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Classic Reproduction

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Keywords

Futures Studies, Futures Methodologies, Alternative Futures, Dimensions of Futurism

An Introduction by Sohail Inayatullah

We are thrilled to publish this piece by Dr. Somporn Sangchai. The monograph was originally written in 1974 for the Hawaii Research Centre for Futures Studies, headed by James Dator. Dr. Sangchai was a fellow at the time at the East-West Centre and a colleague of Professor Dator's. I would have been either eighteen or nineteen years old when Dator gave me a copy of the monograph. I read it and have kept it with me ever since. It was an interesting read in the 1970s, but now, 45 years later, it is a fascinating read. Dr. Sangchai's work presages the developments in the field. First, as many others did later, he articulated numerous names for the field (Futurism, Futuristics, etc.). Secondly, he begins the process of dividing the field into objective and qualitative, as well as quantitative aspects. Third, he invents the futures cone, now a mainstay of many practitioners (calling it distances in alternative futures), introducing spatiality to the temporal nature of the field. Fourth, he links spatiality to the planning cycle. Fifth, he introduces non-Western futures studies, which has certainly been a significant theme in the last 50 or so years. Philosophers such as P.R. Sarkar, Ashish Nandy, Zia Sardar, Mahdi Elmandjra, and many others have all added their thoughts to articulate a more integrated view of the future, challenging the Jetsons' prototype of flying cars and robot dogs. Finally, he begins the work that numerous writers have since championed: an inner-directed Futures Studies, the narrative and integrated turn we have witnessed over the past two decades. Dr. Sangchai divides this area into two dimensions: movement toward the mystical (intuition) and movement toward the scientific (brain research). The Journal of Futures Studies is honored to publish this powerful monograph on the field of Futures Studies. We hope it is cited repeatedly for its originality and framing of the grand debates of the field.

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An Introduction by Nok Boonmavichit

Dr. Somporn Sangchai in Bangkok, photo taken by Nok Boonmavichit (2024)

We are delighted to present Dr. Somporn Sangchai's insightful article, "Futures Research: Some Aspects of Futurism," in the September edition of Journal of Future Studies. This reintroduction of Dr. Sangchai's work serves as both a tribute to his contributions to futures studies and his unique insight on the concept of inner-orientation, which has become highly relevant in our modern era.

Dr. Sangchai's extensive academic background, encompassing politics, futures thinking, environmental studies, strategic management, and Muay Thai reflects the multidimensional nature of his intellectual pursuits. His diverse interests and expertise are manifested in a body of work that offers unique perspectives on pressing social issues.

Notably, Dr. Sangchai's involvement in futures thinking was sparked by his presentation on “The Trends in Thailand" at a conference in Hong Kong, which led to a fellowship at the East-West Center in Hawaii in 1974. During this time, he came into contact with renowned futurists such as Jim Dator and expanded the horizons of futures thinking.

One of Dr. Sangchai's distinguishing contributions lies in the inner-future orientation—an unconventional concept in Western discourse on futurism. Over four decades ago, he observed the social trend towards materialism, advocating for the eastern mysticism as a complement to the outer-orientation of scientific methods to foster development in the field.

Along with his academic career, Dr. Sangchai's commitment to preserving his family legacy of Muay Phraya Pichai (an ancient Thai boxing) remains unwavering. At the age of 83, he continues to share his knowledge of this ancient fighting system, recognizing its significance not only as a physical discipline but also as a means of

cultivating mental acuity and spiritual resilience.

Dr. Sangchai's publication includes over 30 books, covering topics ranging from politics, environment, business strategy to Thai boxing heritage. In light of recent political developments in Thailand, Dr. Sangchai's warnings about the fragility of democratic institutions and the importance of foresight on good governance resonate deeply. His insights serve as a timely reminder of the importance of prospective approaches in navigating the complexities of our rapidly changing world.

In republishing Dr. Sangchai's monograph, we honor his legacy as a scholar, futurist, and guardian of Thai cultural heritage.

SOME ASPECTS OF FUTURISM

The original version of this paper was prepared under the auspices of the Open Grants Program of the East-West Center, Honolulu. A seminar presentation was made at the Center in February 1974 and was published by the Hawaii Research Center for Futures Study Social Sciences and Linguistics Institute, 1974 as Working Paper #4, Futures Research.

Introduction

It goes without saying that the study of the future is, at present, academically respectable and socially acceptable. Only about a decade ago, however, futurists were accepted only if they were science fiction writers and were not taken seriously in other areas. Futurists were, in general, considered dreamers, quacks, or even lunatics due to the fact that their speculations and predictions ran counter to the present-day logical system. Nevertheless, some of their predictions, or speculations, have been amazingly accurate, foretelling such modern inventions as airplanes, submarines, etc. Indeed, some futuristic ideas that once were condemned have been accepted and pursued by later generations. It can be maintained that prediction is in itself an invention (Schon, 1967) and because of such "accuracy" in prediction, especially in the realm of military forecasts and inventions, as well as the growing concern for human futures resulting from recognition of the many hazards and adverse consequences of modern technology, more and more respected scholars and thinkers have turned their attention toward the study of the future. In the past ten years, futuristic studies have been taken seriously and are now more developed methodologically. The general public has become aware of the significance of the future and the attempts made by various agencies and institutions in looking for alternative futures. Universities offer courses in futuristic studies, corporations acquire futurists-in-residence, and institutions have been established and/or commissioned to investigate various alternative futures.

