movement which is differentiating and one which is unifying; one is tendentially univocal and analytic, the other is multivocal and comprehensive. But both movements and developments are inside a syncronic frame; both systems of structures and both systems of processualities are inside and parts of a intentional world. At each point according to the specific structural position every other point has a specific adaptation in terms of symbolic complementarity or suspendes itself in favor of its opposite or reciprocal processual situation.

Work and liturgy, contemplation and philosophy, dream and reason, isolation and participation, structures and liminality, are parts of one life. They are dynamic situations from which and by which life lives, in different forms and articulates its meaning and its intentional relation with its origin and manifestations. Each form, each situation, each process, are specific differentiations of the time and space of the human cosmos.

Much of the reason why human consciousness constantly varies is connected to the articulation and differentiation of structural processuality of the human cosmos. But it is clear that life (man/mankind) requires a comprehensive knowledge of itself. It requires wisdom. Wisdom is to have the capacity to adhere innerly to the articulation and differentiation of life, without bringing one structure into the time-space of the other. It is the realization of the meaning of change and the dynamic structural consequences in other fields, moderating a form in favor of the other (Differentiation of formes).

Wisdom is to have the unity of growth and movement, seeing life around its base from its roots of internal symbolic recognition
and identity and fostering it with the positive attitudes of each one of the individuals participating in the same human cosmos. (Unity of form).

Wisdom is to define and follow the way by which "center" and "periphery" coagulate, that means the way of initiation and the way of expression. (Internalization/action).

Wisdom is movement toward a structure of "total consciousness", rational and symbolic (at the individual and at the collective level), active and passive.

The trend of actual technological rationalization makes more difficult a "total consciousness". Many of the actual individual and collective conflicts are connected with the "right of a total consciousness" at the institutional and individual level in the field of rational structures and symbolic structures. The men who became international symbolic leaders, symbolic models, like Ghandi or Pope John, Marx, etc., are the ones who have expressed and fostered the image and idea of such "total consciousness" even if they have evolved from different cultural points. But this is only a tendency. Although meaningful, a tendency is weak and highly variable. It lacks the specificity of the intentional forms; it is unable to generate in the human world a unified intentional nucleous, namely a 'template' of positive attitudes into the symbolic system in correlation with the system of action.

This is perhaps the major difficulty in a situation of change like ours, namely the absence of a vital nucleus and the search for the definition of a viable intentional nucleous by which life finds its harmony and rhythm.

The actual change touches the basic structural situation in the intentional make up of the individual and of collectivity; the present situation, as it was in the major historic period of change, brings the responsibility to redefine the structures of intentionality.

Without pretending the impossible by saying what such structural definition will or should be, I will look briefly, as a way of example, into a highly articulated map of consciousness,
designed at the high point of Renaissance from the universal mind of Leonardo da Vinci. It is the Adoration of the Magi, of the Uffizi Gallery, (1480 A.D.). I will not discuss if the map, if it is feasible to call it in this way, is complete or if it covers all the basic structures of Leonardo's "time, much less than our own time". The idea I have expressed of "total consciousness" is not explicit in Leonardo in the terms I have expressed it above, nor is complete, according to Leonardo's own artistic development, in the painting I am going to look at. It certainly does correspond to the structures of consciousness and responsibility built into the comprehensive work of Leonardo, from science to literature, painting and the others artistic works. What I will look at in the map of Leonardo are the types of intentional symbolic structures, their articulations, and the inner movement and initiatory process toward a intentional unity.

The biblical reference of the painting is the encounter of the Magi with the Madonna and the Divine Child. Nevertheless the composition of the painting, the symbolic figures represented, the inner relation between the different elements of the design, overcome the pure textual reference.

In the painting there are two parts clearly differentiated, a center and a peripheric ring. The center is symbolic: the Madonna, the Divine Child, the Magi and other symbolic figures. The center is calm and silent; it is innerly articulated where the symbolic interrelations of the different figures flow and originate at the unified and unifying heart of the painting.

The periphery is dominated by movement and action between architectural and natural forms; emotion and reason, seem to move differentiated in the field, pressing toward the border of the symbolic center.

Between center and periphery exists the Madonna and the Child; hands and bodies seeking toward a more and more calm center; faces depicting the spectrum of the mind's relations with life, from sentimentism to vision, from doubt to trust.

The sequence of intentional insights of the aged intense faces defines a line of constant initiatory tensions which binds the
center with the periphery. The intentional unity of the painting, although apparently mysterious in its distinction between periphery and center re-emerges clear at the point where the Child touches the gift of one of the Magi. Few signs, like the gesture of Michelangelo's God creating Adam of the Sistina Chapel, are so powerfully precise defining the movement from "active" to "passive" and from "passive" to "active".

From there -- the point of encounter -- the previous tensions and structures of action re-emerge with meaning. To reach the center means to obtain awareness of the value of the system of action, individual and collective; to touch or the being touched from the symbolic center means participate in the peaceful awareness of the Madonna at the center of the symbolic frame, arboring the central symbol.

Both the structural movements from outside to inside, from center to periphery make visible the processuality, active and passive, of the intentional nucleous, the differentiation of its structural autonomy into the symbolic cosmos; the heart of the total consciousness of the individual.

This painting is fascinating in its capacity to express an inner vision of the movements and structures of mind into the symbolic cosmos and the sacred history. We can say that it reveals the intuition and first synthesis of a mature intentional awareness which Leonardo has searched for throughout his life. In the Adoration of the Magi appear many of the profiles and intuitions which he will develop to its fullness in his future work.

The Adoration of the Magi describes the mysterious articulation of the "intentional nucleous" of human action; the "structural template" which defines the "value" of action and sustains its meaning at the root of every differentiation.

Of this intentional nucleous Leonardo reveals, or helps to reveal, the sincronicity, the articulations of his structures, the movement between different structures of conscience and the central symbol; the initiatory process toward a total consciousness, toward a
central awareness of the articulations of life and its changes. This is the intentional nucleous -- in this case highly differentiated -- which mediates the elaboration of the human experience into a unified meaningful system. "Space" and "time" and the basic attitudes of the center of the symbolic cosmos become themselves "original traits" differentiated into the intentional nucleous and finally into the system of action. In this way the individual acquires inner autonomy and capacity of adaptation with a feeling of full presence into the sociocultural situation, no matter how it changes.

The work of Leonardo is highly significant in the Renaissance's meditation from the changing medieval world of experience toward a more differentiated awareness.

Botticelli, Masaccio, Michelangelo, Dürer, Leonardo and others create new models trying to express the quality of life, the equilibrium between reason and emotion, activity and passivity, communitas and structure, contemplative comprehension and active movement. They don't destroy the previous system of symbols; they define a new perspective into it and a new program of action.

In the medieval portals of the romanic and gothic cathedrals of Chartres, Notre Dame, Vezelay the Christ or the Madonna were the symbolic point of reference mediating and sustaining the system, the symbolic cosmos of the temple. In the work of Leonardo, it is the individual that is located in the portal of the human cosmos; the individual as model of internalization of the symbolic system, as intentional mediation of the system itself. Leonardo's model of the intentional nucleous is analogous to the cathedral of Chartres; it is Chartres seen from the point of view of the intentional initiation, from the inside point of the structures of conscience. It is a model of full consciousness into the cosmos of life.

3.2. Coming again to our sociocultural system, at the beginning we noted a situation of unbalance. Not focusing the various institutional causes, we did refer to one factor in particular which influences the intentional nucleous itself: namely the ever
growing development of technological abstraction, the destruk-
tion of the vital milieu, the unbalance at the individual and
collective level for the lack of a symbolic type of synthesis.
It is difficult to define the concrete symbolic adjustment,
but Leonardo's own development shows the articulation of human
intentionality and how it is basic that the individual acquire,
on the basis of fundamental and ultimate symbols, at least of its
own culture, a "symbolic and liminal capacity" which focuses
toward a structural and dynamic autonomy of the self, capable of
symbolic experiences. In the meantime the individual has to be
prepared to have and conserve a creative relation with the
technological system and the capacity to reach a level of *communitas*
with the other individuals participating or not in his own
technological and/or symbolic system.

4. The mediatory institutions -- political and religious -- will be
efficacious to the extent in which they will have a universalistic
(symbolic) character and clearly develop the universal character
of the political and religious man towards the *communitas*, beyond
the "ingroup" solidarity.

5. Is it possible to define the ways of religious and/or political
mediations between the symbolic system, with its universalistic
claims, and the system of action, with its unifying tendency?
It is dramatically important to avoid a new dualism between the
symbolic system and the structural differentiations of the system
of action.
The presentation of alternative social models by countries of the South and the possibilities of common elements with diverse roles and diverse functions.
INTRODUCTION

The present work asserts the general scheme for a prospecting study of Venezuela.

This study emerges from a final diagnosis of the country's social, political and economical actuality (°). From here one can deduce the principal evolutionary tendencies towards the -- future (chapter I). Among them projects the change of values of the Venezuelan people. The knowledge of the motivations -- (necessities) and values of the populations (chapter II) is absolutely necessary for defining the concept of development that will serve to establish the objectives to be attained during the next decades (chapter III).

The pointing out of long-range objectives is a necessary guide for those short-range objectives because they serve as a coherent and linked guideline in order that the decisions of tomorrow carry implicitly in them those of today. That is why in chapter IV it is pointed out that it is the set of values and objectives that are desired for the XX st. century that will serve as a guide for today's values and objectives.

For the attainment of the objectives, different methods are required which can be used following different political paths or alternatives. The principal ones to be considered are the pluralistic democracy, the military dictatorship and socialism whose social expenses are briefly pointed out so as to serve as a starting point for the construction of the different "scenarios" of the future of Venezuela.(°°)

(°) See Mireya Caldera de Pietri and Pedro Pablo Yanez, La Sociedad del Futuro, Centro de Estudios del Futuro de Venezuela (CEFV), Universidad Católica Andrés Bello, thesis presented at the XXIII Congreso Internacional de Sociología, Caracas, 1972.

- See the sociological, political and economical studies of CEFV between 1969 and 1973.

(°°) Idem
I. Tendencies for the future

A diagnosis of the evolution of the Venezuelan society allows the detection of diverse social, political, economic and cultural tendencies. The consideration of them is basic for the planning of any policy for the development of the country. The most notorious ones are the following:

(1) A continuous and growing change of the Society's Values (*). This change is disorderly and heterogeneous, it is not shared by all the social groups. At the same time that certain sectors show deep changes others present moderate or scarce changes. At the same time contradictory values are present which are increasing in strength; a mixture of autoctonous and imported values superpose each other at the same time that "traditional" type values are giving way to other more modern ones. (**)

The role of the social communication media in the process of change appears decisive; today a great deal of information can reach the remotest corners of the country. This cultural avalanche is propitious for a cultural inter-change promoting the new values and customs. The rise in the educational level, the process of urbanization and life in a city are other factors which promote changes of values.

Among the values in a process of change (although not all with the same intensity) we will point out the following:

(*) The order in which the tendencies are indicated does not show a hierarchy with respect to importance or intensity nonetheless, the mention of the change of values in the first place, helps to explain the existence of the rest of the tendencies.

(**) Traditional values are defined as those pertaining to a predominantly rural society that is little open to change. In modern society urban life predominates and acknowledges change.
## Previous Values (***

- Acceptance of disequality -
- Liberty restricted by traditional values, uses, costums, norms and laws.
- Acceptance of Dependency
- Independence
- Parochialism
- Nationalism
- Authority
- Centralization
- -
- Singularism
- Permanency
- Improvisation
- Improvisation
- Discussion of methods
- Live in the Present
- Live in the Past
- Economic Efficiency
- Individual Liberty
- Individual wellbeing
- Free Enterprise
- -
- Mass-man
- Being exposed to public view
- Individualism
- Spiritualism
- Materialism
- Appearances, Formalism
- -
- That which is old and traditional
- Maintenance of the System
  (Status Quo)
- Institutional Rigidity
- Adscription (Power)
- Magical Criteria
- Absolute Morality
- Traditional Religion
- Ideologies
- Concubinage
- Matrimony
- Woman subjected to man
- Son obeys father

## Present Values

- More equality
- Liberty less restricted by traditional values, uses, costums, norms and laws.
- Rejection of Dependency
- Interdependence
- Nationalism
- Internationalism
- Participation
- Decentralization (autonomy, selfdetermination)
- Pluralism
- Innovation
- Planification and efficiency
- Discussion of Methods to attain asserted ends
- Discussion of ends
- Foresee the future
- Break with the Past
- Social Justice
- Social Liberty
- Common Wellbeing
- Direction of Economy by the State.
- Individual Man
- Privacy
- -
- Empathy
- Materialism (Hedonism)
- Spiritualism
- Sincerity, Spontaneity, Authenticity
- That which is new and Modern
- Innovation
- -
- Institutional Flexibility
- Meritocracy (knowledge)
- Scientifical Criteria
- Relative Morality
- Modern Religion
- Pragmatism
- Matrimony
- Others forms of Love Relations
- Equality between man and woman
- Son questions father.

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The distinctions that we make between previous values and -- Present values pretends only to define the extremes of a continuum; Venezuelan reality can be seen at different degrees of intensity between the extreme poles. It is necessary to clarify that there does not exist an identification of the traditional and actual -- values with the dicotomy of bad and good values.
Previous Values
-Upbringing: rigid, temporal and selective
-Necessary Job
-Work and Education
-Compartmentalized Work, Education and Recreation

Present Values
-Upbringing: flexible, permanent and generalized
-Comfortable and Creative Job
-Recreation and Creation
-Interrelated work, Education and Recreation

There exist other values that have great priority and whose tendencies to change are less noticeable that the ones we have just mentioned; among them:

-It is good to scale positions.
-To earn money is very important in order to obtain prestige and to live well.
-The system of rewards and sanctions is very convenient
-Compeitence is good, especially to overpower the opposition
-Private property must be respected
-One must serve family and friends above all.
-Fear of good is convenient.
-Private initiative is good.
-One must follow fashion
-Virility and erotism are advisable.
-To accumulate goods is essential for happiness.

(2) Technological change directs society and produces desequilibrium within and between the political, economic, social and cultural areas of the country (in the same manner, in and between men).

The great technification and the increase of productivity in the economic production (in some sectors) and the improvidence of other effects more or less derived of technology (the speed and complexity of the way of life, contamination, massification, the demonstration effect of the mass media, eagerness to consume goods and services, demographical explosion due to a reduction in mortality, accelerated urbanization process, automatization and unemployment, demand for greater job preparedness and permanent education, etc.) produce the mentioned desequilibria.

A demand of greater control of negative effects of technological is foreseen. One will have greater technological facilities for the increase of productivity, exploration of the natural resources, transportation, the recycling of wastematerial, meteorological predictions, avoidance of climatic disasters, etc.

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(3) The mass media contribute to introduce life habits and -
greater aspirations among the population. Two examples of the
first point are the increasing hedonistic materialism and the -
break up of the traditional scale of values; an example of the
second point is the increasing aspirations for equality and par-
ticipation. The role of mass media in the political, social and
economic life of the countries increasingly more and more decisive.

(4) The acceleration of technological change and the demostration
effect of the more developed countries increase the aspirations
the countries with respect to socio-economic development and ---
stimulates the imitation of life habits of the former by the latter.

(5) The economical power of the more developed countries allows
them to create technology and take over the production and the
international markets. This makes the underdeveloped countries -
remain in a situation of technological, economical and political
dependency in face of the more developed countries. The multi-
national companies will continue to grow in importance and power and
this will end in international deals to balance the force that
they exert and to be able to negotiate the technology that they -
control.

(6) The commanding ideologies in the international field that
transform themselves into concrete political applications influence
the Venezuelan political system; especially the experiences of -
diverse socialistic shades that have taken place in Latin American
countries. The apparent lack of capacity of the democratic system
to solve, with the desirable urgency, the majority of the Venezue-
lan problems, makes certain political sectors of the country try
to introduce substantial changes in the economic and political -
system.

(7) The countries that are in the process of development have
come to a practical awareness of the right that they have to forge
their future in an independent way. This has incremented naciona-
listic politics which contains anti-imperialistic overtones and,
sometimes, xenophobic and chauvinistic ones.

(8) The increasing complexity of the personal and social rela-
tions in both the national and international order, and the growth
of economic cultural, social and political needs, increases the
interdependency between society's organizations and between nations.
In this sense we can foresee an increasing unification between
Venezuela and Latin American neighbours (Pacto Andino, Convenio -
Andrés Bello).

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The growing and imperant socialization process in the world is manifest in Venezuela. Socialization is defined as a greater participation of the population in the socio-economic and political life of the country (not only in profits like education, employment, social security, supportive capacity, etc., but also in the making of decisions at all levels). The claims for greater participation are continuously increasing (*). This is leading to a growing intervention and planning by the state in the social and economic life of the country.

The urbanization process promotes a new way of urban life and is the dominant environmental scene as rural population decreases. The urbanization process contributes to the formation of mass-societies; it diminishes direct personal contacts; increases individualism and paradoxically at the same time that solves problems for people (provision of services, for example) it creates tensions that may have negative consequences for their personalities.

The occupation of the economically active population --- progressively goes from the primary sector of the economy to the secondary and tertiary sectors, especially the last one (increasing automatization).

Within this sector emerges, with a character of importance, the quaternary sector.

The tendency towards less daily and weekly hours of work can be perceived (increase of productivity) the same as the demand of greater satisfaction with the job. Idleness (understood as the use of free time) appears as a possibility more and more noteworthy in the life of Venezuelans. This brings about the increment of organized activities to fulfill the free time such as sport and tourism.

Education appears as an item increasingly taken into account by all sectors of the population. Demand and supply of more admission quota at all levels, of diversification, improvement of quality and possibilities of permanent education characterize the decade of the 70's and will probably continue throughout the following decades. Scientific and technological investigation continues to increase in national importance and dedication.

The tendencies of the Venezuelan family appear some what complex; there is a tendency to generalize the nuclear family (parents and children) and to reduce the number of children because of the effect of the urban socialization, the economical difficulties and the diffusion of birth-control methods. At the same time there appears to be an increase in tensions caused by modern life: a greater number of women working outside their homes, an increase

(*)For example, the claims for admission quota in educational institutions, the number of strikes in recent years, the increasing tendency to sign collective contracts, the university co-governments, "dialogue" within the church, the activity of the syndicates, professional schools and student groups, etc.
in economical aspirations, problems of urban conglomeration, com-
petition at work and at school, change of values, increase of
entertainment and decrease of contact and family life between --
parents and children. This claims for a "humanization of relations
between parents and children". There is a need of safe guarding
the affective function of the family institution.