Acceptance of futures study is not limited to the United States; scholars and thinkers in other countries have gathered at various centers because of their common interest in futures research. Nevertheless, it can be concluded that these centers exist mainly in the developed countries, such as Japan, Great Britain, France, the Netherlands, Germany, Norway, and Italy. One can also find some futures study institutes in Eastern Europe and in a very few developing countries, e.g., Korea. But futurism in Eastern Europe and in the developing countries is closely associated with development planning, a preoccupation which prohibits most developing countries from indulging in the luxury of study on long-range futures.

With their abundance of scholars and interested individuals, the developed nations can afford to invest in the systematic study of futurism and prepare and plan for the unknown future; the developing nations can benefit from this study without having to go through trial-and-error experiments. Nevertheless, they should be selective and adaptive in learning from studies conducted in the developed nations and should, of course, supplement these with their own studies. Indeed, it is indispensable that they should begin seriously to study and plan for their long-range futures, in addition to setting immediate goals for development. Development plans should become steppingstones toward desirable futures.

The Many Names of Futurism

Because of its embryonic development, different scholars and schools of thought tend to prefer one name for the study of the future over another. Thus far, there is no agreement as to which name should be universally adopted, since each has slightly different connotations. The proponents of each name maintain their position as to its meaning and the extent of the study of the future. And as long as they cannot come to a certain degree of agreement on scope and philosophy, no one name will become the name for the study of the future. Of all the alternative names[1] only a few are accepted rather widely: futurology, futuribles, prognostics, futuristics, futurism, and futures research. Each designates a certain viewpoint. A cursory review of these names and their meanings is to be attempted here (Wescott, 1972).

Futurology

Ossip K. Flechtheim (1966, p.72) coined this name in his attempt to update the study of the future "either as a science or as a 'prescientific' branch of knowledge." He did not consider futurology as an "exact science," but as a system of organized knowledge similar to disciplines in the social sciences. Flechtheim (2000, p.264) later clarified that futurology embraces.

> ...(1) all types of prognoses, projections, linear programming, etc., (2) all planning procedures in economics, education, traffic, etc., 3) an assessment of goals, norms, and values pertaining to the future. Thus, futurology as defined under (1) suggests a pure science; as defined under (2) it approaches an applied science; as defined under (3) it comes close to a philosophy.

Nevertheless, it was on a philosophical approach that Flechtheim (1966, p. 102-103) based his argument for futurology, which he saw as repudiating ideology, utopia, counter-utopia, and the "end of ideology." Futurology is situated somewhere between ideology and utopia, and between utopia and counter-utopia, because it

> …affirms the constructive function of a radical criticism of the status quo and the need for an orientation of the present toward the future. Futurology conceives of the future neither as a utopian paradise, nor as a counter- utopian hell. Its vision of the world of tomorrow is that of an ever open, manifold, and contradictory universe full of potentialities and purposes…the futurologist acts more critically than the utopianist, more hopefully than the counter-utopianist and more dynamically than the ideologist.

By pitching futurology against the four estranged approaches of ideology, end-of-ideology, utopia, and counter-utopia, Flechtheim provided an excellent philosophical position to the study of the future. However, although it has found a place philosophically, Flechtheim's contention that futurology was scientific in the social science sense has never been accepted. The study of the future has not yet progressed to the extent of having systematic and/or organised knowledge concerning the future, although it may eventually develop from the present embryo into a "science."

Futurible

This name is closely associated with a French scholar, Bertrand de Jouvenel, whose contribution has provided scholars with a pragmatic approach to the future. To de Jouvenel (2017), the future has multiple alternatives, depending on each individual's ideas and experience. It is the human's choices that decide the future. "Our group quite definitely takes the view that what shall be depends upon our choices:

> "it is precisely because the future depends upon our decisions and actions, and these in turn upon our opinions regarding the future, that the latter so much need to be stated, weighed and tested." (Kendall, 1964, p.xi).

Consequently, futuribles calls for speculation about future alternatives, then a narrowing down by constraints, reason and critical discussions, before action be taken in pursuit of the chosen future.

Futuribles, which seems to refine Gaston Berger's humanistic prospective, strives for probable futures (Kendall, 1964), "utopia within reach." (Massé, 1972). As a result of stressing probable—somewhat shorter range—alternative futures; futuribles has become almost synonymous with the process of medium-term planning in France. Futuribles possesses pragmatic values, but contains an insufficient degree of adventurous imagination.

Prognostics

Fred L. Polak was not happy with the intellectual condition in Europe immediately after World War II, where most scholars became very dogmatic and lost sight of the future. To Polak, the future can be probed and controlled to an important degree, and the development of human society must not proceed unattended. Through intellectual eschatology breaching cultural and mental dogmas, scholars should be more adventurous in looking philosophically and scientifically into alternative and purposive futures. "There are not only different future possibilities: there are also different future desirabilities." (Polak, 1961; 1971, p.217). These desirable futures may even be beyond human capability and realization (Boulding, 1972), they should become goals which society attempts to reach. Through prognostics, homo-sapiens, having passed the stage of homo-viator, will become homo-creator by means of purposive future planning.

Polak (1971, p. 246-264) described modem prognostics as:

1. constantly shifting and extending the future dimension toward a more distant period of time,
2. stressing the qualitative nature of quantitative prognoses,
3. normative,
4. interdisciplinary, and
5. operational.

This description is in itself somewhat contradictory in at least one aspect: the time element. In his effort to defend prognostics as the "science of the future," and to create an almost ideal cooperation between actuality and perspective, Polak attempts to operationalize the study of the future by citing technological forecasting techniques in the United States as an example. Unfortunately, technological forecasting can at present deal only with a very near future. As a result, Polak's possible futures do not actually possess the eschatological dimension he originally advocated. Unless and until technological forecasting can extend the time dimension toward a more distant future, prognostics may not be able to breach the frontier of creative imagination.

Prognostics, also known in Eastern Europe as prognostication or prognoseology, is popular, in the "socialist" countries because of its consistency with ideological planning. The socialist nations feel at ease with the desirability aspect of prediction of the future, although they disagree with Polak on. the scientific nature of prognostics—they consider prognostics an art rather than a science. Prognostics is merely an "activity of men consisting in foresight and forecasting" (Rolbiecki, 1970, p.278), a rather "passive" position for them. But through socialist planning, prognostics is energized and becomes an organic part of the socialist system." (Bestuzhev-Lada, 1970, pp. 299-300; Apostol, 1972, p. 78).

Futuristics

This name is used by Dator and others who were involved in Human Futuristics (Maruyama & Dator, 1972). Futuristics is a study of future alternatives, limitations, and choices; it cannot be called a "science" in a traditional sense, since its function lies mainly in the catalytic capacity to assist people toward developing scientific attitudes for the future. Maruyama (1978, p.25) states that human futuristics is

> ...a science of how to help people develop attitudes and abilities for self-education in order that they may move through the current epistemological meta transition into an era of nonstationary culture and knowledge, non-hierarchical mutualism, and heterogeneous symbiosis, not as followers of culture change but as changers toward a society where technology is directed by cultural goals generated from the grassroots.

Maruyama suggests that the main tool for the catalytic function of human futuristics should be a new educational system which incorporates new goals, methods, form, and content suitable for the future technological society. "Human" in this context implies the preparation of man for the future through designing his societal futures and self-education for a trans-epistemological process: "futuristics" merely means possible future alternatives as selected and generated by the people. In this sense, futuristics is a dialectical process and has no time continuum. Since one stage of the future will be led automatically to another stage by the people themselves, futuristics resembles a chain of futures with no ending in sight. This is not to say, however, that each imaginary stage is characterized by a stationary pattern: on the contrary, there will be perpetual change, a meta transition.

One may agree that futuristics represents an approach for the study of the dynamic future, but one may not agree that futuristics is a "science." Although Maruyama has loosely defined "science" more or less as the preparation of human mentality for seeking knowledge about, and creating, a future of perpetual change, a liberal definition of science, not to mention science in the traditional sense, seems to run against such a definition.

Futurism

This name has become popular in the United States, despite its historical connotation of the anti-traditional renewal of fine arts at the beginning of this century in Europe. European thinkers, of course, are reluctant to use it and have resorted to other names. Although most Americans have accepted the name "futurism" for the study of the future, some attempt to dissociate themselves from it and use other names—e.g., futures research, futures study, etc.—because they do not want to be involved in the polemics of name coining and the philosophy or history behind such names. They merely want to study about the future and its alternatives, or about the methodology for studying the future. Nevertheless, many futurists accept the name "futurism" without any uneasy feeling, disregarding the philosophical polemics that normally accompanies it. In general, futurism has come to mean the study of the future.

Futurism, as it is known in the United States, has a very broad meaning. It can mean several typologies, techniques, characteristics, distances of the future, etc., depending on the writers themselves. Confusion usually reigns due to the lack of explicit meanings for this term in distinctive contrast to the better-defined European names. Nevertheless, this particular name possesses an advantage vis-a-vis Its European cousins: it is very general while European names are much narrower because of their definite meanings. While the European scholars are polemical and philosophically oriented, the American thinkers prefer to indulge in more pragmatic aspects of the study of the future.[2]

The dimensions of futurism can be described as follows:

Methodologies

The weakest area in the study of futurism has been the methodology, which is still in the "underdeveloped" stage. Until recently, most futuristic predictions have involved only intuition, imagination, or common sense. Such human creativity, however, has been somewhat unsystematic and, occasionally, illogical. It is hardly possible for futurists to follow the same methodology systematically and come up with- the same conclusions without prior contacts or clues, since human intuition and imagination hardly run along a single channel. It is up to the individual futurist to attempt to forecast future developments, as envisaged through his own social and cultural context and his own creativity. It is no wonder, therefore, that despite the existence of a great number of intuitive futurists throughout history, only a very few have been "famous" for their accuracy in prediction.

Attempts since the end of World War II, and within the last decade in particular, have reoriented futurism toward methodological improvement. In addition to the quantitative betterment of futurism, futurists also attempt to bring about a qualitative development in subjective forecasts. Some even maintain that modern futurism "*can be exposed to tests of internal logic, intuitive, plausibility, and eventual conformance to observation in the same way as any scientific hypothesis or artistic image [therefore] futurism has a philosophic validity similar to that of many other intellectual activities."* (Penning & Shostack, 1971, p.174). Others, however, are not entirely convinced of such a claim to validity since forecasts can be countered and revised at all times, and, occasionally, counter-forecasts and revised forecasts could reverse the former logic and intuition, and even upend the previous philosophic validity (Moreland, 1971, p.169-171). In general, therefore, one can claim that qualitative improvement in subjective

forecasting has been achieved to a certain extent, but there is still room for improvement.