(14) There exists a tendency of increasement of the belts of
"socially isolated" people around the cities caused by the rural-
urban and town-city exodus. This margination is caused by the im-
capacity of Venezuelan cities to incorporate the migrators to the
social and economical life (provision of education, employment,
housing and other services) at a desirable rythm.

In addition to what we just said there exists an increasing
claim that those people must be incorporated to a "better life" in
the shortest time. This assumes an extraordinary effort on the
part of Venezuelan society.

(15) The intense demographical growth will continue to exert
pressure upon the growth rate of the gross Territorial Product,
although birth rate tends to diminish. This means that the young
population of the country will "weigh" upon the economically active
population and that the problematic of the marginal population,
whose demographical growth is greater than the average, will be
more difficult to solve.

The bettering of health and nutrition and the immigrations
will continue to prolonge the life hope and the useful age for
physical and intelectual work of the Venezuelans.
II. Motives and Values.

Basic concepts:
-Motives

They are the motor elements of action, the dynamic conditions be, them within the organism or in the environment or both, that will lead us to try to attain certain goals (*). They can either have a physiological or a cultural basis.

-Social Values

They are the expression of a perception, socially shared, that something is good or bad, esteemable or unesteemable, etc.... values are the anverse of motives.....the object, attribute or condition that satisfies motivation.(**)

-Social Objectives

They are the goals society aims to reach; it posts them based on its values and motives.

-Necessities and Aspirations

Necessity can be defined as a force impelling individuals towards certain objects or certain conditions. Necessity can be differentiated (in the face of aspiration) as "...an exigency that specifies the subject's aspiration, concentrating it on a better defined object, comparatively to aspiration, that is at the origin and at the end of necessity, also fostering the interchange ---between the object and the subject".(***). The concept of necessity is similar to the one used in this study with the name of motive.

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(*) Otto Klineberg, Psicología Social,F.C.E., 1969


Introduction

The motives and values that will be seen in this study are those shared by the majority of Venezuelans. The goal that it pursues is the detection of the motives and values that can serve as a basis for posting the national objectives for development. Formulated as basic hypothesis are the following:

1- Motives and values change. Their study assumes a consideration of their historic tendencies. (*)

2- Motives and values have an individual dimension and a socio-cultural dimension, intimately interrelated; they form a dynamic and interdependent totality.

3- Motives and values are immersed in a social, economic, political and cultural context that will be necessary to consider in its study so as to understand them in its dimension and meaning.

4- There exists a relation between the changes that occur in the social structure and those that motives and values go through. Transformations in the former induce changes in the latter and vice versa.

5- The adjectives and instruments of development depend, partly, on the motives and values of society. The partial, total or lack of attainment of the objectives and the transformations that have taken place in society, produce a renewal of the motives and/or values.

6- On the list of motives and values, not all of them have the same relative importance for man. This depends on man's own nature, the cultural conditions of society, the socio-economic level attained by the people, their experiences, social pressure, their preferences, society's resources, the degree of perception of the people, etc.

Nevertheless, motives and values have a certain hierarchy with regard to the priority of their satisfaction. Once the most essential motives and values (called motives and values of survival) find a way of being satisfied, emphasis is placed upon others of an intellectual or spiritual order (the opportunity of selfrealization, for example). In this sense A. Maslow (**) classifies man's basic necessities (motives) on five levels:

(*) See Chapter II.1 of this study

a- physiological necessities  
b- security necessities  
c- belonging and love  
d- esteem necessities  
e- self-realization necessities

According to Maslow the satisfaction of the first level - necessities makes man want to satisfy the ones on the next level.

7- There exists a close interrelation between motives and values. Just as much as a motive brings about an action from - whose results values are derived, these, at the same time, can contribute to reinforce or change the motivation.

On the other hand the division line between a motive and a value can not always be drawn with clearness. There are motives classified as values and viceversa (acquisition, for example).

Motives

Studying motives, it has been found acceptable to classify them in two big categories: those which lead us to attain physical well-being and those which lead to mental well-being (*).

Physical well-being:

. Hunger and Thirst  
. Heat or cold  
. Physical insecurity  
. Weariness  
. Sickness  
. Inaction  
. Sexual and Reproductive desires  
. Elimination of Body Wastes

Mental well-being:

. Self-affirmation (prestige, esteem or status necessity)  
. Perception of belonging to (gregarious behavior)  
. Security perception  
. Affection  
. Acquisitiveness  
. Esthetical impulses (sensorial)  
. Variety in activities  
. Individual or groups' beliefs (weltanschaung)

. Opportunity for self-realization (creativity)
. Maternal, Paternal and Filial Motives
. Curiosity (adventure)

Other mental well-being motives:

. Aggression
. Escape (evasion)
. Self-submission
. Retaliation

The list of motives presented is not exhaustive, some of them give the appearance of being implicit or derived from others pointed out; such is the case of acquisitiveness which can be considered a means for satisfying self-affirmation and security motives; individual or group beliefs (a "weltanschung" necessity) can satisfy the security motive; the curiosity and adventure necessity can, partly, serve as motives of self-affirmation, security, creativity and a variety of activities. Notwithstanding, we have hoped to explicit those motives we have considered important.

We wish to explain that within this study we do not pretend to clarifz which motives have a physiological base or which have a cultural base. What is of interest is that they exist and that they must be taken into account when the objectives and the instruments of development are posted.

Notwithstanding what was said, it is interesting to know Otto Klineberg's opinion on the subject. (*)

According to him the motives that lead to a physical well-being have a physiological basis, save some individual exceptions. Among those that lead towards the mental well-being ".....which have an indirect physical basis and that occur with high frequency but that admit exceptions within groups and individuals, are found agression, evasion and probably also self-affirmation" (**), gregarious behavior (belonging to) paternal, filial, acquisitively and self-submission motives ".....do not have a known physiological basis, but they occur with a certain frequency, be it because of social factors common to the majority of human communities or as a means for satisfying practical interests. They are, primarily means to attain an end, but they can come to function as ends in themselves" (***)

(**) Idem. p. 164.
(***) Idem, p. 165
The motives mentioned can appear with other denominations according to the different authors: for example, the psychogenic necessity for superiority (*) could be identified with the self-assertion motive.

In the discussion of the motives, the "negative" type ones are considered important, such as aggression and retaliation. The existence of this type of motives together with the lack of fulfillment of other important ones, contributes to explain the outcome of disruptive, violent or anomalous type of social phenomena, the manifestation of tensions or the generation of disequilibria. The void between the aspirations and the achievements can be of such a manner that it might inhibit the fulfillment of the motives because there exist no channels for the attainment of the goals, because they might not be open for the majority of the population, because of the lack of perspective that they are opening or that they seem to open in the future or because there do not exist substitutive satisfactions.

On the other hand, there are conditions that can propiciate the inhibition of "devious" behaviors in answer to nonsatisfied motives: a) internalization of society's norms (demonstration - effect coming from the information exploitation brought by the social communications media, makes this internalization difficult; b) the longing for approval by society's members; c) anticipation of a formal punishment or the absence of society's rewards; d) lack of opportunity for deviant action.(***)

These considerations are important when considering the establishment of national development objectives, the choosing of instruments and the reactions and repercussions that they induce upon society's groups.

Values.

The discussion of the previous motives allows us to outline those values that will serve as guidelines for a policy of development.

Values are expressions of wants at a certain level of abstraction; they are substantiated through society's objectives and goals. Among those values that satisfy motives and that in Venezuela show a more or less increasing tendency, (***) and (****) the following can be pointed out:

(*)

(**) See Chapter II, 1


(****) P. Oud and E. Drooglever, The Values of Development, op. cit.
Those which satisfy physical well-being motives and those which concern mental well-being.

Physical well-being:

- Nourishment
- Shelter
- Rest
- Health
- Performance of activities
- Sexual relations

Mental well-being:

Foremost are freedom and equality. Freedom, defined as that faculty pertaining to man which allows him to think and do as he wishes, has its social limitations. Life in society has obligations and curtails rights on behalf of the common good. Freedom is strongly related to equality. Just as much as Freedom, Equality cannot be attained absolutely. Differences in aptitudes, capacities, tastes and wants among people make total equality between men impossible. Nevertheless, the possibility of equal opportunities is desired within the Venezuelan society. The lack of possibilities renders some men less freedom than others when those have less alternatives from where to choose to attain their goals. Equal opportunity is, then, a prerequisite for the attainment of Freedom.

Other essential values are:

Participation,
Knowledge and
Health (*)

Participation in the making of decisions gives every man the opportunity of being able to influence the decisions that have to do with himself.

Knowledge consists in being informed and understanding the nature of things; likewise, the ability of being able to apply these notions (knowledge).

Wealth is the possession or the right to use material goods of any type.

(*) P. Oud and E. Drooglever Fortuijn, The Values of Development, op. cit.
These three values added to liberty and equality are instrumental for the fulfillment of self-assertion (status), belonging to, security, variety in activities, beliefs, self-actualization (creativity), esthetical drives and curiosity motivations; they are also needed for the achievement of physical well-being.

Other values considered important are the "spiritual values" love, understanding, altruism, cooperation, brotherhood, sacrifice, loyalty, forgiveness, civilism, sincerity, empathy, humility, honesty, constancy, responsibility, universality, etc. These values -- satisfy the necessity for affection and for self-assertion and at the same time the maternal, paternal and filial motives.

Renovation value satisfies variety of activities, creativity, self-assertion and curiosity motivations. Values of maintenance and order satisfy security and self-assertion motives.

Other values of interest for the objectives of development are:

Religion, God, Christ.
Privacy
Competitiveness
System of Rewards and Sanctions
Efficiency and Efficacy
Work
Marriage and family
Power
Peace
Case of Tensions
Providing for social mobility (better living and prestige)
Beauty (Esthetic Values)

Some of these values can be considered as derived from the principal values (liberty, equality, participation, knowledge, and wealth) and from the values previously pointed out.

First let us remember that in the previous chapter (*) we mentioned other values in the form of tendencies that can be seen in Venezuelan society. Some of them are more substantial expressions of other values and they can be considered as objectives of the country: for example, nationalism which is an operationalization of brotherhood, cooperation, empathy and other spiritual values applied to social relations between Venezuelans.

(*) II.1.

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III. Present Objectives for Development

The enumeration of motives and values will serve as a basis for the pasing of development objectives of Venezuela.

An acceptable definition of the concept of development is the following: (*)

"Development is a process that leads to a situation in which all the members of the social system live with freedom and equality, that is to say, a social system which provides an equality of power for all its members by giving to each of them equal opportunities to keep or increase in a similar magnitude (in approximately the same time) their participation in the making of decisions, their knowledge and wealth, as much as is required for their optimum degree of mental and physical well-being".

The establishment of the objectives of the country can be substantiated by this definition of development.

Knowledge of the predominant values of the country and its aspirations and possibilities need to be operationalized with the historic happenings of the country in which they will be applied.

The objectives which Venezuela must attain give one generation's time (approximately at the beginning of next century) can be considered as being the general, specific and derived type.

General Objectives

i- Reach an equilibrium between production of riches and the increase of population.

ii- Reach an equilibrium between personal and societal development.

iii- Reach with the society an equilibrium between man's material and spiritual values.

i- This general objective very difficult to obtain due to the demographical growth (restrictive variable of law flexibility) finds two channels for its implementation, both of which can be considered as specific objectives: a) Decrease in birth rate and b) Increase of production of riches (P.T.B.) and better distribution of riches.

ii- The second objective will allow man's self-development projecting from its potencialities but not allowing his personal interests to go against these of others; on the other hand it -

(*) Emiel Drooglever Fotuijn and Peter Oud, Research Project - Development. Strategy, op.cit.
tries to avoid a "massism" which will curtail the individual's values, changing him into a part of the societal or statal machine.

This can be attained by a harmonized equilibrium between the person's initiative and the Status power.

The third general objective aims to acknowledge man as he is and it is based in his motivations and values which tend to fulfill both his physical and mental satisfactions. It seeks to curtail the hipertrophy of materialistic or spiritualistic tendencies that separate man from his real goals.

**Specific Objectives**

For the realization of the general objectives we will point out the following specific objectives good for all Venezuelans.

1- Political, personal and National independance.
2- Permanent Education, National and Worldwide Communication.
3- Production and Usage of the material Riches (goods and services): Personal, Regional and National Economical Independance.
4- Promulgation of spiritual values.
5- Possibility of a personal, family and group life.
6- Continuous bettering of quality of life.
7- Functional Social, Political and Economic Organization

Both the general and specific objectives are a consequence of the values of liberty, equality, participation, knowledge, wealth, spirit, renovation, maintenance and the rest mentioned in this chapter.

**Derived Objectives (for all Venezuelans)**

The specific objectives need for their realization the following derived objectives.

1- Efficient and effective pluralistic nationalistic democracy (creation of Intermediate Organizations of participation and utilization of the means for social communication).

- International Personality (real regional integration; international openings; interdependancy on the face of dependancy).

2- Education in accordance with the necessities of development of the country; vocational, renewed, methodological, -
participating, creative, interdisciplinary, specialist and at the same time synthesizer. Physical intellectual, moral and religious education, that is to say, integrated.

- Intra-National and International Communication
- Means of social communication instruments of education, recreation, information and communication.

3* Agrarian Reform; Petroleum and Mining Policy; Preservation of Natural Resources.
- Agricultural and Manufacturing Industrialization
- Provision of Services
- Satisfactory Job (Remunerating and Creative); Elimination of unemployment.
- Adequate housing Conditions.
- Good health; lengthening life span.
- Social and Individual Security.
- Recreation and rest (Sports and Tourism)
- (utilization of means for Social Communication to promote)

4- Social communication means and process of education will promote spiritual values.
- Planned recreation: promotion of concerts, conferences, expositions, lectures, trips, etc.

5- Make possible a family environment characterized by support, affection and privacy.
- Establishment of conditions for social life according to personal initiative social, professional, sports, religious, cultural, etc., groups or family or group initiative.
- Humanization of cities.

6- Science and Technology used in favour of material and spiritual well-being.
- Periodic revision and renovation of the OBJECTIVES of development (general, specific and derived) and the instruments for its implementation.
- Humanization of cities.

7- Planification policy at different levels with the goal of adjusting the objectives to the means and the resources at hand and the most perentory necessities of the country.
- (Especially for the Public Sector).

(8) Several of the here mentioned contribute to the objective of redistribution of income.
- Prevision and construction of the Future.
- System of Maintainance and Renovation that will guarantee the continuous efficient (with respect to the means) and efficacious (with respect to the goals) functioning of the organizations, specially the public ones. (Administrative Reform).

Other Important Objectives

In designing the objectives fee development it can be of importance not only the attainment of fullfillment of a value -- (for example, the participation value) but the casing of tensions produced by the impossibility of doing so immediately caused by any sort of reasons (for example, to sacrifice in the present a greater participation of the national revenue because of a necessity to invest).

The diffusion of the means for social communication and the intensive urbanization process have contributed to increase the population's hopes in such a way as to make the impossibility of attaining satisfaction a source of probable tensions. On the other hand the increasing importance that freedom and equality values have obtained in our society and the progressive progress of participative socialization (*) as much as the existence of marginal urban population have nourished the worry of the political parties and other Venezuelan groups and people (as much governmental as opposition) to the point that we can consider as a number one objective of the country the incorporation of the -- marginalized people to the social, economical and political life of the country.

Nonetheless this incorporation assumes the performance of an economic and social policy that will allow the achievement of the general, specific and derived objectives mentioned in this chapter. This takes time and effort, all of which slows the fulfillment of the aspirations and leads to tensions and probable disequilibria.

In this sense it is important to establish intermediate objectives that will make achievable partial goals, the perception that vertical nobility is and the pointing out of substitutes -- (of the objectives most difficult to achieve) that will produce satisfaction.

Participation (direct or indirect) in the discussion of the objectives, goals, means and results of a policy of development, the continuous information of what is being done and how is being done; the exposure of the sacrifices required to attain certain goals; in summary to make the population feel and ---

(*) See Chapter II.1. Tendencies.
understand that what is being done is for them and with them. They are objectives-means of a policy of development. The advantage they have is that they help to ease the tensions that can be restrictive and unbalancing for the development we are aiming at.

Marginated people are always referred to as if they were a homogeneous group. Studies (*) on the subject show that the "marginal population" is heterogeneous. We are talking about these inhabitants living in the urbanizations that surround the cities of the country, the "belts of misery".

For an adequate understanding and solution of this problem we have thought it necessary to consider different indicators of marginality within the country and city:

- employment
- family income
- education
- legal status
- others
- housing
- physical aglomeration
- political participation
- recreative expansion
- nourishment
- services for the community: electricity, water, sewerage, medical attention, etc.

Other indicators of marginality can be age (especially for old people and persons up to 40), sex (woman vs. man), race, etc.

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(*) Mercavi 70, Banco Nacional de Ahorro y Préstamo, 1970.
- Urbanización en Venezuela, Proyecto Ven. 11, Volumez, Caracas, 1971, Study by CORDIPLAN-UNITED NATIONS
- Rights in Land and Housing in an informal Legal System: The Barrios of Caracas, Kenneth L. Karst, Reprint of "The American Journal of Comparative Law, Volume XIX, Summer 1971, No. 3."
Probable Sources of Tensions

A rational policy of development includes among its objectives foreseeing the future which includes an anticipation of happenings and especially of those which can be a source for tensions:

1- Continuation of the process of demographic explosion especially among families with little income.

2- Urban concentration of the population and the impossibility of the cities to absorb all the migrants in a humane fashion.

3- Progressive contamination of the water and the air by waste matter and noise.

4- Quantitative and Qualitative demands in modern education in face of availability of resources and other necessities of development.

5- Increasing demand for employment of those finishing educational process in face of a possible supply of the economical system.

6- The lack of scientific and technological research (pure and applied science); indiscriminate use of technology without foreseeing its effects.

7- The present use of the mass media on top of other effects could be contributing to:

- Prostitute certain spiritual values with exotic awkward, hedonistic types of shows or publicity.