Great strides have been made, of course, in the qualitative aspects of futuristic methodology. Such contributions toward the development of futurism come mainly from scholars and thinkers in the United States. Most of them belong to the "think tanks" or certain private corporations collaborating with the Department of Defense. Under the title of "technological forecasting," futurism as related to military, scientific, and industrial spheres of activity have become respectable and acceptable. It may not be exaggerating to state that the degree of objectivity and quantitative finesse of technological forecasting has transformed futurism from a purely subjective study into a more "scientific" adventure. Needless to say, technological forecasting and its quantitative techniques are now dominating the methodologies used in futurism. This does not no mean, however, that the subjective approach to the study of futurism has substantially diminished. On the contrary, McHale has noted the continued high ranking of subjective techniques used by futurists (McHale, 1973).

If methodologies in the study of futurism are arbitrarily placed along the qualitative-quantitative and subjective-objective spectrums, it becomes apparent that there are many methodologies at the subjective end of the spectrum. Simultaneously, quantitative methodologies have increased in number, with great, input from the American think tanks and OECD. Figure 1 also revels that (1) there is a serious gap in the qualitative-objective type of methodologies, despite some efforts being made in constructing heuristic, empirical, and analytical models; and (2) since qualitative-subjective.

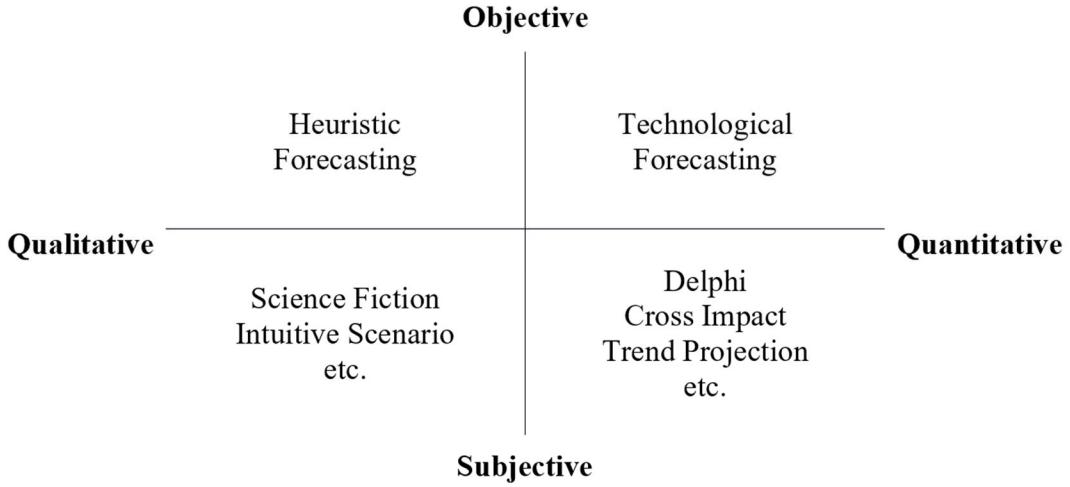

Fig 1. Methodologies in Futurism

Qualitative-subjective methodologies such as scenario construction, science fiction, conjecture, etc., usually resort to intuition, common sense, or even wild imagination which occasionally does not "*exhibit the logical structure of deduction or induction*." (Iklé, 1968, p.108). But such techniques have been the hallmark of futurism, because they facilitate the making of unusual and startling predictions. Not tied by many constraints— except the boundary of their own creative prowess -- futurists have been able freely to exercise their imaginative creativity and predict or prophesy any future development. Qualitative-subjective futurists are not hampered in general by lack of imagination or failure of nerve in exercising their freedom to fantasize. The need for futuristic mavericks is convincingly demonstrated and called for by most scholars in futurism (Clarke, 1972, p.133-150; Jungk, 1973, p. 117). Qualitative-subjective methodologies have provided an excellent breeding ground for the perpetuation of intuitive and imaginative futurism. And although modern futurism strives for a more systematic approach to the

study of the future, it does encourage the utilization of fantasy, intuition, and imagination in predictions and forecasts.

This does not mean, however, that the exercise of imagination and intuition belongs exclusively to the qualitative-subjective futurists. Futurists employing other types of methodology must also possess such mental capabilities. The latter group, nevertheless, are deemed to be limited by various methodological constraints, professional biases, and the underdevelopment of their own methodologies.[3] It is not surprising to find that forecasts or predictions coming through quantitative methodologies do not usually exhibit a "far-out" quality, especially predictions coming from methodologies such as the Delphi Technique or technological forecasting. Most of these predictions are within reach.

Typologies of the Future

Most futurists are concerned with the nature of the future as well as with its characteristics. In one dimension, their writings reflect a pessimistic or optimistic view of the future or something between these two poles. In another dimension, many writers consider the future as determinative, normative, or systemic.

Throughout history, utopian writers have been very optimistic in their outlook on the future, while recent writers have developed more counter-utopian attitudes, as reflected in pessimistic novels such as *1984* or *Brave New World*. Writers of science fiction, however, embrace both extremes and/or position themselves somewhere between the two. Present-day scholars and thinkers tend to be neutral in outlook but lean toward an optimistic position in their desire to create a better future and to avoid a possible future disaster.

Thus far, futurists tend to consider man as a factor in determining the future. In most ancient futuristic studies, the future is seen as determinative—something outside the human's ability to control or redesign. Industrial revolution and technological breakthroughs, however, give rise to confidence in man's unlimited capacity to design and control the future. Most recent futurists, however, prefer to work within a pragmatic framework—a systemic view--that the shape of the future can to a very great extent be influenced by man rather than being determined by the future itself. John McHale's viewpoint on the nature of the future succinctly represents the position of most futurists on the matter.

Our view of the future is no longer that of a great evolutionary onrush, largely independent of man's intervention, tinged variously with doom or elation. We realize, for example, that man does not, in the end, master nature in the nineteenth century sense but collaborates within the natural world; his very existence depends upon an intricate balance of forces within which he is also an active agent (McHale, 1971, p.5).

In most futuristic studies, the future, whatever its nature, shows mixed characteristics. Whether it be determinative, normative, or systemic, it can be pessimistic, optimistic, or neutral. The typology of futuristic studies, based on these two dimensions, can perhaps be portrayed in the model below, with arbitrary examples for all categories.

Characteristics of the future Nature of the future	**Pessimistic**	**Neutral**	**Optimistic**
Determinative	i.e., Environmental	i.e., Karma Evolution	i.e., Utopian, Nirvana
Systemic (Pragmatic)	Industrial Revolution	i.e., Futurology, Prognostics	i.e., Development Planning

Fig 2. Typology of Futuristic Studies

Most popular futuristic studies tend to lean towards pessimism or optimisms, and a determinative or normative nature -- the four corners in the figure -- while most scholarly works seem to favour neutral characteristics as well as a systemic nature for futures. Nevertheless, futurism is increasingly normative and optimistic, as exemplified by planning for desirable futures. It is more optimistic since planning aims for a better future through preparation for possible adversities and creation of desirable goals. Yet it remains quite neutral in outlook because of its pragmatism and shorter future distance. It is also more normative because of a greater emphasis on man's desire and capability to select and create a new future. But it is kept within practical bounds through being selective and realistic in the process. And despite the tendency of futurism to be increasingly optimistic and normative, it does not signify a belief in man's unlimited capability or utopian dream. Modern futurism lies somewhere between neutrality and optimism and between a systemic and a normative nature. A position between the four types of studies in the lower right-hand corner of Figure 2 may very well illustrate the proper position of modern futurism.

Distances in Alternative Futures

In the cursory review of futuristic studies above, one may have noted other labels for alternative futures, such as "possible futures," "probable futures," and "desirable futures." There are differences among these labels, if one measures them on an abstract-concrete spectrum. "Probable futures" signifies a closeness to reality, while "possible futures" indicates a closeness to abstractions. As is generally accepted., the greater the time span, the more abstract things become. Consequently, the concrete-abstract spectrum is actually the time continuum. Probable futures lie closer to the present than possible futures.

Daniel Bell, in paraphrasing St. Augustine, mentions that time," is a three-fold present: the present as we experience it, the past as a present memory, and the future as a present expectation. The future is not an overarching leap into the distance; it begins in the present." (Bell, 1968, p.1). Bell's statement may be taken two ways: first, futures will depend on what we do at present, or present actions will shape or design futures; secondly, the future is a continuation of the present from the time span perspective. Platt's "wagon-train model" of futures may be regarded as such a continuation, since the present is followed by the inertia future, the choice-and-control future, and then the uncertain future (Platt, 1971, p.32-47). This writer, however, prefers to position futures on the time continuum as follows: present □ immediate futures □ probable futures □ possible futures □ distant futures. Consequently, the present is linked to the future, or vice versa. Through linkage of the future to the present and through planning,

which will be discussed in greater detail in the next section of this paper, a transition toward the future may be provided. It may to a certain extent rectify Lasswell's justifiable indictment of futurism that

> ...the methods by which the future is presented do not foster vivid perceptions. ... presentations are often lacking in transitions. Very often the potential future is described at a cross-section in time with no attempt to relate the cross-section to the state of affairs at present. This is especially common when rather "Utopian" proposals are put forward (Lasswell, 1959, as cited in McHale, 1971, pp. 289-290).

Futures do not simply march by man in the same manner as a wagon train. They can be, to a greater extent, what we determine them to be. Such futures may be deemed necessary, allowable, or desirable. At the same time, man can prepare himself for, or prevent the occurrence of, undesirable futures. Desirable futures, as advocated by most futurists, carry the implication that man must be action-oriented if he wants to attain them. He cannot be a wishful thinker. Consequently, the prediction of desirable futures is self-fulfilling, while prediction of undesirable futures is self-defeating. Normative futures -- both desirable and undesirable -- cut across possible and probable futures. At any rate, normative conditions can be achieved with greater facility in the longer time perspectives. In other words, there is a greater degree of flexibility and success in deciding on and achieving desirable futures, or preventing the coming of undesirable futures, at a more distant time than the very near future. Freedom of action exists in futures planning; and futures can be shaped to a great extent by human desires, and man's critical and creative imagination.