- Bring to light the magnitude and quality of the socio-economical inequalities within society's different groups.

- Increase the aspirations of the population (especially if the channels to satisfy them are not accessible).

8- Carelessness and neglect of the maintenance of the country's Natural Resources.

9- The continual deterioration of the politicians' image and of their parties in the mind of the people to whom they make promises of, economic and social development (if the promises are not kept).

10- Deficiencies observed in the Public Administration and the Administration of Justice mismanagement unnecessary delays, disobeyance of laws and regulations, "commisions" , "leverage", etc.

...
11- The two last points together with No. 7 contribute to a possible downfall of democracy in spite of the goals achieved during the three last democratic periods.

12- The "shock" between certain values and objectives of development.

- Individual Freedom vs Social Freedom. (imposition by the state of the Common Good vs. the -- Claims for freedom by the individual).

- Enjoyment of the wealth in the present (consumption and redistribution of revenue) in face of a postponement of this (a policy of austerity and forced saving for investment sake).

- Spiritual values vs. Material Values. Cooperation vs. Competition Sharing vs. Acquisition or Power

Promotion of the ideal of a materialistic life of accumulation: money, comfort, power, wealth, individualistic education, etc., vs. a concept of an integral life: love, esthetics, universal culture, communitary solidarity together with those things needed for the spirit.

- Conflict between the traditional and modern values: (Status Quo vs. Change) (New economical and social relationships among men) Lack of habit of living within a continuous and accelerated change; search for support and security within that which is stable.....

- Traditional Religion vs. "Modern" Religion. (Difficulty of the church to adapt itself to the new life systems and give a new spiritual help...human longing for spiritual values.....)

13- Lengthening of the life span and isolation of Old -- People vs. Opportunity of employment for the younger ones.....

14- Intense and compulsive decrease of birth rate vs. the religious habits of the population.

15- Necessities of Mass Production, of great efficient and Efficacious Enterprise, and of the computer faced with the possible Massism Depersonalization, Oligarchy and Control of people.

..../..
16- The interference of foreign influences in the management of Venezuela's destiny; this interference can be of a more or less direct action and it can be exercised through:

a) Increase in external debts.

b) Private foreign investment. They can acquire the most "powerful" forms of investment such as those of the international corporation and its' most elaborate and recent form, the multinational enterprise. The negligence of the governments in the elaboration of policies leading to the adequateness of the conduct of the foreign enterprises to the national interests (and regional - Latinamerican as well) can originate deplorable tensions.

17- The resistance of the National enterprises to "open up" to the increasing socialization process; their possible unwillingness of giving the workers a greater participation within the enterprise.

The resistance that enterprises can oppose to the State's planning policy, which will progressively increase its participation in the administration of the economy of the country, for reasons of Common Welfare, given the complexity of modern life - and the needs of development.

18- Ideological struggles between the defendants of capitalism, pluralistic democracy and socialism.
IV. Values and Objectives desirable for the XXI century

The presentation of longer range values and objectives has the finality to serve as a guide to those of a shorter range. It is obvious that the construction of a desirable future starts in the present.

Only if the long range objectives are known can one plan the objectives of the different stages with the purpose of allowing the coherent and linked flow of the process of development. In this way the objective of each term assumes the second stage.

It is logical to assume that the values and objectives of the country in 30 years will be modified, at least partly. It is evident that we cannot operationalize and detail them for that span of time in the same way we did for one generation. That is why we present here some values and objectives that give a general view with respect to the desirable mediate future.

IV.1 Year 2000(approximately within one generation)

Values:

. Greater universality of the values
. Effective universal brotherhood
. Cooperation before competition (empathy in face of individualism)
. Common profit before individual property.
. Complete balance between spiritual and material values within society.
. Individual ethical freedom (while it does not interfere with the Common well-being.
. Flexibility of the legal dispositions concerning love and sex.
. Legal matrimony
. Remunerated labor unnecessary for minimal commodities
. Creation and learning as a recreation.

Objectives:

General

i- Wealth-population balance (at a national and international level).
ii- Individual-society balance (with respect to values and development)
iii- Material and spiritual values balance

../..
Specific and Derived

1- Politics: internationalist pluralistic democracy; regional and worldwide integration; decreased emphasis in nationalism; intra-or extra- national regionalisms.

2- Education: more renewing, practical, universal, disciplinary and creative; progressively integrated with work and leisure. Intense communication with world culture. Intranational total communication.

3- Integrated development of agriculture, industry and services provides goods and services at common reach. Guaranteed minimal personal income. Great interconnection between work, education and recreation.

Large control over illness, complete social security; increase in life span.

4- Mass Media and education at the service of society's objectives; especially spiritual values (included are esthetical values)

5- Propitiation of possibilities of an effective and private family environment; ethical freedom and harmonious individual and social activities.

6- Large control over technology and its effects; increasing application to human wellbeing.

Periodic revision of objectives and instruments for its renewal.

Humanization of cities

7- Planification (Intra and Inter-nations)

Foresight for the future

Functional maintainance and renewal.
IV.2 Year 2050 and following (three or more generations)

Two alternatives are presented for these years, one of a "bold" tendency and another more conservative.

**Bold Alternative**

**Values:**

- Universal values (Unity of Mankind)
- Total substitution of egotistical and competitive spirit for one of empathy and cooperation (lack of aggressiveness)
- Communitary profit of goods and services
- Complete primacy of spiritual values
- Fundamental universal ethics; free expression of values
- Universal and communal life

**Objectives**

**General:**

i- Predominance of wealth over population (at a national and international level)
   ii- Individual-society balance (values and development)
   iii- Primacy of spiritual values

**Specific and derived:**

1- Politics: world government of consensus (possibility of self-management)

2- Education: world culture; complete world communication

3- Economic production and distribution render feasible material welfare to all; in other words material needs are satisfied by science and technology.
   - Man's activity: creative, spiritual, esthetic.
   - Control over man and illness: life, death and mind; design of man.

4- Mass media serving society's objectives, especially communication of spiritual and esthetical values, diffusion of the universal creative activity of mankind.

5- Feasability of personal life, communitary and family, especially the first one.
6- Total control of Technology.
   - Feasability to renew instruments and objectives

7- Self-management;
   "Control of the Future".

"Conservative" Alternative

Values:

. Universal values blended with individual or group values.
. Manifest predominance of communitary spirit over the individualistic one (Competition, Self-assertion and aggressiveness persist).
. Manifest predominance of spiritual values over material ones.
. Manifest predominance of communitary property over individual property.
. Balance between international National and regional ethics.
. Individual values: free expression of them subordinated to common welfare.
. Family: Freedom of individual, family or communitary life.
   - Balance between family and communitary life.
. Education: work-leisure: life is recreational creativity and spiritualness.

Objectives

General:

i- Wealth - Population Balance
ii- Individual-Society balance (in values and development)
iii- Predominance of spiritual values over material values.

Specific and Derived:

1- Politics: World Federation of Countries.

2- Education: Interrelated cultural coexiistence.
   Total world communication.

3- Satisfied material needs for all due to Technology.
   - Creative, spiritual and esthetic activity
   - Illness control; lengthening of life span.

4- Mass media servicing recreative, spiritual, creative, esthetic activities.
   Mass media servicing society's objectives.

..../..
5- Feasibility of Personal, family and Communitary life.

6- Total control over Technology.
   Renewal of Instruments and Objectives.

7- World planning; foresight and some control over the Future; functional maintenance and renewal.
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MAN AND SOCIETY

"Human Needs"

By Elungu Pene Elungu
Vice-Rector, Université Nationale
du Zaire, Kisangani

The transformation of the world and human life styles is now progressing at a rapid pace, even in the developing countries where day-to-day changes are so pervasive that they are disrupting the individual, the family and the national society.

Africa has forthrightly repudiated colonization. Her young nations are still fighting for independence -- perhaps their most pressing need -- by overcoming the towering barriers put in their way by the more advanced and better organized societies.

If the young African countries have anything in common, surely it is this need for freedom and for an identity, the need to be accepted and respected. Such unanimity is not only African but worldwide; the urge for freedom and independence is ingrained in all the peoples of the globe.

For mankind today, this proposes a fundamental question, the reply to which advances a hypothesis for the future: how can men be organized in such a way as to assure every nation its independence and every man the maximum of true freedom?

Man has chosen his direction through reason and discussion; he is reaching for a common political consciousness, for a world government which will guarantee his liberty and well-being. The United Nations organization is striving to fulfill this mission, and its specialized agencies are searching to find techniques that can provide the basis of an organized coexistence.
Unfortunately, this institution dedicated to the freedom of all, is still feeble. Its weakness is all the more distressing because it lacks adequate means to grapple with the totality of common problems afflicting men everywhere on the globe. The international organisms are so weak that the world's confidence in them is languishing, in the developing countries even more than elsewhere. Consequently, every nation approaches its problems -- generally the very same problems confronting other nations -- almost entirely from its own point of view. Thus, nations are pitted against each other in a competition that has no arbitrator. We not only imagine but observe every day the unhappy results of the fundamental contradiction plaguing mankind, united by the same situations and aspirations, yet divided into separate, hostile countries.

The developing countries suffer from this stinging deception most intensely of all, and they are stressing nationalism with much more conviction. To ally their nationalism with modern know-how in their will to attain a future of freedom and well-being has become a primary, imperious need.

In Africa, and especially in black Africa, this need upholds the national society as a virtually absolute framework of reference for all political and economic activities; it is the basis of its socio-economic-political institutions and their functioning.

Among the results are: 1) the decline of tribal societies, and 2) growing progress in the concentrated urban centers.

Our societies have won technological, political and economic progress at the expense of the villages and tribal life. The tribe ignored time and tensions. The rhythm of the days and seasons was slow, tensions were reduced to a minimum. The individual knew his society, and his society, in turn, knew him thoroughly. He had a clearly defined identity. The permanence of his ethnic group assured, it seemed, his freedom and security, even against death.

Then came modern society and its needs. Based almost wholly on work and a technological organization bent on constantly rising production, modern society has created new centers in which men have established new relationships, between employer and worker, administrator and
administered -- a society of bipolar duality.

This society isolates the individual from all his attachments and abandons him to his freedom and his fate: to work or not work. It has been highly attractive to the individual and still is. Untold millions of people have left their villages and tribes, and they have abandoned their languages to adopt other languages and life styles more suited to the demands of industrial labor in the cities. The equilibrium has been upturned, but it is far from being re-established in our villages. The dichotomy today is total: the cities are developed, indeed overdeveloped, while the villages and immense expanses surrounding them are under-developed. The misfortune of a developed city in a developing country is the umbilical cord that binds it to the under-developed villages, a counterweight from which it knows not how to free itself. In this conflictual union, the city grows bigger and bigger while the village shrinks. Misfortune strikes both, more in the city than in the village; the city is unable to absorb the human masses immigrating from the villages, and unemployment is rampant. To combat it, disorganized village life invades our cities: entire neighborhoods reproduce the villages from the habitat to the re-organization of daily subsistence in hideous areas deprived of nature.

In this context, family bonds loosen. Traditional marriage meant a permanent union between two families through the union of two persons; the family union was nurtured by continuing reciprocal exchanges. Now marriage has become less firm and the union between families has given way to looser relations between man and woman. Hence the frailty of marriage and the rise of divorce, commonly called -- not without irony -- the "liberation of the woman." The liberated woman is one without family ties, without an attachment to a specific man; her freedom, a negative factor, is like merchandise awaiting a buyer. The liberated woman prostitutes herself "freely". This species is by no means rare; it is a permanent mark signifying the death of our villages, of disordered city life and the poverty of our villages -- but also the far more crushing poverty of our opulent cities.

Obviously, the individual suffers most from this state of affairs. First of all, he is uprooted from his natural and cultural surroundings, and transplanted to an urban life which is oftentimes highly unfavorable to him. His adaptation is difficult and dangerous, while unemployment
threatens to make it impossible. With the loss of his identity, the individual also loses his self-sufficiency, and his freedom leads him into anonymous areas of misery. This dehumanization threatens not only the individual but also thousands and millions of human beings, hence the national society in its rush to achieve total freedom. These millions are endangering the very equilibrium of the world.

From all the foregoing, we must understand and consider a certain number of needs felt by the developing countries in a strategical perspective for the future:

1. The need for self-development;

2. The need for this development to apply not only to the city but also to the village collectives as development factors and centers;

3. The need to establish a definite demographic, economic and cultural balance between the cities and the villages;

4. The need to introduce techniques and education in the hinterlands towards transforming the villages into viable communities made to man's measure;

5. The need to preserve traditional cultures and to maintain interactions among them and between them and foreign cultures;

6. The need to organize the country politically, economically and culturally, bearing in mind the demands for unity in diversity.
Conflict has pervaded, and continues to pervade, the life of societies and nations. Such conflict -- which is at the very core of world politics -- is, as a rule, the consequence of the dependency of one of the parties in conflict upon the other, and its origin may be either social or international. International conflicts are aggravated when stemming from a colonial or neocolonial relationship, in which case the dependency is not merely that of one State upon another, but also that of a State upon transnational corporations. (1)

The present-day framework of international dependency precludes the implementation of a strategy aimed at achieving an alternative social model for our countries of the southern hemisphere, distinct from the models in force either in the countries following a market economy, or in those adhering to socialist patterns.

In view of the difficulties involved in persuading the leading sectors of the aforesaid southern countries of even the need for such a strategy, it is easy to conclude how this attitude makes it difficult to impose an alternative model.

We understand that a comprehensive alternative model would be one offering:

1) a social system distinct from socialism and capitalism, which is not an intermediate system, but rather one transcending both;

2) a productive system that does not follow the patterns of either socialism or capitalism (2) and

3) one whose international role could not be subservient to the interests of either the socialist or the capitalist blocs.

This "third position" should apply to the overall political relations between blocs, as well as to the role to be played within the framework
of an international economy tending toward universal solutions. An alternative model consisting only of variants 1) and 2) would, in our view, represent a restricted alternative.

Two fundamental obstacles stand in the way of the implementation of even a restricted alternative model, i.e.:

1) our countries, irrespective of their present level of development, are overwhelmed by such grave social and political problems, (hunger, poverty, disease, lack of educational facilities, violence, etc.) that even the minimum capitalization required to aspire to the building of a native model is quite beyond our possibilities.

2) A mental dependency exists in our population, particularly our political leaders, as the result of the influence exerted by both neocolonialism and anticolonialism. There is much vague talk of models, but attitudes remain partial to one or the other of the two predominant models.

To the aforesaid two obstacles we must add a third preventing the implementation of a comprehensive alternative model: our political leaders refuse to accept any restrictions upon our industrial development, and, consequently, reject a new international divisions of labor that could be detrimental to such development, even in the event of its goal being that of a universally planned economy.

Thus, the main requirements to make possible in our southern countries the planning of an alternatives model, even a restricted one, are the following:

1) a modification of both domestic and international political power relationships allowing for change;

2) a capitalization enabling us to defray the social cost of such change, and

3) a change in the mental attitude of the population, and particularly its leaders.

References to the Third World, or to our countries of the southern hemisphere are usually made on such an abstract plane that the profound differences are overlooked which exist among these countries in the sphere
of productive and educational development, size and population, idiosyncracies, geopolitical position, etc., etc. Putting aside all the aforesaid differences, save those related to the unequal development of production and education, it may be noted that:

1) the absence of a complex technological structure makes it easier for the least developed countries to establish a system of production distinct from either socialist or capitalist patterns, but that, on the other hand,

2) they are mentally less prepared to accept political changes contemplating social ends, even though they may be more inclined to alter their priorities as far as the productive structure is concerned. Indeed, the development of production is conducive to the formation of a vast and highly politicized middle class which, influenced by the Duesemberry effect, opposes any alteration in the set of priorities proposed by the capitalist models of the developed countries, and,

3) their capitalization is generally insufficient to support an alternative model, i.e., grave internal obstacles stand in the way of implementing, or even conceiving, an alternative model, irrespective of the fact that a certain degree of development may have been attained.

To these internal factors we must add external ones:

1) Many sectors of the productive structure, some of them strategic, are in the hands of transnational corporations, and

2) the implementation of even a restricted alternative model involves a social cost which, even if only transitory, economically debilitates the international position of the country where it takes place particularly affecting its exports.

It is therefore highly unlikely that a State will adopt an alternative model, save in the event of compensatory international assistance, or, at least, if a similar model is not simultaneously adopted by other States of like characteristics.

Because of the high cost involved, even commonplace industrial antipollution policies can give rise to a conflict between neighboring States, as was exemplified by Argentina and Brazil in the course of the Stockholm Conference.
on the Human Environment.

The question of an alternative model may therefore not be posed with reference to a given State, but rather in the context of joint action by several, and firstly at regional level. The following three steps cannot, in our thinking, be dispensed with:

1) a redistribution of productive functions within the different areas of the developing countries with a view to attaining a profitable scale economy, reducing costs, and destining the benefits thus obtained to the financing of the alternative model at regional level;

2) a solidary attitude among the developing countries with a view to the implementation of similar policies forming part of, or being related to, the alternative model. (3)

3) Joint action by the developing countries to demand from the developed ones a change in attitude with respect to the needs of the former.

It should be noted that the idea of an alternative model for the southern countries arises from the need to:

1) prevent those countries from making the same mistakes as the developed countries, i.e., environmental pollution, social injustice, alienation, urban concentration with all its ensuing ills, and the improper use of natural resources;

2) prevent these countries from pursuing a contradictory social life style wherein privileged minorities contrast with vast majorities living under subhuman conditions.

3) integrate the economies of these countries toward universalist ends, putting a stop to environmental pollution affecting other States, and, above all, stopping the steady deterioration of the balance between available natural resources and the number of human beings on this planet.

Despite the fact that the solution of an alternative model would seem to have sprung from the developing countries, the problem was first posed in the developed ones.

The reason for this sudden interest on the part of the leaders of the developed countries in the plight of their lesser brothers may be ascribed
to the fact that they became aware of the intimate relationship existing between their own destiny and that of the underdeveloped countries. We must, however, point out the unilateral view of some of the leaders of the developed countries when it comes to evaluating planetary problems. Thus, for example, they pose the question of the population explosion in the developing countries, and offer the solution of contraconceptive methods whose effects on human health are far from having been proven innocuous, whereas not a word is said about the wanton wastefulness practiced by developed societies.

We all know that humanity is faced with a threefold problem, i.e., population explosion, rapid depletion of the earth's natural resources, and environmental pollution.

In the face of this situation some political sectors in the developed countries propose to share their prosperity with the underdeveloped countries. Such prosperity can but imply more squandering of natural resources, and more pollution, and to this the developing countries can have but one answer: Shared austerity, among social classes, as well as among countries with varying levels of development.

Shared austerity must be the moving force behind any alternative model for the South and behind any attempt to achieve a planetary (universal) economy, but the population in the developed countries will not agree to such sharing of austerity without outside pressures, and therefore the developing countries must impose upon the former, not only that they accept, but furthermore that they help finance their alternative models.

The developing countries must demand that the developed countries

1) put an end to the armaments race, as well as that competition be stopped between the two great political-military blocks aimed at demonstrating supremacy in the field of material development;

2) put a stop to wastefulness and overconsumption (4);

3) accept a new concept of international cooperation based on mutual benefit, but not, however, on reciprocity. The benefit should be reversely proportional to the development of the country receiving it;

4) lend their support to the alternative models, either directly, or through the international organizations they control.
It is our understanding that a conflict exists between underdeveloped and developed countries (particularly the developed countries practicing a capitalist economy), and that the aforementioned four points constitute the basis for an indirect approach strategy.

The developing countries have two important weapons which they may use, if they choose to do so, to put pressure on the developed countries:

1) their reserves of nonrenewable natural resources of which the latter are consumers, and

2) the funds obtained from the exportation of raw materials over these last years.

To establish a rational planetary economy, a lengthy previous process is required. The implementation of comprehensive alternative models in the developing countries, and putting an end to the policies of wastefulness of the developed countries, are the two basic prerequisites for the establishment of a planned planetary economy. However, it must be overlooked that at the same time both these prerequisites require radical changes in the internal political relations in both types of countries.

We further believe that the doctrine of 'justicialismo' launched by general Perón in Argentina in the year 1946 represented the first alternative model offered by any one country in the South, and which was translated into a "Third Position" beyond capitalism and communism, and between the political-military blocks.

In 1946, general Perón and his "justicialismo" enforced in Argentina an alternative system based on social justice, political sovereignty, and economic independence. The humanistic conception of "justicialismo" as an alternative doctrine can be summarized in this sentence of its founder: "The work to achieve international cooperation must be effected by discarding antagonistic ideologies and by the creation of a world consciousness in the effect that man transcends systems and ideologies, and that it is therefore not acceptable that humanity be destroyed in the name of right or left."

As early as 1958, the "justicialista" doctrine posed the problem of the critical balance between the depletion of natural resources and population growth. Today, general Perón has expanded his doctrine to incorporate the problematics of ecology. The search for an Argentine alternative model is now enriched and updated at the very moment "justicialism"
returns to power. The following transcript of part of a message from General Perón to the peoples and governments of the world (February 1972) proposes to illustrate an updated and comprehensive alternative attitude. This attitude is faced with all the problems we have previously enumerated. General Perón has said: "If we take a global look at mankind's problems we shall see that they spring as much from human greed and improvidence, as from the characteristics of certain social systems, the misuse of technology, and ignorance of the earth's complex biological interrelationships and the natural progression of human population growth. Heterogeneous causes call for heterogeneous responses, although the ultimate common denominator would undoubtedly have to be man's intelligence. To the rationality of collective suicide we must respond with a rational urge to survive."

To halt and reverse our disastrous course we must accept certain premises, namely:

1. The most necessary and urgent prerequisites are a mental revolution which must take place mainly in the minds of the leaders of the highly industrialized countries of the world; a world-wide change in social and productive structures, particularly in the technologically advanced countries in which a market economy prevails, and the emergence of a truly biological coexistence among men, and between man and the rest of nature, in the sense that man's strivings should at all times fulfill rather than oppose the life requirements of both his species and nature;

2. Such a mental revolution implies an understanding of the facts that man cannot replace nature when it comes to maintaining the natural overall balance of the earth's life cycle; that technology is a two-edged sword; that limits should be placed on so-called progress even if it means giving up some of the amenities of civilisation; that nature should be allowed to regain the balance wilfully upset by man to the extent that such a recovery is at all possible; that natural resources tend to become depleted and so should be utilized rationally and with care; that all prejudice should be set aside to plan the growth of the globe's population, notwithstanding which, at this time there is an even greater need for increased food production, for widespread educational and public health facilities, and for education and wholesome recreation to take the place of the superfluous goods and services now so highly prized by man.
3. Each nation has the sovereign right to make use of its natural resources, yet each government is under the obligation of seeing to it that the citizenry exercise this right rationally and with care. The individual right of citizens or a people to subsist pledges humanity to fight for collective survival.

4. Changing the world's social and productive structures means that squander-and-profit may no longer be allowed to act as the driving force behind any society whatever, and that all social systems should have social justice as their base, not only so that man may benefit from it directly, but that he may also strive to increase the production of food and other essentials. Goods and services production priorities must therefore conform to the particular needs of each country. In other words, mankind requires new patterns of production, consumption, organization, and technological development that, while granting priority to the meeting of man's essential requirements, will allow for the rationing of natural resources, and minimize environmental pollution.

5. Man needs a new mind in a physically renewed world. A world whose peoples are debilitated by environmental pollution, exhausted by hunger and thirst, and crazed by noise and crowded living can not produce a new society centered on the full unfolding of human personality. The prison cities of today must be transformed into tomorrows' garden cities.

6. Planned population growth must be implemented with the least possible delay, yet without detriment to human health, and in keeping with the peculiar conditions that prevail in each country (i.e., population growth should obviously not be restricted in underpopulated countries such as Argentina), and within the context of globally rational economic and social policies.

7. The battle against environmental pollution, against the squandering of natural resources, noisy and crowded cities, and the explosive growth of human population should be initiated forthwith at all levels -- municipal, national, and international. These are not just another set of problems to be dealt with as a matter of course by the governments of the world, since viewed as a whole they constitute the problem mankind must solve if it is to survive.

8. All of these problems are indissolubly linked to the questions of social
justice, the Third World's struggle for economic independence, the relaxation of international tension and international cooperation.

9. The solution of many of these problems will require that ideological differences separating individuals within a society, and States within the international community be set aside.

Lastly, we want to address ourselves to the countries which, as ours, belong to the Third World:

1. We must defend our natural resources tooth and nail from the voracity of international monopolies eager to carry them off for the purpose of sustaining the absurd modes of industrialization and development prevailing in the technologically advanced center under a market economy. The Third World can no longer increase its food production on any appreciable scale unless it parallely develops its related industries. Thus, every bit of raw material carried away today from the Third World will mean tomorrow's diminished food production capability.

2. However, preventing the outflow of our natural resources will be of no avail if we remain unwilling to discard the patterns of development propounded by these monopolies, which are the very negation of a rational utilization of such resources.

3. Thus, to safeguard their interest, the countries of the Third World must seek regional integration and joint action.

4. We must not forget that the real issue in the greater part of the countries in our Third World is the total absence of any social justice, and that a truly popular management of public affairs is sadly lacking. And yet, if social justice is not achieved, the Third World will be unable to cope with the grievous difficulties lying ahead of mankind in the coming decades.

To survive, humanity must mobilize for war as war, as it were against itself. No one can afford to stand alone from this titanic task. We therefore call upon all governments and peoples of the world to joint in this undertaking.
FOOTNOTES:

(1) We have chosen the term "transnational corporation" instead of the commonly used one of "multinational corporation" for, as we see it, such corporations do not represent a cooperation between nations, but rather interests which transcend, and therefore ignore, national goals.

(2) A real alternative social model must contemplate the following:
   a) application of new production techniques minimizing consumption of natural resources, unemployment, and environmental pollution.
   b) priority for the meeting of elemental human needs (food production, public health, education).

   The implementation of a real alternative social model therefore implies eradicating the commonly accepted concept of productivity and the acceptance of a new technological structure.

(3) It should be noted that the implementation of an alternative model is not without implications in the sphere of national security. The influence exerted by the armed forces on the leadership of the developing countries is a well-known fact. No State will therefore consent to the putting in practice of an alternative model endangering its national security. This is one more reason to affirm the need to implement alternative models at regional level. The relationship between the alternative model and collective security at regional level is furthermore placed in evidence.

(4) The fact that the U.S., representing 6% of world population yearly consumes 35% of the earth's natural resources clearly indicates the need for a change.
THE SEARCH FOR ALTERNATIVE DEVELOPMENT MODELS
IN THE THIRD WORLD

By F. K. Mariakasih
Political scientist

1. The Rome Special World Conference on Futures Research with participants of many cultures, nations, social and political systems, is not the place to discuss technical problems of the scientific field. We should practise the holistic approach and arrive to a consensus and common basis by dialogue and confrontation. People involved in development policy are overwhelmed with so many concrete problems of a complex nature, that we can loose ourselves on specific details and become unable to deal with the society as a whole.

We have, for a fruitful communication, to limit us to methodological aspects and attempt to bias our opinions by long term interests and discuss the premises, value orientation and the main line of our study theme. This discussion paper try to formulate some such premises and value orientation on the problem of the search for development models in the Third World.

2.1 I think, that a conference on futures research can not only discussion conference, but for the sake of a better and just future, it must be an action oriented meeting; especially for the Third World, the nations in Asia, Africa and Latin America with two third of the 3 billion world population.

This world is unhappy with the present situation, she is looking for a better future and experimenting with social revolution or an accelerated modernisation. She is more consciousness, that the world system creates a discrepancy between the rising expectations and the unsatisfactory results of the Development Decade strategy of the United Nations. Many countries in the Third World live in a unstable social system with political tensions and an economic insecurity. The Third World realise, that she is the poor part, the have nots and the underdogs of the world society. From this point of view futures research should be done with the intention to do research for changing rapidly the world polity.
Elements of a futures research

3. Futurology as Zukunftgestaltung and the creation of new life conditions asks for a relevant research with the following elements:
   a. a diagnosis of the past, to analyse the social and cultural heritage and the historical roots of
   b. the present situation, to come to a concrete and realistic insight of the fundamental problems and an inventarisation of the resources and capacities of the nation.

To control and to steer the future by public and personal acts, people need
   c. a futurological imagination: how should be the future for designing
   d. a development model or Zukunftgestaltung with
   e. a strategy of actions and planning the necessity goal-directed changes of behavior, social structure, to transform the environment and the political pattern.

Methodological premises

4. The development of the Third World depends on a new and just relationship between the rich world (western and communist) and the poor world. The value oriented assumption is that all people in the world has the fundamental right of a human existence and has a proportional share of the rich dom of the world.

5. The growing gap between the rich and the poor world is a result of an adequate strategy of the development in the Third World and the failure of the present world economic system, realised in international agreements and organisations (Unctad, UN Development Decade and others). The rich world should come to the political will to change the existing world trade pattern, that still favour the rich world and harms the development of the Third World.

6. Futurology should contribute to design new life conditions (Zukunftgestaltung) and to formulate the strategy of relevant development models
of the Third World. The value oriented assumption is that planning the future can be rational, systematic, efficient and we can guide the development in the expected direction.

7. The Third World is a plural society, and has her own identity. She is looking for a development model according the cultural and historical heritage and not in a matrix of the western capitalist model (First World) and not of the communist model (Second World). She can learn the lessons of the western and communist world in her process into a welfare state, but a Third World nation has the right to have a human and free life in a context within her own identity. The value oriented assumption is that in the development of nations imperialism and foreign interventions is intolerable and is a violence against the right of full self determination.

**Diagnosis of the Past**

8. Countries in the Third World vary from nation to nation; there is a plurality of cultures and social systems, we see a variety in historical setting and political background, but all Third World countries have something common.

These countries lived for centuries under a foreign domination and after the political liberation have the same ideal: to be free of economic domination and to establish a prosperous and just society.

9. Foreign domination means military oppression, political control, economic exploitation, social desorganisation and cultural imperialism. The indigenous economy were forced to serve the needs of foreign people. Traditional skills and handicraft disappear by the import of cheap products of the western industries. The internal trade of the Third World were decimated in the 19th century and the indiginous and international economic pattern were moulded for the interests of the west. The metropole in Europe and the United States (and Japan in the 20th century) control the development of the colonised nations. She export capital and know how in exchange of high profits and cheap labor. For an effective economic exploitation, colonialism change the social system in favor of foreign interest. She intervene by force or with a "divide et impera" politics. The slave trade decimated many african societies and brought social desorganisation. Culture were destroyed in Latin America (the indian cultures of Mexico, Central America and the Andes), in other continents.
declined.

In the 20th century cultural imperialism made the alienation of the elite in the Third World and the indoctrination of western superiority. (Fannon). The institutionalised education is a school education western oriented and make the people unfit for a life according his social and cultural heritage (Illich theory of deschooling).

10. The colonial period is a time of a truncated development; Nations were alienated and colonial administration is a structural violence. People cannot be, what they should be through the foreign oppression. In many parts of the Third World level of living has declined; there came a proletariat. At the end of the 19th century, when all of the Third World had been divided in western colonies, the Third World were so structured that their development depended on the western powers. This dependency is still going on. Factories, mines, plantations imported machinery, know how from the West; the marketing process of the products is on the hands of the capitalist group. Exports and imports can be manipulated by the industrialised nations.

The indigenous trend of development was cut and it were moulded as an object of the needs of the western countries.

II. The struggle for liberation in the Third World in the process of decolonisation has the following elements:

a. political independance to stop foreign political control

b. economic selfdetermination on the lines of an economic development for the people: to create a national economy

c. social revolution: to come to a new just society with land-reform and a just division of the national income

d. cultural revival: to create the own identity, self dignity and national reliance.

It is clear that political independance without economic self determination means nothing, and that a complete decolonisation should restore the damages of the colonial time especially in the cultural field.

12. Countries in the Third World still live with this colonial heritage and is on their way to a complete decolonisation. After the political independance the main struggle is the economic liberation, to end the
foreign economic domination and to change the world economic and trade pattern. We can see this strategy to a complete decolonisation in the policy of the Third World countries in the United Nation Organisations, especially in the UNCTAD and on the Non Aligned Conferences at Lusaka 1970 and Algiers 1973.

The Present Situation

13. After political independance comes a rising frustration climate, the continuing economic domination of the rich industrialised countries and the impossibility to change the international trade pattern hinder the hope to have a better take off to a prosperous new society. The planning and resources in the Third World are unsufficient.

14. The domestic economy is in the colonial time bounded into the international economic system and this international system listen to the rich industrialised countries. The rules of the international system formulated by the rich countries has been established in international institutions, codes of behavior, legalised and exercised by the rich world.

The intention of the Third World to change this and ends the privilege position of the rich countries is a failure. Till present time the UNCTAD is not in a position to change radically the relationship between the poor and rich world. The wishes of the Third World formulated in the Charter of Algiers 1968 and the Lima Charter 1972 are neglected by the rich. There is no sign that Unctad 4 give the Third World any encouragement.

The plea of Unctad 2 (New Delhi) 1967 to spend 1% of the national income on aid and foreign investment is for most of the rich countries a verbal act.

15. The rich countries (western and communist world) have the military, economic and scientific power and use them on their own interests to control the Third World. In the bargaining position between the rich and the poor world for economic, financial and political problems, the rich nations have more power and can dictate the rules and conditions. The economically weak Third World have little power. For this situation of unequility political science introduce the concept of the asymmetric relation.

This relation is a heritage of the colonial time and continues the economic domination of the past with other forms.
The Third World needs more income for her development budget. This income depends on the prices of export products (oil, copper, tobacco, rubber, cocoa, coffee and so on). These prices and the economic policy of the rich countries (by import restrictions, tax policy, discrimination) are not the results of free trade but of politics.

The international monetary crises arose in the rich countries (recession in the U.S., budget surplus in West Germany and Japan, manipulation of the big multinational corporations) effects strongly the economic development of the Third World. The search of a new monetary system is a matter of the rich western countries (with Japan) the Group of Ten meetings in Rome, Paris, Washington, Brussels) and ignores the wishes of the poor (organised in the Group of Twenty founded in Caracas 1972).

16. As a result of this assymmetric relation is the fact, that the percentage of world trade of the poor is diminishing. The wealth of the rich increase each year. The gap is growing wider. This assymmetric relation results in an increasing economic dependance of the poor and creates a permanent frustration and a danger for world peace. This assymmetric relationship makes a ceiling, a limitation of the development in the Third World. This assmetry thwarts the attempts of the poor to break out the economic and technological underdevelopment. The poor nations are doomed that its struggle for liberation and a prosperous just society have little success. The results of the assymmetric relationship between the poor and the rich world can be seen in the increasing debts of the poor (Unctad analyse), the growing power of the multinational corporations in the Third World (see UN report, ILO report) and the bad terms of trade.

17. In general traditional aid of the rich is an instrument of the rich nations; she is inadequate and very small in relation with the benefits which the rich take from the poor and is neglectable in relation of the profits from economic domination.

Aid is given with political strings and most of it consists of loans and favours in many cases the western private enterprise. Aid is given with the intention to promote economic, commercial and political interests of the donor countries. The big powers U.S., the Soviet Union and China use aid as a political weapon for their big foreign policy. Communist countries, Great Britain and France give aid to countries
that can support their foreign ambitions. In general aid is a tool to influence the other. The fundamental problems in the Third World can never be solved by the present aid policy.

18. The Third World with a lack of know how and financial resources is forced to borrow money, accept governmental aid and welcome multinational with some restrictions. The result is more dependancy. To repay the loans is a burden, that force the poor to borrow more and more. The increasing debts of the Third World, that in 1980 (by estimation) for most countries will be entirely offset by repayments. The increasing debts is a serious problem that chain the poor and increase the dependancy.

19. The prices of raw materials to the rich countries are falling. More production does not mean more revenue. The prices of machinery (machines that the poor needs for the development and comes from the rich industrialised countries) increase.