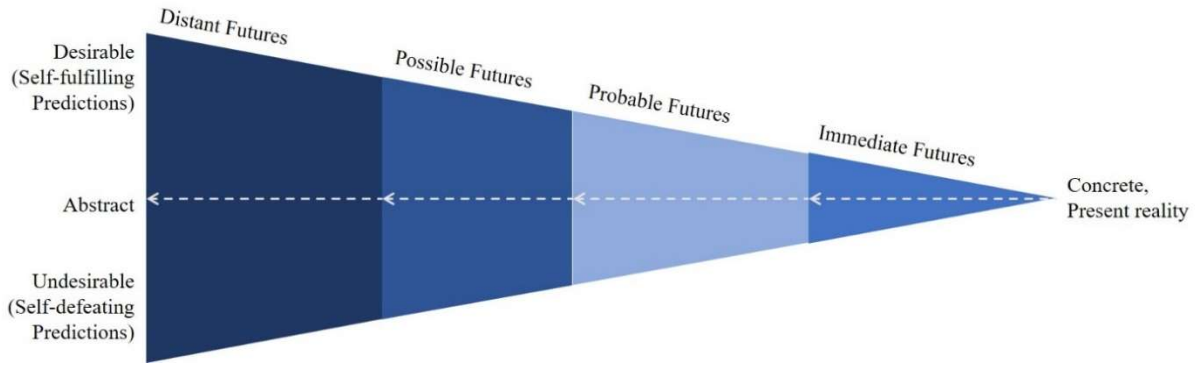

Fig 3. Distances in Alternative Futures

Planning for Alternative Futures

One of the most important aspects of modern futurism is planning and implementation of plans for desirable futures. However, futurism may actually have two practical purposes, in addition to challenging man's critical and creative imagination. First, it serves to educate the people and prepare them psychologically for the future. It might soften the effects of future shock if man knows in advance what is waiting for him in the future. Man's acceptance of, and readiness for, the future will surely facilitate the realization of desirable futures; he will be more aware of future possibilities and limitations. He should also learn about the undesirable aspects of the future, so that he may participate in a design to avoid such pessimistic outcomes. It can also lessen man's anxiety about adverse outcomes and prevent possible panic. Obviously, this first function of futurism may lead toward "anticipatory democracy." (Toffler, 1973, p.74-78).

Secondly, futurism signifies man's actions toward actualization of desirable futures and avoidance of undesirable futures. Mankind cannot and should not allow events to overtake them, simply by stepping aside and doing nothing. Through man's imagination and action, events can be shaped or controlled to a great extent; some events may not be completely forestalled, but they can be rendered more or less tolerable. At the same time, man probably cannot hope to realize all aspects of desirability or avoid all features of undesirability; he must be selective, give priority to certain actions or omit certain irrelevancies. Futurism generates desirable futures. "If they don't follow through and

do something about it, though, it's waste." (Pasatiempo & Krauss, 1973, p.135). Through planning and plan implementation, man can play an active rather than a passive role in shaping his own futures, instead of being forced to adapt to whatever emerges as before.

Consequently, the futurist should also be a planner, or be closely associated with planning. To be sure, some maintain that

> "The futurist is not a planner, not even a long- range planner, although he might very well do long- range planning and certainly should contribute to the long-range planning process. The futurist's area of interest begins where the long-range planners leave off" (Cornish, 1970, p.247).

But such a separation of futurists from planners in order to permit the former to fully exercise their creative and inventive idealism may in reality reduce "realistic idealism" or "idealistic realism" (Dror, 1973, p. 130-131). The futurists work best if conditions permit them to break away from traditional environments and rigidities, while the planners perform well in a sphere closer to reality. Nevertheless, the planners must also look into unknown futures in their planning. Planners who do not have a futuristic outlook can never be good planners; futurists whose prophecy cannot be translated into action sooner or later will probably remain in obscurity or disgrace. The differences between planners and futurists may be only in the degree of abstraction. Consequently, attempting to draw a demarcating line between these two labels is a futile effort. There should be close collaboration, or, if possible, futurist and planner should be combined in one person, so that ideas could be both planned and implemented.

Perhaps one should attempt, further to visualize futurism and planning on an abstraction-concreteness continuum similar to that of Figure 5. Moving from the concreteness, of the present to the abstraction of the future, we see immediate futures, probable futures, possible futures, and distant futures respectively. In terms of time span, immediate futures are considered less than 5 years from the present, probable futures between 5 to 10 years, possible futures between 11 to 25 years, and distant futures over 25 years.[4] In the planning field, such time spans do more or less coincide with short-term plans, medium-range plans, long-range plans, and long-range goals respectively.

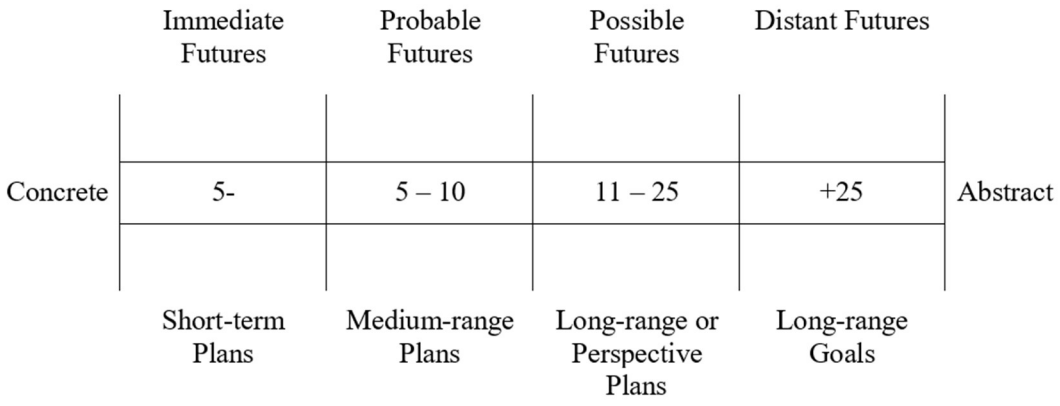

Fig 4. Relationship of Futurism to Planning

Long-range goals for distant futures are not plans in the traditional sense. Long-range goals, which in this instance are more like Feinberg's transcendent goals,[5] can provide guidance for the other types of plan. But as the time moves forward, long-range goals are reduced to long-range plans, then medium-range plans, and finally short-term plans. Consequently, planning and futurism are merely different sides of the same coin, and futurism in itself implies

planning and implementation of a plan.