The terms of trade, from the point of the poor world, is worsening. More production does not mean larger amounts of foreign currencies for investment. The system of world trade can be manipulated by the rich. For example:

a. a country in Asia

In 1971 the U.S. puts the stockpile of rubber into the world trade, the prices of rubber are fallen. Indonesia lost about 75 million dollars with this manipulation

b. a country in Africa

Two thirds of the export of Ghana is cocoa. Between 1953 and 1961 Ghana increased the cocoa export with 71%, but the revenue increase only 23%.

c. a country in Latin America

Multinationals exploit Chili with exhorbitant high profits on the copper mines. Brazil exports coffee; between 1953 and 1961 exports of coffee increase by 9%, but the revenue fell by 35%.
20. The fact is that the rich industrialised countries refuse to change the asymmetric relationship. There is little hope that the Third World liberate herself by own strength, if the rich lacks of political will for a far reaching and rapid change. The liberation of the Third World comes of a change of the government policy and the change of the grass roots mentality. Only a coordinated strategy of the Third World and men of good will in the rich can change the attitudes, the political will and the mentality of governments, organisations, political parties and their leaders. After UNCTAD 3 (Santiago de Chile), there is a tendency of pessimism that political leaders in the Third World do not see any sign of ending the asymmetric relationship.

The Futurological Imagination

21. The futurology has to create an imagination: how should be the future and how to create the conditions to come to that future. Futurology intends to control the future by a formal plan in which all public and personal activities can be canalised into the direction to transform the whole environment step by step (or rapidly, with shocks and accelerated or by revolution) into our final goal. Futurology needs a philosophy and is a secular faith. People must believe that a better and just future is in the make and that the human being can manage the development according the development model.

22. The Third World believe that a just and prosperous society is possible and that men can work to this final goal. The Third World use the concept of socialism (socialism in India, socialism of Egypt, socialism of Tanzania) and is not equal to the western doctrine of socialism. Socialism in Asia and Africa are more pragmatic, the planning of a welfarestate. If this planning is not be done by changing the social conditions, the idea of socialism or a just and prosperous society is an utopia or a political slogan.

The assymery of relationship is an obstacle to make a development model that can guarantee the final goal.

I think that futurology have to make its contribution to apply the progress in the social sciences for changing the human behavior. For what is needed for a succesful development in the Third World is the changing of the behavior of politicians and on the grass roots in the rich countries to maintain solidarity with the human needs in the Third
World. To change the international trade pattern, this can only be done by mutual agreement between the rich and poor world.

23. For designing a development model for the Third World we must have a prospective outlook (Gaston Berger). We can know the trend of development in the present conditions the present resources, power and assymmetric relationship. We realise that for a relevant development model we have to change these conditions.

For this relevant development model are the following elements:

a. the data of the analysis of the past and present situation
b. the futurological imagination: how should be the future
c. techniques of changing men and societies
d. prognose of the effects of these change techniques, the functions and dysfunctions, to steer the development to our goal

As Robert Jungk has proposed for the Council of Europe, the Third World countries can use the idea of a look out institution with the functions:

a. to initiate, stimulate and coordinate scientific future research
b. to stimulate, to create "future creating workshops" to design development models
c. to stimulate discussions by experts about the goals of the development
d. to analyse the problem as a whole (the holistic approach and not from one discipline, partial or too specialistisch)
e. to ask the attention of the policymakers for the key problems and the danger (dysfunctions) areas, the crises issues of the Third World (the structural unemployment, hunger in several regions, and so on)

This look-out-institution mobilise the grass roots and make that all segments of the society will be involved in the transition process. Futurology can make an essential contribution in the Third World. Futurology as a nation design science is a very important instrument for planners in the Third World.
Alternative Development models

24. It is evident that there does not exist one concept of a development model in the Third World. The development in the Third World varies from nation to nation and there can be many different development-models. The development in a more developed country as Chili demands other methods than of Somalia or a country such as Ceylon. The development plan of India has other priorities than the national development of a maritime country Indonesia. It can be, that beside the internal different development-priorities, that there can exist a typical development model for a poor country, that must live in an assymetric relationship with the rich world. The science of art of futurology must give us the answer of this question.

25. I like to pin point that there exist in the rich world the opinion that the Third World going to a welfare state, that has been realised in the rich countries, the Third World must take the same route as that of the First or Second World. This opinion has the assumption of an unlinear evolution, a theory that all development has the same evolution. In a simple opinion, it is the idea, that development model which bring success in the United States or in the Soviet Union or China must be successful too in the Third World. I think this idea neglect the pluriformity of the human development. With all respect, what has been done in China, the Soviet Union and the United States and it is with no doubt that the Third World can learn the lessons of the First and Second World, but the development model in a Third World country is not the same as that of a development model in the western or communist world. If the politicians in the First and Second World are intol erable and want to stress their development model or to condition their aid with asking to accept its development model, we can say of a new form of imperialism or neocolonialism. Countries in the Third World has the right to develop their own identity according to their social cultural and historical heritage.

26. If we make the assumption that a development can be analysed with the value oriented assumption:

   a. social justice: the idea to a just society (structure)  
   
   b. human personality: a just society give the most happiness to the human being (personal aspect)
With these two assumptions we can see four development models

ad a. there is the difference between power and affluent on the hands of an oligarchy

In the Third World we see the traditional feudal society and in the western countries the capitalist state as two examples of the concentration of the wealth on a small group (feudal group, capitalist group)

ad b. the development of the human personality can be with an accent on I. the individual frame of reference

2. the societal frame of reference

The western development model accentuate the individual form of reference and can ignore the social functions of the capital. The communist countries accentuate the societal frame of reference (the neglect of private enterprise as unsocial) and can neglect the personal freedom.

I think that in the human being exist personal and societal aspects and each development model must make the composition of the personal and the societal as a frame of reference.

Diverse Functions and Diverse Roles

27. The non alignment philosophy as a reaction of the cold war is an sich the realisation of the idea that the Third World will choose an own way of development and intends to combine the best results of both development models in the First and Second World. If the Third World search for a development model we want to pin point to the idea of the pluriformity of development models but with a type that is different than the individualistic and capitalist model of the western countries (First World) but different too of the collectivistic socialist state (Second World). The development model of the Third World has a diverse function and the roles of the many segments of the society vary than that of the capitalist or communist world.

All these assumptions and hypotheses must be deep and operational with the new concepts of the futurology. On the idea of a new division of labor of the world society the Third World with her own development model can make a contribution and ask for a typical function and role according her own identity and cultural background. The Third World with the futurology is on the beginning of a new development.
ORGANIZATIONS

RELIGION

By Adam Nordwall

The American Indian has always had a deep abiding faith and humility. His spiritual awareness was one of harmony with his environment, he did not assume his role to be superior to any other living thing that shared the earth mother with him. Despite the tribal differences and methods by which they practiced their beliefs, the over-riding fact remains they all possessed a religious discipline and devotion that pervades their whole conduct.

Since the coming of the White Man, the Indian has undergone or forcefully experienced every form and effort to proselytize him and none has dogged the Indian so tenaciously as the Christian missionary who was found preaching among the Indians in the days when they were free men. They followed the Indian to the entrapment of reservation where they established churches of almost every denomination as well as boarding and day schools.

When the Indian came out on relocation, it was not unusual to answer a knock on the door and see a "blackrobe" (missionary) standing on the door step, bible in hand, ready to complete his mission in life. Only now he was to save them from the evils of society as well as saving the Indian from his "pagan" ways back on the reservation.

The role of white-dominated church groups in the urban community can best be described as mixed. Some have played a major role in the assistance of relocated Indians by the establishment of Indian centers or boarding houses while others still maintain their traditional missionary posture, and nihilistic attitude toward Indian beliefs, little realizing that their predecessors on the reservation have already destroyed their effectiveness by their alienation of the people.
The Indians' efforts at maintaining their own spiritual beliefs was a matter of controversy between the government and the various religious orders, especially after the government agreed that freedom of worship also included Indians. This action highly incensed Sister Mary Claudia Duratschek OSB, Ph.D. In her book "Crusading along Sioux Trails" she stated, "For the government to countenance the restoration of pagan practices under the guise of allowing "fullest constitutional liberty in all matters affecting religion, conscience and culture" among a people for whom missionaries have toiled and died to Christianize, betrays a distorted sense of values on the part of the officials. Pagan idolatry and Christianity are mutually exclusive." This philosophy advanced by the Church helps to explain the awkward position Indian people were to find themselves in dealing with the missionary possessed with this dogma. They said in effect "you must sell your soul to us if you are to avoid eternal damnation." Garrick Mallery, of the Smithsonian, held a differing opinion to Sister Duratschek quoted in the "Picture writing of the American Indians."

"The most surprising fact relating to the North American Indians, which until lately had not been realized, is that they habitually lived in and by religion to a degree comparable with that of the old Israelites under the theocracy. This was sometimes denied in terms, by many of the early missionaries and explorers. The aboriginal religion was not their (the missionaries) religion, and therefore was not recognized to have an existence, or was pronounced to be satanic." The bias of superiority of one belief over another which the missionary attempted to transpose onto the Indian often led to divisiveness among the tribe that extended down to the family and continues to the present day. The means by which a religious order can influence the
Indian community can take an interesting variety of forms. The Pentecostal Church has parishes set up on reservations and Indian communities where in their efforts to bring the gospel to the Indian congregation have decried the traditional Indian song and dances as being un-Christian and evil. Their Indian converts who take the vows of priesthood continue to espouse the Pentecostal cause in the community but not all do it in the traditional church-congregation role.

In California, we have two Indian Reverends; Elgin and Effman, who have worked their way into high positions of power and authority in the state. Reverend Elgin has moved from Director of Intertribal Friendship House in Oakland to Chairman of the Board of Intertribal Council of California and then to becoming Director of Model Cities program for four Indian centers. Reverend Effman has been an executive staff member for the defunct "American Indian United" headquartered in Chicago; he then went on to become Executive director of Intertribal Council of California. During that time, they continued to serve in the capacity of "Reverend" when the occasion called.

Other religious orders attempt to give a public impression that they are deeply committed to helping resolve the plight of the Indian by holding or sponsoring well publicized conferences or hearings. Some of the conferences were a mockery and insult to the Indian who attended only to find non-Indian "experts" listed as the main speakers who made grandiose statements about what they believed to be the best path for the Indian to follow if they were to achieve success in life...all this from a non-Indian point of view and logic. At one large conference of this type held in Oakland, California, a council
chairman listened to the proceedings for several hours and asked for the right to speak to the assembly. He stated "what is happening in this church is the very thing that Indians have been confronted with throughout history, of the white man agreeing among themselves the course of action and direction that Indian programs should follow. Don't you think it is about time Indian people should be involved in plotting our own destiny?" An embarrassed silence hit the audience as Madam Chairman rushed up the podium, cutting off the Indian speaker by saying "We certainly appreciate your comments" and then turning toward the audience. "Don't you think our Indian friend has given us a good reason for holding another conference?" The audience responded by generous applause as the meeting concluded. The next conference was never held as that church group decided in all probability, that their services were more needed elsewhere.

A hearing, conducted by another religious order in San Francisco, in 1957, called for Indian participants to air their grievances and complaints before an assemblage of non-Indians. One Indian speaker prior to the meeting expressed his concern about the purpose and intention of the hearing by asking an attorney, who was helping in the organization of the event, if this might not be "another exercise in futility" on the part of the Indian. The attorney gave assurances that the church was serious in their desires to help. Some months later, the Indian called on the attorney and inquired as to the follow-up action the church was to undertake in meeting some of the needs expressed in the hearings. The attorney replied the church appropriated funds to hold the hearings and no funds were allocated for program development.
The foregoing incidents are just examples of the many such incidents that have taken place in urban centers throughout the country which tend to frustrate, anger and alienate the Indian.

In complete contrast to the practices of the white controlled religious orders in those orders that involve Indians on all levels, the American Indian Baptist Church uses little of the missionary approach at bringing in new members. The involve themselves in the Indian community in such a way as to be hardly noticed utilizing the "soft sell" approach in acquiring new members. The Native American Church maintains perhaps the lowest profile of all in the community; they never advertise or solicit new members and it is often difficult to find out when and where services are to be conducted. In spite of these deliberate roadblocks to the curiosity seeker, the Native American Church continues to thrive and grow. The Native American Church is also the most controversial as it is more commonly called the Peyote Religion based on the ceremonial eating of a cactus bud found in Mexico called Peyote (Lophophora Williamsii.) Their ceremonies utilize native techniques and songs that also incorporate teachings and practices of evangelical Christianity. The Christian Churches reacted with abhorance at what they termed the joining of Pagan rites to Christian ceremony and were strong in their denunciation of this practice. "Masquerading under the high sounding title of Native American Church, Inc. under the laws of Oklahoma in 1925, and protected by the First Amendment of the United States Constitution, the pernicious evil stole in among the unsuspecting Indians."

(Crusading along Sioux Trails P. 212) The good Sister used the following adjectives in her description of the events surrounding the ceremony, "savage instincts," "paganisms","deluded Indians" "most
"revolting", "idolatrous worship." This one example of how the churches were an integral party to the cultural genocide that threatened the Indian. Shame and humiliation along with beatings and other forms of degradation were used against him if he were to pursue his traditional ways. The Indians religion, like every facet of his life, is subject to extensive study by anthropologists, sociologists, etc. who attempt to give unbiased and objective reportings of their findings. "Indians say the peyote ceremony "belongs to us." Peyote came to the Indians, not to the whites." "Some Christians may not realize how much satisfaction they derive from the companionship of church membership as well as from the worship itself. The Indian religions of Shakerism and Peyote are supplying that companionship which many do not get in the Christian church. Perhaps, they will in the future, for many Christians are now awakening to this need. Among the Indians, there are today thousands of really convinced church members. Perhaps they will have something to contribute to Christianity's future." (Underhill P. 268-269)
A DESIGN FOR LIVING

A DESIGN FOR DEVELOPMENT

By Romesh Thapar
Journalist

1. I am going to share some tentative thoughts about a subject which obsesses us, but about which we say the usual things because we are afraid of breaking the economic-political-social framework of confrontations within which we have become accustomed to debate. I speak of the free enterprise and centralised planning concepts. Both groups of protagonists have found themselves in this race for more or less identical goals, which the developing societies are unfortunately seeking to imitate. The goals demand the acquisition of more and more material goods at the cost of social growth. This is the value system which underpins both the planning frames. The deep cynicism which is today sweeping the advanced protagonists of these perspectives is illustrative of the confusion which grips us. We have, in fact, failed to control for human good the revolution of science and technology which is already upon us and we are reluctant to admit it. Learning from the past, when the industrial revolution was allowed to spawn its many aberrations, we have to sharpen our awareness of the consequences, of present trends and act now to motivate our people into what will inevitably be a new value system capable of nourishing the disciplines which we need.

2. For developing societies like India, this matter is doubly urgent. Whereas the developed world has completed its industrial revolution and is now deeply convulsed by the first repercussions of the revolution of science and technology we are coping with both revolutions simultaneously. The complexities are, therefore, immense in terms of establishing priorities and utilising our limited resources to the optimum extent. All that our concept equipment consists of at the moment is a mix of the theories of the Fabian England of the thirties and the free-booting USA of the early part of this century. The mix is irrelevant in today's situation. In this context, when I speak of the challenge of science and technology in developing societies, I summarize it in the phrase, 'two
revolutions in one.'

3. Because we have been so thoroughly brainwashed by present-day mass media, I will have to dwell somewhat on the malaise which afflicts us.

4. All societies are evolving organisms and we as the moulders of these societies must learn from the extension and liberation of human knowledge in the last 200 years. If we are all in the process of evolution, we must understand what we are evolving towards. And we must project our comprehension of human activity towards achieving this vision. Clearly, only that change is worthwhile which humanises man. We have, in other words, to conceive this change, engineer it, and then make it part of the consciousness of man.

5. When we look around this world of ours we are astonished not so much by contrasts in social patterns within human societies as by the similarity of the problems which are being sparked in the course of rapid scientific and technological advance. This general phenomenon, unaffected by the fact that development in various regions is at different levels and is planned at different speeds, does suggest that we must now address ourselves to the question of fashioning what has been called 'the understructure' of possibly the first true world civilization.

6. It is a challenge which cuts across East-West and North-South divisions, for if the under-structure is defective or unbalanced it will topple the edifices we are seeking to build. The past tells us how human society became a slave to its technology. There is a danger that technology may remain a deity -- whether worshipped in high-powered mass media or projected in the neon lights of metropolitan cities or expressed in the aspirations of the developing countries. It must become what it has always been intended to be -- a tool in the hands of man with which to improve, if not perfect, his life on this planet. This task demands the collective thought of the creative intellectual workers of the world.
7. If we were to reduce the understructure to its various components, we would find that the most critical element is the value system which has come to be associated with what we call 'a standard of living'. More and more are people looked up to for what possessions they have, or what they own. Status is counted by the make of your car, your refrigerator, your radio. What is somewhere being forgotten is that all these goods were only meant to assist man. The means are, and in some societies have become, the end. We are thrusting into the future without any clear idea of the quality of life we want to give ourselves.

8. This lack of objective affects all societies, developed and developing. Those which have advanced to a certain stage of affluence are in the grip of wasteful living, despite backward enclaves. Those which are beginning to advance, and which already possess pockets of affluence, are damaging their limited resources in imitating wasteful standards.

9. If it is our intention to humanize man and to elevate him above his present wretched conditions to a level of simple, aesthetic living within the foreseeable future, then there can be no running away from the forgotten business of making a critical assessment of the relevance of so-called affluent standards to different cultural patterns, and of the specific needs and the more fundamental values by which man should live.

10. Our world is witnessing traumatic transformations in science and technology. In their totality, these transformations should have reduced the tension in man's life. That is the function of progress. But, in actual practice, the opposite is true. With every advance, man seems to be more and more bound to the routine exercise of living defeating the very purpose of man's effort -- leisure. The uncontrolled impact on man of all this development has dehumanized the very processes of development, but the world is at last becoming more conscious of the pressures which push us into habits and value systems which generate social tensions, exhaust and destroy the gains of decades of endeavour. Voices are being raised to warn us against our accepted notions of what constitutes the good life.

11. Indeed, the more one investigates the prevailing concept of 'a minimum standard of living', the more one is surprised by the excessive
human needs and interests embodied in it. Yet, ironically enough, all economic and social planning is conditioned by our unthinking acceptance of the inevitability of enthroning such a standard!

12. If the past of man is a teacher, then let us learn from it.

13. Many factors contributed to the decay of the great civilizations which flowered on this planet. It is significant that decadence was "sown" when the civilization of the past reached a level of contemporary affluence, when opulence and luxury began to eat their way into the firm fibre of the people. We are again, in our own times, witnessing some such development despite the glaring contrast of depressed living standards which prevail for an overwhelming majority of mankind.

14. Today, conspicuous, wasteful affluence is not confined to this or that region. Pockets of such affluence exist everywhere, infecting values, damaging human relationships, creating alienation within the orbit of affluence and feeding the desire for imitation in circles not-so-affluent. Indeed, international tourism, a major world industry, is a leading influence in this direction despite its cultural pretensions. Every survey indicates that the preferences of the affluent dictate tourist infrastructures the world over.

15. In the context of a population which increases more rapidly than our present capacity to mobilize resources, and the need at every level intelligently and creatively, without frustrating individual expression, to control the demand for more and more of what is not really essential for the development of man, it is necessary to inculcate new principles of civilised living and at the same time to engineer the basic materials which are an integral part of it. This design for living becomes in a sense a design for survival on an essentially human plane of dignity.

16. The rationale for such an approach is compounded of the realities around us. We speak with feeling about the simple, satisfying life, the cutting down of unnecessary consumption, the perils of status symbols which distort tastes and values, the contradictions between thought and practice which makes a mockery of the pretensions of our civilization. Yet, little is done at any level organisationally to translate feeling into action.
17. On the one hand, we are the unconscious proponents of a way of life based on waste. On the other, to create the material for this waste, we work overtime. In the process time itself becomes precious, something which is employed to amass the resources for wasteful spending upon which individual — and now, even national — status depends.

18. This equation between individuals and the nation is not un-scientific. If we were to subtract the time taken each day to produce materials for the wasteful life in affluent enclaves the world over, we would realise what a self-defeating business it is because it destroys or restricts the possibilities of creative leisure, to increase which, after all, should be the objective of all social and economic activity.

19. And this is a cult which is taking root everywhere. Dreams of a life as lush as in the glossiest of magazines reflect natural desires and strivings, but these should be given fresh and meaningful content if we really intend to ensure a stable and meaningful existence for the depressed millions who comprise two-thirds of mankind and who are rising to claim their place in the sun.

20. This approach has nothing in common with the activities of those who romanticise primitiveness, who seek relevance in a revivalist code, or who search for personal salvation in the extremes of nihilism and regimentation. In fact, these are the aberrations spawned by the unresolved contradictions developing in our world civilization.

21. The widening gap in the technological development between the developed and developing nations produces a similarly widening gap in the living conditions of the people. With increased communications, this produces in the developing world a set of aspirations which are identical to the aspirations of affluent societies, but which have no possibility of realisation. The frustration of this unfulfilment increases with every technological advance and reduces the possibility of any base for lasting peace. The mind of man must therefore apply itself to this problem. It must evolve a set of goals for the future which are relevant to both societies.
22. To confront the challenges facing us, we have to assess, on the one hand, the complex crisis of peace in our shrinking world and, on the other, the crisis of the human mind reacting to the situation which surrounds it. The two crises are closely related. They have to be tackled simultaneously. Effort at one level is defeated by inaction at another. Our apparent inability to grasp the total situation makes us victims of the very forces we create and over which we have less and less control. Much has been written about this tragic phenomenon, but the striving to locate the septic focus in our system is halting uncertain and inhibited. It is here that we can make our most significant contribution.

23. If we speak of the mind, we have to understand how helpless this mind has been made by its most triumphant achievements in science and technology. The leap in knowledge during the last fifty years, the pushing back of the frontiers of the unknown, has given man a variety of incredible skills. However, the very fact of the leap has denied the opportunity to the mind of man to adjust to the change, to discipline and condition it for the general good. The dramatic advance of science and technology, so rapid as to deny the mind the time to grasp its implications and hence devise correctives, is not studied in terms of its impact on human relations and living.

24. We have got into the habit of running away with the notion that invocations about co-existence, mutual understanding and cultural exchanges are enough to build the defences of peace in the minds of men. We forget even as we mouth these phrases, that we are in practice linked to activities which are sharpening political, economic, social and cultural polarisations in our world. It is these polarisations which are increasingly a threat to ordered living in a shrinking world. Indeed the revolution of science and technology firmly possessed by the advanced nations, with its built-in leap effect, intensifies such polarisation between the developed, the developing and under-developed regions of our world. We cannot accept these trends as inevitable, for they are self-destructive. We have to evolve correctives on a world scale, even as we do within family, a community or a nation.
25. The despair which engulfs the mind of man is all-embracing. It cuts across the frontiers of affluence and poverty. It cuts across power elites drawn from various classes -- or at least the thinking sections of these elites. The 'flower children' sprouted by the jungle of affluence, the volatile anger of the impatient in the sprawling regions of poverty, the desperate moves of the cultural revolutionaries, the revival of anarchist thought, the nihilism of the sensitive and the apathy and cynicism of the millions of educated youth are, in fact, a part of the single trend which reflects reactions against the social frame within which we have to operate. It is imperative that at this juncture in our affairs, when new science and new technology have created the clear possibility of a massive forward thrust, we begin an incisive assessment of the relevance for the future of the social frame within which we plan our life. Is it viable in the context of development? Does it belong to a past epoch? Are we guilty of living by values which are no longer valid? Crises of this kind have engulfed past civilizations. Is our civilization on the edge of some such catastrophe? These questions concern both the mind of man and the quest for well-being on our planet.

26. The scientific and technological revolution, pushed in various directions by considerations far removed from the essential interests of man, except of course in such accidental conjunctions as happen to serve him, has created an unending maze from which it is difficult to escape. Unless we are able to direct this process on the basis of profound understanding, we shall find our condition becoming inevitably more complex. The first efforts to evolve models for living and behaviour in the future, and to use these models to discipline our present actions, constitute a recognition of the need to assert our hegemony over the knowledge to which we have given birth. But the efforts remain few and far between, and suffer from the desire to preserve such norms as we are accustomed to. This is particularly true of our developing societies. For instance, the integral nature of our village community is being torn up by the surge to reach the town, or to set up the small village town which reveals all the ugliness of ill-digested, borrowed ideas, bereft of either traditional values or those of a technological age. Qualitative changes demand the forging of new weapons, both intellectual and institutional. One such weapon is the making of prototypes -- in all the items of man's
normal use. Prototype combining advanced technology with the traditional aesthetics of different peoples can be evolved through the cooperation of the developed and developing world, so that these prototypes compete with the synthetic tinsel of what usually goes by the name of 'modernism' in our societies. Such prototypes, mass produced and marketed, powerfully competitive, will cut waste and reduce the developing gap between the advanced and less advanced. Whether in matters concerning food, political behaviour patterns, constitutional structures or social assertions -- matters inextricably tied up with the all-embracing question of peace -- we must now realise that the old terms of reference no longer have validity.

27. The concrete jungle that is the modern metropolis is enthroned as the city of tomorrow. Only stray voices are heard to challenge this travesty of what a city should be -- an efficient human mechanism intended to manage both the problems spawned by science and technology and to enrich man's spirit. The sum of loneliness and frustration has only been increased by modern urban development. The growth of the concrete jungles is paralleled by the growth of psychiatry. Man's environment is desecrated by man. He is unaware of what he is doing, and has done, with himself.

28. The traffic jams of our major cities, for example, have become one of the features of urban growth. The automobile, intended to speed movement, has now become a hindrance to that movement. We merrily continue to produce the material which consolidates the traffic jam. The standard has been established and then elevated to the principle of what is called 'the good life'. There is built-in anarchy in the process, but who has the courage to cry halt to this aberration -- and to others too numerous to detail?

29. The standards of living prevalent in the affluent pockets of the world are also deified. The urge for more and more of what we do not really need is axiomatic to present growth. The enormous waste involved concerns not just materials of all kinds but also involves massive, meaningless effort by men and women, an effort that sparks explosive psychological tensions and dries the springs of creativity. There is time for little else except competition at the level of ostentation.
30. Societies which claim to live by other values are no better. In socialist societies, there is a 'me tooism' not a 'better than', a mental state which startles the sensitive observer. Here, despite social controls, the cities rise like jungles, the traffic jams are consciously sought, and so are the wasteful standards. No genuine alternative is posed. The choice before man remains what it has always been -- conform or perish. His plight is tragic for, unless the alternative is blue-printed, he cannot be otherwise motivated.

31. The infection of these obsessions spreads throughout the developing world. A city such as Bombay, in my country, congeals within itself all the features to which I have referred. It becomes the symbol of the future to more than five hundred and fifty million of my people. Our planners know that to proceed along this path is madness. Yet we proceed along this path. When China rejects this path we are amused. True, the cultural revolutionaries are doomed. They are trying by official fiat to skip a whole human experience in a world already shrunk, a world soon to be ringed by communication satellites which, willy-nilly, will internationalise all the values and standards prevalent in the most advanced societies today, those same self-defeating values and norms. China cannot isolate herself. Two hundred years ago her cultural revolution may have been a success. But not today. Science and technology can no longer be defeated by slogans. Other answers have to be found. But the question raised by China cannot be dismissed.

32. I have dwelt at length on what I consider to be the heart of the crisis. We seem to be unaware that the very processes of growth we witness today will divide our world into distinct areas -- the highly advanced, the advanced and the camp followers. The millions of Asia and Africa will soon learn that within the framework of the scientific and technological revolution they cannot possibly make up the leeway of centuries -- that is, unless they evolve a dramatically different alternative, spell it out and campaign for it. I shudder to think of the impact of this realisation upon the mind of Asia and Africa, if alternatives have not been worked out. Either there will be deadening apathy, with all its accompanying aberrations or there will be explosive anger -- a mix of starvation, frustration and obscurantism -- spilling over frontiers and sparking responses which could lead to mass annihilation.
33. If you should feel there is exaggeration in what I say, then it is for you to explain that the processes of growth we witness now have another, different impact. There are vicious circles within vicious circles. If disease is conquered, there are more mouths to feed. Bursting populations, fed on rising expectations popularised by the mass media, demand standards for which resources are not available. Resources for significant development can only come from the surplus of the affluent. But the affluent are embarked on a course of development which rules out any surrender of resources to the less fortunate of this planet. Today man's effort is without a disciplining philosophy which conditions our thrust into the future.

34. We can no longer look upon our world as we have done in the past. Naturally, when dealing with nations, the complexities are greater, more ramified, not easily resolved or untangled. But the business of returning to fundamentals has to begin.

35. The pace is being set by those who possess wealth and power, by those who are arrogant enough to believe that the culture they have spawned is the medicine for all. In every developing land the virus has been planted through those who imitate mechanically, through patronage and sponsorship, even through innocent activities like cultural tourism. Two-thirds of mankind is being made to conform to a pattern of life which feeds alienation and which, significantly, is being rejected even by the sons and daughters of the elites of the advanced countries.

36. This is important to the dialogue we are embarked upon. The growing alienation in the industrial and technological societies -- a vital factor in the crises of cultures -- is now sought to be transplanted. The developing nations of Asia, Africa and Latin America, which receive this supposedly civilising touch, are now discovering that it strikes a parallel and more dangerous alienation - an alienation which polarizes the elites from their own peoples. This cultural disintegration sharpens the divisions already existing in societies which have yet to resolve the problems of inequality.
37. The intensity of this alienation-cum-polarisation in our part of the world is also fed by the revolt of youth throughout the world who reject the established norms and perspectives of man's effort to advance. Advance in the directions indicated is considered retrograde, conformist, inimical to freeing the spirit of man.

38. There is now a deep contradiction between the value systems of established societies and the future to which we aspire. It is an explosive situation. The anarchism, nihilism, frustration and anger inherent in this situation can only be tackled by an alternative value system which has been carefully worked out, justifiable in humanistic terms, capable of providing the answers to the challenges posed by our massive entry into the era of science and technology. We have failed to create this value system of our era.

39. An antiquated value system cannot provide the base of human activity at this critical juncture in the lives of two-thirds of mankind who, as a result of the population explosion, demographically, have become younger. The enlightened among them realise that imitation of the rich nations invites traumatic shocks which our complex societies are unable to cushion.

40. In other words, the developing nations must learn from the tribulations of the developed.

41. We cannot permit ourselves to become the protectors of a meaningless and explosive status quo. We must become the instruments of enlightenment. We must sketch the new perspectives before man, and make these perspectives the guidelines for all his activities. I am asking for a revolution in social thinking to match the revolution of science and technology. Such a 'confrontation' -- if it can be so described -- is inescapable, for although I speak of the developing world, the roots of alienation are common in both worlds.
42. How do we go about it? What is called for is the sketching of new perspectives, new priorities, new attitudes and new assessments. This is no longer a job for a single man or single men working from their ivory towers. The very logic of the revolution of science and technology dictates a coordinated, collective effort of various specialisations for, in today's world, a scientific or technical leap in one sphere heavily impacts human activity in general. Our failure to understand this element of the revolution which is on us blunts even the limited probes we have attempted to make. In other words, we had better stop looking for charismatic magicians and get down to the dull business of gathering result-oriented specialists to pioneer a new social structure.

43. At the time, we must become the implacable enemies of romantic do-gooders. The human condition is such that we tend to look for shortcuts to our dream-world. There are no short-cuts. We are in the midst of 'two revolutions in one'. We are relevant only to the extent to which we locate our aberrations and move in coordination, collectively to cure them. This is why I feel that if economic theory dominated the first half of this century, social engineering will have to play an increasingly pertinent role in the second half of this century.

44. Let me explain. Scientific agriculture inevitably dictates larger holdings, giant farms for staple crops and more intensive small-scale cultivation for supplementary foods. No single mechanical pattern can be imposed because of ideological dogmas. Similarly, we have to demarcate the areas in industry. To encourage centralised monoliths in every branch of industrial production, on the basis of dehumanised economics which ignores the social dimensions of growth, is to invite disaster. Industrial growth must be so designed as to prevent an explosion or urbanisation as we have come to understand it. We must organise an even spread of production points, large-scale and small-scale. We must not think in terms of cities which are concrete jungles, but in terms of the spreading habitat. This immediately poses the question of preventing through natural processes the migration of millions from village to town. In other words, we have immediately to conceive economic growth and the resulting facilities in such a way that the migration is halted. Village crafts must be equipped technologically to link to a national market and
a whole sphere of activity must be reserved for them. We do not want a 'do-gooder' approach but a highly scientific technical exercise. Facilities like TV should consciously be concentrated in the rural areas to 'anchor' the population. Indeed, top priority must be given to bridging the gulf between village and town - and the cost must be calculated in perspective, in terms of the totality of human growth, or else the effort of decades will be drowned in the anger and frustration generated in the shanty towns we create.

45. If you accept the broad sweep of this argument, then the details inevitably follow. Our people cannot rise out of mud hovels unless we create alternative building materials which possess the qualities of mud, are of greater permanence and cheap, and permit the creation of new rural habitats. Tensions in towns cannot be ended unless we solve the problems of mass housing, mass transport and mass consumption on the basis of a new and aesthetic definition of living standards. Environments will be destroyed unless we find integrated approaches to the business of living. And so it goes on, this business of consciously motivating our people to skip the aberrations of affluent anarchy. The task is not easy. It cannot be ordered. It can only be achieved through free choice, through better alternatives, properly projected and marketed. Indeed, prototypes will have to be engineered and made to compete with the trash. We have this yearning - and the talent - in our developing societies. We must build the dream of the future, and motivate our millions in a new design for living and development.

Otherwise, we shall only be seeking patterns of growth which have been enthroned in the developed countries and which are being rejected by the enlightened of those countries.

46. I believe that the disciplines of the approach I have spelled out will mould a value system far superior to anything that the present developed societies in the West and East have thrown up. The ideologies in which we have been brought up are irrelevant in terms of the 'two revolutions in one' phase, which I have dwelt on. Science and technology will fashion a new ideology, if you can call it that. It will have to be based on centralised planning - but with a decentralised implementation system. The class structure will in the process undergo fundamental changes for the engineering of the total growth of man inevitably places
power and initiative in the collective functioning of educated and trained men. In other words, the classic theory of revolution will have to be replaced by a rather complex system of action and reaction and multi-level impacts on social structures.

47. In short, we must address ourselves to a new type of society. When communication satellites ring the world, imagine the impact on behaviour patterns. When aircraft carry a thousand passengers, imagine the devastating impact on the medieval customs controls and health regulations prevalent at airports. When cities double their population, imagine the impact on local administrations. When science and technology dominate the planning process, imagine the impact on the "generation gap", on the very processes of democracy. What I want to say is that you cannot philosophise without a knowledge of the basic laws of science and technology. This fact will become more sharply underlined in this second half of our century.

48. We in the developing countries should be more concerned with these challenges as we will be expected to cope with them at very short notice and within a very limited time. Unlike advanced countries, which are able to adjust over decades to the repercussions of the industrial revolution and, now, the revolution of science and technology, we have to cope with these problems on a kind of permanent emergency basis. Politically and socially, too, we do not possess the institutional support for effective action. We must, therefore, place ourselves two steps ahead of the developing situation. You can well imagine the task ahead.

49. These are, as I stated earlier, tentative thoughts. I have gathered together some of the ideas which I have been trying to develop in the hope that we might be able to end the uncertainty which grips us. Any new thinking always encourages cynical responses. Our job is to spark new thinking. Out of the turmoil of ideas something valid is bound to emerge.

50. Social anger is good – but only if it possesses social perspectives. Unfortunately, much of the anger of today is anarchistic, without perspective. It is here that we have to intervene with passion and faith, to find the perspective. Then, and then only, will meaningful policies evolve.
MAN AND HIS ENVIRONMENT-DESIGN FOR LIVING

Draft resolution submitted by Czechoslovakia, Finland, Japan, India, Mexico, Poland and Yugoslavia.