Pyke (1970) has succinctly stated that there are two types of forecast: the exploratory forecast as a reconnaissance into the future from an assured basis of knowledge and the normative forecast as a remodeling of the future based on the reconnaissance. Therefore, the exploratory forecast proceeds from the present to the future, while the normative forecast proceeds backward from future goals to the present. The normative forecast, in this instance, is very similar to planning since it involves ways and means to achieve a specific objective and comparison of various options. One may attempt to distinguish futurism from planning on the basis of exploratory *vis-a-vis* normative techniques: futurism is more exploratory, while planning is more normative. However, modern futurism has become more normative and action-oriented, as stated earlier in the paper, and one is able to conclude that modern futurism does include planning and programming for the implementation of a chosen desirable goal. Indeed, exploratory and normative forecasting techniques are used in most futuristic studies, not to the exclusion of each other but together. They are two-directional—from present to future and back to present—in practically every methodological sequence. Futuribles has employed such techniques widely;[6] and planning is an integral part of Futuribles, Futurology, and Prognostics (Hetman, 1970; Berry, 1971).

It has been implied earlier that long-range goals are the ultimate objective for planning. This is not to say, however, that long-range goals are synonymous with final goals since long-range goals can be modified or even changed. At any rate, planning must take long-range goals into account in order to formulate intermediate goals. Long-range plans are derived from long-range goals, medium range plans from long-range plans, short-term plans for medium-range plans, and operational plans from short-term plans. Figure 5 illustrates a two-directional process wherein shorter-range plans are derivatives of longer-range plans, and shorter-range plans lead toward longer-range plans and desirable futures. Through systematic planning, the desirable future is bridged to the reality of the present. This incremental and systematic approach to the future through planning is somewhat piecemeal, but it is a ladder leading toward long-range goals. It should be noted, however, that medium range and/or short-term plans may be bypassed on many occasions.

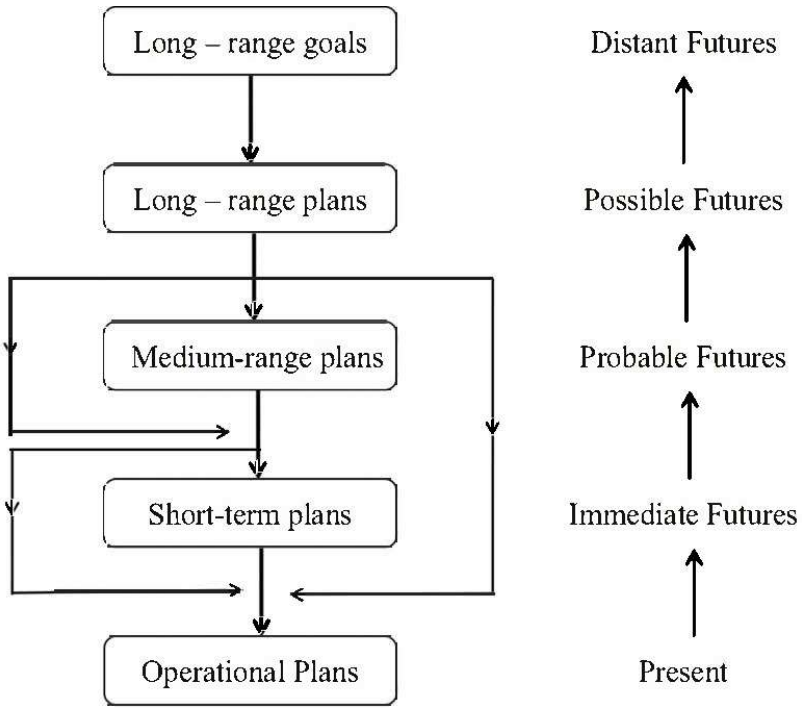

Fig 5. Hierarchy of Plans

Planning, however, does imply a certain degree of rigidity. In attempting to plan, one must take for granted the established goals at which the plan is aimed. And in order to reach those specific goals, certain measures or actions must be defined, evaluated, and implemented. Accordingly, once objectives have been agreed upon, actions that lead toward such objectives will become more or less rigid. However, periodic re-evaluation in the light of changing circumstances may make it necessary for planners and implementors frequently to revise and/or deviate from the planned courses of action, without losing sight of the original objectives. Indeed, alternative objectives may also be formulated if the original goals are deemed unfeasible or undesirable under a new condition. Planners must be able to seek alternative courses of action, as well as alternative goals or futures, during the planning and implementing stages (Sangchai, 1971). It is desirable that flexibility be retained in forecasting, planning and implementation, despite the difficulties in attaining it. Such a dynamic condition requires a great deal of foresight, perseverance, originality, courage, imagination, and mental stability from planners and implementors.

Alternative Orientations

Most studies of futurism deal with technological developments or predictions. Science fiction contains mostly technological forecastings, while other typologies of futurism also emphasize the scientific and technological futures. Hayashi (1974) discusses the future as a development process arising from human needs, leading toward functions and subsequent technologies. The fulfilment of needs through development of technology in turn stirs up and diversifies new human needs. This spiraling circle will continue until there is, possibly, a disruption in the technological invention, an elimination of the gap between technological development and human needs, or a development of “destructive” or “negative” technology which permits destruction of new products (Hayashi, n.d.). Other futurists, especially those specializing in technological forecasting, foresee only bright scientific and technological advancements for the future, with or without consideration of man’s development under the technological society.

Despite the major emphasis on technology in futurism, one can say that many futurists are concerned about social futures and the impacts of technology on human beings. A few futurists have attempted to fore cast and predict human conditions and values. Hayashi (1969) prophesies that technology will lead to a diversification of values—a multichannel society—where a "sensory" rather than “logical" orientation in reasoning will prevail. The proponents of Futuristics are very concerned with the preparation of mankind for changing the future through development of technology as directed by cultural goals generated from the grass-roots (Maruyama & Dator, 1972). Some other futurists even believe that what will matter most in the future are arrangements which can cope with, and make use of, technology.