1. Recognizing that UNESCO is founded on the belief that there can be no true peace unless there is a consensus of the mind for an order which the mind esteems, that in the process of evolution all societies should ask themselves what they are evolving towards;

2. Remembering that man is at once the final objective of all human action and the creator and inheritor of all progress, that the problems posed by the relationship between man and his environment are among the most complex in today's world and call for urgent attention in all their aspects;

3. Realizing that the quest for a better life is conditioned by the value system which is at the base of what we call a standard of living, that in the context of man's intention to humanize his life and to discipline the striving for more and more of what is not really essential for his development many peoples and cultures may deem it necessary to re-interpret this value system and in so doing redesign our concept of 'a standard of living' to remove from it its wasteful elements;

4. Noting that the modern forms of urban living throw up more and more problems which militate against the efficiency by which man organizes his life, that, for example, the health of man is threatened by air and water pollution, by the congestion of space, and even by noise which has become a problem, that his natural habitat is being despoiled and that, if unchecked, these processes will defeat the very purpose of man's advance;

As a result of the recommendations made by the Nehru Round Table, the Indian delegation to the 14th General Conference of UNESCO moved a resolution suggesting that UNESCO should launch a new and major programme entitled "Design for Living".
5. Considering that our world is thus witnessing traumatic, uncontrolled change in living and environment, it is imperative properly to conceive this change, to engineer it and make it part of the consciousness of man, and that the talent and experience of the world's outstanding thinkers, educationists, designers, architects, scientists, technicians, and communicators must be brought together in collaboration to interpret, design and implement the competitive alternatives for man in growth, and so attempt the beginnings of an answer to the fundamental needs of our age;

6. Declaring that by sustained and practical experimentation among communities, by consciously propagating values which oppose waste, by popularizing the healthiest elements of our heritage, we must assert the need for harmony between man and his living environment and project it in the scientific and technological forms of a civilized society;

7. Confident that the immensity of the challenge compels thinking minds everywhere to address themselves to these inter-related problems which, if resolved, could open the way to an integrated approach to development, that the time is opportune for concerted international action based on UNESCO's initiatives to obtain a global view of the challenge and responses to it;

8. Recommends that Member States
   a) give increased support to research, documentation and educational activities in this critical area of human activity;
   b) undertake experimental projects aimed at creating an harmonious environment and integrated living standards which correspond to man's physical and spiritual needs; and
   c) present their view and experiences to the Director-General on his many-sided problem during the preparation of the future programme.

9. Requests the Director-General to prepare, in consultation with Member States and appropriate inter-governmental and non-governmental organisations, for submission to the fifteenth session of the General Conference, a major long-term project of research documentation and operational action on the basis of the resolution with special emphasis on:
a) the collection, analysis and distribution of existing data;
b) the furthering of basic research and experiments;
c) the promotion of creative intellectual activity, including scientific and professional collaboration;
d) the provision of facilities through exchange of persons for the effective transfer of knowledge and expertise between countries;
e) the organization of supplementary high-level training on an international basis; and
f) the diffusion, through education and mass media, to the general public of information which would make it aware of the vital importance of the questions raised in this resolution.
RECOMMENDATIONS OF THE 'DESIGN FOR LIVING' SEMINAR HELD IN NEW DELHI IN SEPTEMBER, 1967

PREAMBLE

There exists in the world today, crisis at all levels of man's life and environment.

There is a fragmentation, a breaking down, a search for identity and meaning.

Explosions in scientific knowledge, a shattering of frontiers, a new technology, extensions of the dimensions of space and time, new sources of energy, have given man as never before a potential mastery of his environment.

It is possible for man today by using the knowledge and resources at his disposal meaningfully to solve the world problem of food, shelter and education.

The category of the contemporary tragedy is, however, that with all man's knowledge and resources, the gap widens between affluence and want, knowledge and ignorance.

There is enormous waste and enormous hunger, enormous power and enormous insecurity.

A lack of equilibrium in resources and action has generated pressures at every level of man's environment and inner being.

Man has walked in space, he has photographed the hidden face of the moon, but in himself man remains fearful, insecure, fragmented. There is growing alienation, a breakdown of yesterday's values and behaviour patterns, an incapacity for action in the present, a failure to comprehend the fantastic complexities of life or to keep pace with man's immense knowledge.

Man appears incapable of acting and controlling the tools and instruments that he himself has created.
A. THE PRESENT SITUATION - INDIA

When we consider the condition of man in India, we are considering the
condition of 500 million people. This is one-seventh of the human race.
This is truly the condition of man, man with a capital M.

Man with a tremendous potential. Man with tradition, patience and dignity.
But man with nothing, living at the lowest level of economic existence.
Living in one time dimension but separated by centuries from contemporary
man's stupendous knowledge, his resources and his technology.

The population explosion in India has taken place at this, the lowest
level of man's economic existence. This has meant an increase of poverty,
a further sharing of nothing and a choking of existing things.

The population explosion has generated pressures in India on the environment,
on society, and on the interiority of man.

This pressure of population is visible in bulging cities, in houses, in
schools, in growing unemployment, in breathing and living spaces.

This pressure on the outer and inner life of man has generated anxiety,
insecurity, callousness and growing violence.

There has been a breakdown in family, in behaviour patterns, in traditional
values, in the living environment, in the traditional forms and objects
of daily use, in producer and consumer relationships.

There is the contradiction of a small intellectual elite, with sophisticated
mind and training, with access to the new knowledge, new tools and new
sources of energy, operating in the same environment as the peasant in his
fields or the village artisan with his centuries old tools.

There is in India a profound imbalance between production and consumption,
tools and technology, affluence and want.

A factor of vital significance in the Indian situation is the continuing
revolution in communications.

The building of roads, new methods of transport, the bicycles, the radio,
the cinema, the electricity, increasing emphasis on rural industrialisation,
has completely shattered the old rural-urban relationships. Distances
have shrunk. Frontiers in every direction are breaking down. Steel,
aluminium, cement, plastics, all the new materials produced by technology
are altering man's environment and his way of using things.

The establishment of channels of communication through which the new knowledge and technology can reach interior secluded areas, have opened up centuries of isolation and introduced into the situation entirely new challenges and tensions.

The new technology, progress in economic terms, has also meant a shattering of traditional form, object, function and relationship. The introduction into the rural situation of the symbols and artifacts of industrial production and mass culture have demanded from the peasant, living in a traditional space time continuum, the capacity to discriminate and exercise deliberate choice.

The capacity to choose and to take decision based on observation and analysis has no place in a tradition-nurtured society and faced with the complexities of choice and altered meaning and relevance, man finds himself bewildered and insecure.

There is in India today a situation of existential complexity. A country with centuries of traditional memory faced with the shattering of symbol, form, function and meaning. A situation where there is want and unharnessed resources, degradation and dignity, ignorance and illumination, violence and the capacity for immense peace.

A situation where there is increasing alienation of man from the happenings in the country. A growing anxiety and paralysis of will.

B. Demand of the contemporary moment

Man's magnificent achievements in the outer, the physical, has not let to an extension of space within.

The tremendous technological and scientific explosions and the atomic acceleration of the pace of change has not led man to increased outer and inner security.

Man is discovering that technological efficiency and affluence does not mean extended awareness and a deepening of the human dimension. There is need in the world for a multi-dimensional and a multi-disciplined approach for educators, designers, scientists and communicators to question anew the problems and values of man and his environment.
There is need to evolve through theory, experimentation and prototype the environment and artifacts necessary for a minimum standard of life.

There has to be a vital concern for elimination of waste, human and material.

There has to be feeling of sanctity for life and environment.

The contemporary moment demands a search for an extended awareness capable of receiving and acting in the present.

A space, within and without, an absence of pressures where man can discover his relationship to man, to nature, to the machine, to work, to leisure and to himself.

C. Statement

Science and technology, enquiry, observation, methodology, analysis and prototype form the foundations of contemporary culture.

No society, affluent or under-developed can afford to ignore or neglect this magnificent heritage.

But, the contemporary situation demands that to science and technology has to be added the dimension of compassion -- a new space, an extended perception, a simultaneity capable of containing the totality of the past and the potential of the future. Capable of action that is not fragmentary. A state that has the depth and energy and power of the contemporary moment.

Man needs wonder and delight, frugality and compassion, reverence and cleaving attention, transforming the landscape of science and technology.

IMPLEMENTATION

How can man be inspired and involved in the present day with this new attitude to his fundamental problems that will affect him and his existing organisations and institutions? This calls for a coming together of disciplines, intertwining of efforts, of engaging the best minds of the day.

Already many specialised research programmes in various countries in special sectors are going on which have great significance, but these research activities encompass only their specialised independent fields.
Occasionally, for the convenience of such research, allied disciplines are brought into play. But even then the purpose of such research remains restricted to its own ends and does not embrace the whole content of man's destiny.

Such research and investigation which has any relevance to our programme in all sectors of science and technology should be coordinated. Moreover, new coordinated research and investigation should be sparked off and launched.

Steps must be taken to involve governments, institutions and individuals to make them aware of this need and, through that awareness, to move into this programme.

The first priority is to be given for starting discussions — discussions which will lend to workshops and pilot projects. Such workshops and pilot projects will centre round conceptual problems rather than specific schemes.

These workshops should cut across all barriers and truly become a meeting of minds from all cultures. This will enable developing societies to skip stages through which the industrialised societies have already passed. It will make it excitingly possible for the best minds to work out experiments for the most backward places in the most advanced terms.

Many old societies in turn may be able to provide interesting answers in terms of stability, beauty and integration which may give new meaning to leisure in affluent societies. The possibilities are endless.

It is therefore recommended that the UNESCO should re-orientate a major part of its activity to this new understanding of 'Man and his Environment — a Design for Living' in the fields of education, science and technology, culture and communications.

More specifically, each national commission should suggest its own order of priority for discussion, workshops and projects so that the combined experience of these national seminars can lead to the contours of immediate activity on an international plane. To this end, this seminar in India recommends the following.
WORKSHOPS

It is the young who will build man's future. They therefore must receive a new education which will equip them for this task. The main tasks centre around man in his urban, rural milieu and environment. Therefore, four main workshops are suggested.

1. Youth Participation

If a new design for living is to emerge and spread, it is evident that the involvement of the youth in creating both the new outlook and values and the new programmes of action will be indispensable.

In India, the problem of youth participation has assumed great importance and urgency and it is imperative that those interested in the creative development of the society and the richness of individual living should pay full attention to this problem.

a) As a first step, it is proposed to set up a workshop on youth participation. The workshop will be composed of the most sensitive minds in the country familiar with all the fields which are of significance to the experience of the youth. The workshop will consider all aspects of the problem.

b) After the study stage, the proposed solutions will be carefully scrutinised with the active participation of the youth and some priorities will be allocated to the various programmes in the context of resources and practical feasibility.

c) The selected programmes will be tried out in different situations in order to test their effectiveness. This stage of action is important as the pilot projects would reveal how the involvement of youth psychologically can be ensured and fully related to practical activities.

2. Education

The culture of our times -- the contemporary moment -- demands an educational situation where the concern of the teachers, the communicators, is not only to impart knowledge at the highest level -- methodology, observation, precision, enquiry, the capacity to use mind and hand - but to awaken in the child the capacity to be aware, to be awake in the present. A mind that has the scope and the attention, sensitivity, as well as the compassion
to behold outer and inner phenomena; a mind that can move swiftly at the same pace as the contemporary moment, this is the great need of our times. A new and dynamic process of education should nurture such a mind. We feel that there should be a search for such educators and such educational institutions, and that they be selected and made the central core of the programme 'Man and his Environment -- a Design for Living'.

A few institutions of quality and promise, well equipped to impart the new outlook and training at all levels of education may be selected for further development. Inter-disciplinary research and studies at a few university centres should clarify and advance the concept of this new education. One concrete programme should be to establish a Centre of Study and Research at the highest level, comprised of mature research fellows drawn from universities and institutions of higher learning, engaged together in a continuing process of reflection on all aspects of man and his environment to achieve a rediscovery of the awareness and potentialities of life, to bring creative living within the reach of all.

3. Technology for the village

The tendency in many developing societies is for the rural population to flood the urban areas as industrialisation takes place. This creates uncontrollable pressures on urban areas and at the same time further impoverishes the poor village of its talents and human resources. The main reasons for this are the static, restricted life in the village and the age-old, inefficient backward techniques for the rural mode of living and work. It is necessary to discuss ways and means which may help the villager to fulfil his urban aspirations in his own milieu.

It is necessary to mobilise the best resources of technology and the application of the finest minds to provide realistic, feasible techniques for the age-old activities of a village society. Village technology should be assisted to enter the national market competitively, not artificially. This can lead to a new balance between the usual contradiction of town and country. This may call for the creation and utilisation of new sources of energy, the improvement of existing tools,
and the production of new materials, like a brick which is more durable than mud and which possesses its time-tested qualities. These prototypes would affect the planning mechanisms in developing societies. They would change established scales of priority. It will be the role of this workshop to discuss these challenges and to create the prototypes which would, if employed, change man's life in his lifetime at costs which might well be less than those projected currently.

4. Concern for urban perspectives

It is clear from the example of existing cities that urban life today has created more problems than it has solved. For cities which are already at a high stage of development, solutions of a radical nature are difficult to implement in pragmatic terms even where the answers are known. Developing societies can benefit immensely in this respect by skipping intermediate stages and leaping straight into the future. So, the task of this workshop is to analyse the most fundamental aspects of urban life and arrive at its terms of reference from there. Man lives in a house; therefore, housing and the household objects are of great importance. For countries like ours, low cost must be the dominating factor. Therefore, this suggests two separate studies, (a) the problem of low-cost high density mass construction and (b) the problem of household prototypes.

Urban housing, if it is to be low-cost, must veer towards high density mass construction. This may mean development of a unique cheap unit of construction. This may mean devising flexible units of housing in a high density complex where man's individuality is not destroyed. This may mean intermediate stages of development between a villager's mud hut and the new immigrant's urban housing. There are all kinds of related human and technical problems which will have to be attended to by this workshop.

The objects man uses for his everyday life -- his utensils, his furniture are equally important for his standard of living, for his satisfaction. Here, imitation which defies the particular needs of local culture, habits, etc., will not do. So, new materials, new designs, learning from the traditional yet applying the most advanced techniques will be called for.

After satisfying his needs for housing and household objects, man must move around in the city and must derive pleasure from his urban environment. This brings us again to two separate studies (c) the problem of urban transportation and movement and (d) the problem of environmental conjuncts.
In advanced societies, man has reached a situation in his cities where a private car is fast becoming obsolete. The traffic congestion has reduced movement to a nightmare. Yet, the object of all mechanised traffic is freedom of movement. Private cars are still at a low rate of development in our kind of society. The workshop may consider totally different modes for pedestrian movement — like horizontal escalators. It may suggest a shift of emphasis to production of new kinds of public transport for developing societies. In brief, the workshop will concern itself with mass transportation where it will become so accessible as to be 'on tap' like water or sewage in a city.

Cities tend to isolate man from nature. Urban pressures tend to create environment inimical to visual and mental pleasure. Too little attention is paid to conjuncts — the space around a housing estate, street, furniture etc. This study may lead to certain basic understanding of the problems, even a codification for enriching man's urban environment.

Given this frame of thought and action, UNESCO can assist man to claim his future.

(Among those who participated in the Seminar were Dr. Mulk Raj Anand, Chairman, Lalit Kala Akademi, Mr. Santi Chowdhury, Film Director, Mr. Charles Correa, Architect, Mr. R.N. Dogra, Director, Indian Institute of Technology, Mr. Bijit Ghosh, Head of the Department of Town and Country Planning, School of Planning and Architecture, Mr. L. C. Jain, General Secretary, Indian Cooperative Union, Mrs. Pupul Jayakar, Chairman, Handicrafts and Handlooms Export Corporation of India Ltd., Mr. J. N. Thadani, Businessman, and Mr. Romesh Thapar, Editor, 'Seminar'.)
CAN CORPORATE PLANNING "INVENT" THE FUTURE OF THE THIRD WORLD?

By André van Dam
Planning Director for Latin America
CPC International, Inc.

"One need not have hopes
in order to undertake,
nor meet with success
in order to persevere"

William the Taciturn

1. Stretching the mind in time and space

Corporate planners, accustomed to stretch their mind in time, may henceforth distend it in geographic space as well. The astronauts and the Stockholm conference punctuated our habitat as a finite and shrinking planet. Seemingly unrelated events in faraway countries all of a sudden implicate our work, our home and our future.

Europe and Japan rely for 95% of their petroleum requirements upon the Third World. Huge pipelines carrying natural gas connect Soviet Russia with the United States and Europe. One electric power grid will eventually tie Europe together. Europe depends for ten million guest workers upon southern countries, including North Africa and the Near East. Energy and labor are weighty factors in the increasing inter-dependence of nations.

The chain reaction of occurrences between distant countries is reflected in some dramatic illustrations. In ecology: the release of atomic energy over a Pacific atoll causes a dangerously high level of strontium in milk served at Milan's school luncheons. In communications: a satellite hovering over the Indian Ocean carries Europe's information to marginal consumers in the Andean mountain-range, thus lifting their aspirations. In sociology: the U.S. government depends upon those of Laos, Pakistan and Turkey to stave off the grave social threat of addiction to heroin.

In medicine: the construction of a giant hydro-electric barrage in Africa spreads a fly-born disease to faraway villages. In agriculture: the unscientific use of pesticides in Latin America endangers canned foods on the shelves of Europe's supermarkets. In manpower: Japan's establishment of labor-intensive manufacturing industries in certain Latin American countries, for exports to the world markets, induces United States' and other labor unions to
exercise pressure upon Congress.

To the corporate planner, the most immediate sign of the crescent inter-dependence of nations (1) is the explosive expansion of worldwide commerce and cross-border investments. However encouraging, these trends exemplify the complexity of global problems -- which become indivisible from global solutions. The multinational corporation that considers planet earth as its theatre of operations, can no longer dissociate affluence and environment, economic growth and human development, technological innovation and cultural identity, nor -- for that matter -- corporate planning and the Third World.

2. The Third World -- liability or asset?

Hitherto, the Third World may have been perceived merely as a potential market for industrial products and as a supplier of raw materials. The inter-dependence of nations, however, may cause the Third World to loom large as a partner of North America, Europe, Japan and Oceania. Extrapolating from the historical record, this seems a farfetched notion. However, to those who extend their mind in time and space, the signs of a changing relationship between North and South become quite manifest. The following phenomena imply that the Third World may substitute its peripheral role in world affairs for a more central function:

One: the Third World owns many of the strategic (renewable and non-renewable) natural resources upon which the prosperity of the affluent nations depends. These range from strategic metals to proteins and petroleum. For instance, the altering posture of the petroleum-producing countries vis-a-vis the international oil companies may induce countries producing other commodities to act likewise. Two: the Third World will have relatively more clean air, uncontaminated soils, limpid waters and sunshine than the industrialized world. The eventual search for global ecological equilibrium appears to favor the Third World. In the framework of a confined planet, the Third World will possess proportionately more empty spaces. These command a premium in a world where urbanization tends towards megalopolis.

Three: presently, three-fourth of the world population makes its home in the Third World. Although the demographic explosion will abate as the level of living rises, by the end of this century 85 % of the world's babies will first see the light of day in what is currently the Third World. This geopolitical factor may in the final analysis favor Asia, Latin America and Africa. Four: the Third World will in consequence accumulate a reservoir of manpower -- ready to receive and service labor-intensive and, to a lesser extent, energy-intensive industry from the fully industrialized nations. The Japanese already establish vital industries in Latin America in order to cater for their
domestic market as well as to satisfy worldwide demand.

Energy and manpower are but two illustrations of the future role of the Third World within the inter-relationship of nations. This inter-dependence is already knit by worldwide trade and cross-border investments -- which will reach this year US$ 350 billion and US$ 250 billion respectively. Admittedly, the Third World's present share in global commerce and investments amounts to barely twenty percent. An acute scarcity of commodities as well as a nascent solidarity between the developing countries will improve their terms of trade and consequently their share in international commerce and investments.

In the next ten years the relationship between rich and poor countries may turn into an admixture of cooperation and rivalry. Accordingly, rich and poor nations will move from an era of confrontation to one of negotiation. In this prospective pattern, new formations of common and conflicting interests are likely to emerge. Without common interests, they will have nothing to negotiate for; without conflicting interests, nothing to negotiate about. A fair amount of political consensus must be developed before a partnership with the Third World can be perceived and attained. Yet, that is the crucial assumption upon which this prospective view pivots. A prerequisite to political consensus is a change of attitude towards the future development model of the Third World.

3. The evolution of Asia, Latin America and Africa

At the previous world conference in Montreal I introduced the taxonomic analysis as a vital instrument of corporate planning in the Third World (2). Taxonomy enables international marketing managers to anticipate the relevance of countries (and regions within countries), economic sectors and individual product groups over a future period of, say, ten years.

Taxonomy compares and ranks economic and industrial development of rich and poor nations in the context of the total business environment. The future pattern of development of the Third World emerges from the analogous appraisal of scores of different yet inter-related yardsticks: political maturity; the absorption power of science and technology; mores and climes; the size and distribution of population; monetary stability; education and training -- to name only a few. The correlation of these total societal factors shapes the future pattern of development -- be it of a country or of a corporation in that country.

The future is not what it used to be, certainly not in the Third World, which follows the maturation of Europe, North America and
Japan with mixed feelings. On the one hand they recognize in that process the attainment of man's struggle upwards from poverty, disease and the physical enslavement of work. On the other hand they view the endless pursuit of purely material growth not only as a threat to the global human environment -- a circuit into which they are plugged -- but also as a spiritual sacrifice of man's search for the quality of life.

When North America and Europe took off economically in the previous century, they knew neither demographic explosion nor popular participation in societal affairs. They hardly reckoned with social legislation, neither from the cradle nor to the grave. They had unrestricted access to economic hinterlands -- such as colonies -- for their nascent industries. No environmental factors imposed limits to growth, nor did international institutions constrain their expansion. They faced no revolution of rising expectations nor did they defray a huge social expense for the innovation into different technologies. They were scarcely piqued by the skewed distribution of newly created industrial wealth.

When Africa, Asia and Latin America take off economically, they must weave the above ten environmental factors into their development pattern. In addition, the Third World must learn the hard way that rapid technical-economic success breeds socio-political problems. For instance, the eradication of malaria and other illnesses doubles the population every twenty years; the new emphasis on productivity and bigness tends to dehumanize work; urbanization threatens privacy and family life; industrialization fouls the air and the waters; the revolution of rising expectations, if not accomplished, becomes one of rising frustrations.

The Third World is thus allured to quest a "sui generis" development model -- one that creates employment and ensures the basic amenities of life, while preserving those values and traditions that constitute the quality of life. President Julius Nyerere of Tanzania advocates that balanced development be sought in the two million villages of the Third World. By developing agriculture, industry and services in the rural sectors, governments may avoid the ugly consequences of the trek to the city.

The nations of the Third World can still choose among many dissimilar development patterns. Algeria, Brazil, Canada, China, Holland, Japan, New Zealand, South Korea, Tanzania and Yugoslavia -- ten quite unalike models, selected at random, illustrate the gamut of the options. In consequence, the Third World enjoys presently a greater amount of freedom to design its future than Europe and North America in the previous century -- although the choosing is more dramatic. At first glance the Third World looks like a perplexing
mosaic of countries and development tendencies. On second thoughts the corporate planner may urge his firm to lend its profitable assistance to the process of inventing the future of the Third World.

4. The future role of world business

In order to prosper in a fast-changing world whose frontiers are receding, the multinational corporation may not only have to excel in the management of financial, physical and human resources, but also in the management of ideas. In terms of corporate planners: to stretch their mind in time and space as well as in creativity.

The function of the multinational corporation in the Third World is the subject of some misunderstanding and controversy. Amongst recent analyses, one appraisal stands out by its earnest search for compromise (3). Whatever the scope of the conflict, it may be primarily one of perception: the economic benefits of foreign investments and their socio-political costs are reckoned in different coins.

The measurable economic benefits of foreign investments in the Third World have been considerable -- and their ripple effects even greater. In the past fifty years, the evolution of many nations of the Third World would have been delayed without the deployment of corporate resources -- including managerial skills and a fair degree of risk-taking. Yet, conceivably because economic success breeds socio-political problems, the era of traditional direct foreign investments in the Third World may be coming to an end.

The emphasis is on "traditional". Multinational corporations have a remarkable propensity to adjust to changing world conditions. Presently they build turnkey automotive plants in Soviet Russia, engage in joint ventures with other Eastern European governments, trade with Cuba and licence technology to China. Likewise, multinational corporations conform to the new priorities of the Third World: the creation of employment; the export promotion of non-traditional manufactures; on-the-spot adaptation of technology, and research into locally available natural resources.

For instance, the technology that multinational corporations transfer was invented in an environment where capital is abundant and labor in short supply. The reverse is true in the Third World where manpower is plentiful, capital scarce and the domestic market generally small. The future role of world business is typified in the project of a U.S. firm manufacturing motor vehicles. It will establish integrated automobile production in Asia in order to produce a stripped-down model geared to the rugged terrain and economy of that continent. The engine foundries are to be put up in
Taiwan and Thailand; the axle and transmission plants in South Korea; the manufacturing facilities of plastic and electric components in Malaysia and India. Such a project requires excellent logistics in assembly, transportation and marketing. Its concept reflects the ingenuity of corporate planners -- their management of ideas.

The future role of world business can indeed be illustrated most dramatically in the field of adaptive technology (4). There is the two-wheeled walk-behind tractor which a Japanese firm produces so as to compete economically with oxen and ploughs. A Dutch electronics corporation operates a pilot plant in the home country, designed to match the Third World requirements with regards to lay-out, manpower, dimension, machine tools, technology and cost. Agro-industrial firms develop low-cost high-protein foods, whereas chemical companies invent artificial flavors to overcome taste barriers in foodstuffs produced from soybeans, fishmeal and petroleum. However, it stands to reason that corporate planning for the Third World need not necessarily be concerned with technology only.

5. Corporate planning can indeed "design" the future

Dr. Robin Clarke, consultant to Unesco, proposed intermediate technology in the Third World because it places practice before theory, man before the machine, people before governments and students before education. Adaptive technology reflects a new attitude towards development which pivots upon man and his employment rather than upon economics (5). In this fashion the Third World can ease its dilemma of producing either one luxury automobile or one hundred bicycles; either one computer or one hundred sewing machines; either one foreign-trained brain surgeon or one hundred "barefoot nurses". The Third World does not necessarily face a painful choice of either xeroxing the West's consumer society or remaining economically backward. It may have a future of its own design.

The crux of the matter is whether corporate planning in North America, Japan and Europe can become instrumental in planning such a future. If so, the function of planning may have to be defined anew. Ten years ago, Stanford Research Institute circumscribed planning as a process of thinking ahead; of pre-establishing a feasible course of action to take the corporation where it wants to be. In the re-definition one might add: and where society wants the corporation to be. Corporate planning will thus be imbued with the essence of political science: the art of the possible.

The art of what is possible in the Third World requires exploratory or "business-environmental" planning. In an era of inter-dependence of nations, the socio-political ambit may become as important to world business as the market mechanism or technological
innovation. This is specifically true in the Third World because it rejects the notion that what is technically feasible is morally justifiable -- a thesis which prevailed for example during Europe's take-off at the turn of the century.

The term "to invent the future" is an exaggeration, especially when management confronts an era of changing values (6). We can only speculate about the future, since the facts elude us. Yet, when designing the future of the Third World, planners should resist two temptations. One: to abstain from detailed projects on the ground that they cannot plan for chaos (be it nuclear holocaust or revolution). The other: to engage in trend extrapolation or surprise-free planning. In the Third World planners should be endowed with the consciousness that forecasts can and should be made, regardless of whether these will be self-fulfilling or self-defeating -- reversing some existing trends or accelerating others. After all, the future of the Third World, anything but surprise-free, may decide that of his company.

The following seven proposals illustrate how corporate planning can help designing the future of the Third World. In a way, these recommendations reflect the type of consensual planning practiced in Japan -- whereby governments and private enterprise synchronize their plans:

A. The Third World's foremost priority is employment creation. By removing certain labor-intensive industries to the Third World, world business reverses for instance a process whereby ten million migrant laborers from poor countries move to the industrial heart of Western Europe.

B. Another priority is to bolster the precarious balance of payments. Multinational corporations can urge their governments to reverse the present trend whereby for example cocoa derivatives and processed copper products pay a much higher import duty than cocoa beans and raw copper.

C. Adaptive technology and manpower training are of vital importance. World business can adjust its technology on-the-spot to the prevailing abundance of labor and scarcity of capital, to the supply of raw materials, as well as to purchasing and consumption habits.

D. The multinational corporation can assist the Third World in winning the battle of development in its two million villages, by lobbying for stabilization of the world prices for commodities, as well as by establishing refining and processing plants near the rural producing areas.
E. The Third World, suffering from the "diseconomies of scale", must push for national and regional integration. World business can play a catalytic role by producing components in some countries for assembly in other nations and marketing in the entire region.

F. Food and food preservation stand out amongst the Third World's priorities. Agro-allied industry, including paper manufacturers and the packaging industry, face the unique challenge of inventing cheap, odorproof, humidity-resistant packaging material to preserve, store and market protein-rich foodstuffs for marginal consumers.

G. Last but certainly not least, multinational corporations can engage in concerted environmental surveillance in order to anticipate the priorities of the Third World and to accelerate its integration into the world economy. This requires cooperative research and planning.

6. Cooperative research and planning

Dr. John Kenneth Galbraith, in "The New Industrial State", concludes that eventually world business and governments will solve together some of the world's acute problems. Dr. Erich Jantsch, in studies for the O.E.C.D., anticipates that multinational corporations become involved in the planning, development and execution of total inter-relationships between society and technology -- in conjunction with the public sector. There is mounting evidence that business firms will participate in adaptive inter-industry ventures and in other ad hoc groupings of different firms. Their efforts will be facilitated by non-profit research undertaken by governments, universities and foundations.

The rivaling spirit of industry and the proprietary nature of their research would theoretically preclude such a trend. Yet, collaboration between competing corporations is on the rise, particularly in industries such as petroleum, aluminium, copper, electronics, chemicals and aerospace. The rash of international joint ventures in the 1960's also testifies to the flexibility of world business in matters of cooperation. Participative research is already noteworthy in corporate intelligence, particularly in some countries of the Third World, so diverse in language, customs, idiosyncracy, political system, size and degree of evolution.

A miniature case of cooperative research and planning illustrates this novel corporate instrument. Recently, at the request of Brazil's Government, the Industry Cooperative Programme (7) of the Food and Agriculture Organization (Rome) dispatched a mission of senior executives to study the future of agro-allied industry in
Amazonia. The team was truly inter-disciplinary: engineers, business administrators, a chemist, a political scientist, a sociologist and an economist -- and international: three Englishmen, two Americans, two Frenchmen, one Argentine and one Dutchman. They represented seven multinational corporations: paper, sugar, cattle, canning and other food industries as well as high-technology engineering and banking.

This task force taught us inter alia that cooperative research between different business firms and governments requires common denominators -- be it a timespan, a geographic region, a well delineated industrial sector, a financial parameter or research methodology. The success of cooperative research depends also upon the synergetic force unleashed by the diversity of perspectives and backgrounds. Other missions, sent to Dahomey, Pakistan, Sri Lanka and Venezuela, experienced similarly enriching synergisms, which at times can be perplexing.

One prerequisite for successful cooperative research and planning is a political consensus about the objectives. Such a consensus is a product of "metanoia" -- a fundamental transformation of the mind (8). Unless and until traditional business parameters mesh with the changing worldwide societal objectives, participative research and planning may prove inadequate. This was highlighted by an inter-disciplinary seminar conducted by the World Council of Churches (9) -- in which business executives and a dozen other professions gradually sought consensus on vital business-environmental problems of planet earth.

Directly or indirectly, world enterprise is concerned with many an international attempt of cooperation. To cite: the General Agreement on Trade and Tariffs, the Colombo Plan, the International Air Traffic Association, the treaties of Rome and Montevideo, the Seabed Convention, the International Telecommunications Satellite Corporation, the international sugar agreement, and so forth.

There is a mounting number of international organizations, world conferences and global consultative forums. If their exchange of information and ideas can be molded into an action-oriented programme, the concept of cooperative research and planning will be furthered pragmatically -- country by country, company by company, discipline by discipline.

7. From concept to action

The foremost challenge to mankind is no longer the East-West confrontation, but that between North and South. Confrontation must
be bent into negotiation, so that the world can timely solve its deepest conflict. This can be re-stated as follows (10):

The two worlds of man -- the inner value of his inheritance and the affluence of his creation -- are out of balance, indeed potentially in deep conflict. Man is in the middle: in the Third World as well as in the technocratic society. This is the hinge of history at which we stand: the door of the future opening up to a moral and material crisis, more sudden, more global, more inescapable, more bewildering than any ever encountered by the human species. It is a crisis that may decide the survival and prosperity of the business environment and of the multinational corporation itself, within the lifespan of a young corporate planner.

The above "citation" perceives the inter-dependence of nations as a new phenomenon. It highlights the linkage between poverty in the Third World and corporate planning as it does that between the atomic cloud above a Pacific atoll and Milan's polluted milk. In that outlook, under-developed cannot be an economic abstraction as gauged in per capita income. Poverty is rather a dramatic human reality: a daily pain, a weekly grief, a year-round despair of over one billion co-passengers of spaceship earth. The young, who constitute half the Third World, have too much resilience to submit forever to the combined forces of undernourishment, shanty-town, idleness and disease. That would lead to brinksmanship and then on to riots, rebellion, chaos -- hardly a propitious geopolitical perspective for world law and order upon which affluent countries and multinational corporations thrive. In their own enlightened interest, the concept of inter-dependence should be turned into concerted action.

It may be opportune to once again exemplify the scope of such concerted action. Traditional farmers in the Third World receive an average return of 3% on their meagre investments, due to the constraints imposed by the soil, climate, wells, ditches, seeds, draft animals and primitive implements. They might well more than double their return with the aid of fertilizers, pesticides, hybrid seeds, storage facilities, farm-to-market roads, adaptive research, water management and, obviously, a dependable market. In recognition of that urgent need, 25 Japanese agro-industrial corporations established their "Overseas Agricultural Development Corporation" which provides technical help to the Third World.

Quite at random we pick other variegated examples of such cooperative efforts: the Adela Investment Company; the Concorde supersonic transport; the Club of Rome, the European Coal and Steel Community; the FAO/Industry Cooperative Programme; Harvard
University's programme on "technology and society"; the Hudson Institute's study on the corporate environment in 1975-1985; the International Finance Corporation; the Mekong River project; the Pacific Basin Economic Community and the Saint Lawrence Seaway.

The World Scientific Information System is likely to be one of the first global data banks. It may inspire the associations of corporate planners to establish a data bank of their own. Its purpose would be to jointly compute business-environment data in the Third World and elsewhere -- for cross-impact analysis. This is but one illustration of cooperative research in planning.

Earlier it was prophesied that rich and poor nations would move from an era of confrontation to one of negotiation, in which cooperation and rivalry would co-exist. An analogy with business corporations may exist perchance. The acknowledged competitiveness between private firms need not preclude their cooperative posture -- neither on an international scale nor on an inter-industry basis. For instance, the proposed data bank would put to the proof the ability of corporate planners to jointly engage in research. If this pilot project becomes successful, it might blossom out into a full-fledged, flexible institution -- an instrument that would cut across national, political, economic and industrial boundaries.

It is time to sum up. All knowledge is about the past, all decisions are about the future. Farsighted planners can hardly wash their hands of the Third World like a modern-day's Pontius Pilate. Nor can they forget -- in this raging debate on the inter-dependence of nations -- the anguished words of Cicero addressing the Roman Senate: "Catilina is at the gates of Rome, and you deliberate!" It is time for action, in order to design together the future of the Third World.

The exponential growth which is the characteristic of our time, demands therefore that at this 29th day we stretch our mind in time. The inter-dependence of nations requires likewise that we stretch it in geographic space. The intricacy of global problems calls for stretching the mind creatively. Then, finally, the admixture of time, space and creativity impose upon corporate planners to do so together. If that seems presently a Utopian task, it is pertinent to recall the motto of an early futurist, William the Taciturn: One need not have hopes in order to undertake, nor meet with success in order to persevere.
Notes:

(1) "World without borders", Dr. Lester R. Brown, Random House, New York, 1972

(2) "Corporate planning for Asia, Latin America and Africa", Journal for long-range planning, December 1972, United Kingdom

(3) "Multinational corporations in the Third World: is conflict unavoidable?", Peter P. Gabriel, Harvard Business Review, July-August 1972


(5) "Employment in the 1970's", Dr. Mahbub Ul Haq, reprint by the Agricultural Development Council, New York, 1972


(8) "Planning amid forces for institutional change", Dr. W.W. Harman, Man-environment systems, Vol.2 Nr.4, Stanford Research Institute, July 1972

(9) "From here to where", World Council of Churches, Geneva, 1970