Bell (1968, p. 4-5) echoes this sentiment as follows:

> Technology opens up many possibilities of mastering nature and transforming resources, time, and space; it also, in many ways, imposes its own constraints and imperatives. …Technology is not simply a "machine," but a systematic, disciplined approach to objectives, using a calculus of precision and measurement and a concept of system that are quite at variance with traditional and customary religions, aesthetic, and intuitive modes. Instead of a machine technology, we will have increasingly, an “intellectual technology” in which such techniques as simulation, model construction, linear programming, and operations research will be hitched to the computers and will become the new tools of decision-making.

Technological development relating to human welfare can be considered in at least two more aspects. First, technological advancement may also give rise to an increase in the importance of the problem of human-behaviour manipulation. Quarton states flatly, "One can safely predict that techniques for controlling behaviour and modifying personality will grow more efficient by the year 2000. In particular, there will be many efforts to mix behaviour-control techniques and to apply them systematically in areas where society faces major problems” (Quarton, 1968, p. 220). Although the behaviour manipulation predicted by some futurists does not amount to the same scale as that illustrated in the counter-utopian 1984, those in a democratic society cannot ignore this grim prospect. Voting. behaviour manipulations in recent elections in the West have foreshadowed the increasing volume of control

techniques. The future of an individual's right to exercise free, rational, and well-informed choice is indeed in. question. Nevertheless, an awareness of the possibility of such control can partially prevent unscrupulous practices in democrative societies; in an authoritarian country, however, control is at the discretion of the ruling elites.

Secondly, technological development may also imply an infringement on individual freedom and rights in favour of collective rights and freedom. Regimentation and regulation will affect individuals in order to allow the smooth functioning of society. The government may have to play a greater role in the future in promoting the concept of human conservation which enhances the well-being of everyone.

As Frank (1968, p. 179) predicts, there will be

> ...a shift in our traditional emphasis upon the rights of persons; from the doctrine of equality of opportunity to the emerging conception of the equality of human needs, not only for the "creature comforts" but also for the dignity and integrity of the individual and family that are continually jeopardized and denied by the persistence of anachronistic beliefs, practices and laws.

Frank, therefore, concludes that the nation in the future will become a "Service State," with a greater role for government.

Thus far, "technological" futurists dominate the futurism scene and "social" futurists attempt to amend the field. One can say that the difficulties associated with social sciences also prevail in these specific attempts. "Hard science" has found a concrete and scientific ground, while "soft science" lingers some distance behind. Nevertheless, futuristic studies coming from these sources can be considered technologically oriented; even social predictions take into great account the development of science and technology. With the exception of the Futuristics proponents and a few others, futurists see social futurism as the study of social behaviour and systems influenced, and even dictated, by science and technology, and not vice versa. Social patterns and psychology have become merely a protective shield for humans in the world of science and technology.

If one uses the four orientations proposed by Moles (1970) for societies in general -- inner-directed, outer-directed, tradition- directed, and future-directed -- one can say that futurism as it is known in the West is outer-directed, since it deals with "things" more than human beings. And even though some futurists have attempted to shift the emphasis from technology and science to human beings, they are merely reacting to what they foresee in the scientific and technological environment of the future. Outer-directed societies in the West are extremely materialistic and positivistic.

This writer would like to suggest a modification of the present Western futurism. McHale and Cordell (1974) have suggested that the developing nations might be able to contribute significantly to the study of futurism and to adjust with greater facility than the West to the post-industrial society.

In many of the lesser developed and developing regions the prevailing philosophical and ethical value attitudes may also be more appropriate to post industrialism than in the Western nations. Though still "pre-industrial" in many aspects of their local "value" emphases—-i.e., on mutual cooperative aid rather than competitions, on the retention of local community .and individually oriented services, etc.--this may give them a more specific orientation to the possibilities of the multi channel type of decentralised post-industrial forms of-organisation. Their problem of social and ethical adjustment to post industrialisation may be much less difficult than those experienced by some of the so-called advanced nations.

McHale and Cordell's (1974) perception about the contribution of the developing societies is beyond question. Nevertheless, they are concerned with human beings mainly in their relation to science and technology. Eastern societies can offer to the world their inner orientation, with or without man's relationship to technology, as an alternative to futurism. To those who believe in the inevitability of scientific and technological advancement in the post-industrial societies, inner direction may seem merely an escape from reality or an attempt for spiritual revival. Nevertheless, Western societies have overstressed the materialistic aspects and ignored the inner direction. Can the West overlook the possibility of limits to growth and technology, or technological breakdown, as in the cases of the blackout in the North east United States in the mid-1960s or the present energy crisis? Without questioning the inevitability of scientific, and technological advancement, this writer would like to suggest that, the world will gain from a parallel and complementary study of inner orientation.

Using Mole's orientation for future societies, one can arbitrarily visualize two dimensions: inner-outer and

tradition-future parameters. Although there is no clear demarcation line along the spectrums, one may attempt a division at the middle of the scale in order to exhibit a tendency toward one orientation or another. And since there are relationships between these two dimensions, as illustrated in Figure 6, the orientations may be further refined. The inner-tradition oriented societies emphasize spiritual and philosophical matters. The Eastern world and the pro-industrialized West were in this stage when religions and great philosophies were propounded. The Industrial Revolution moved the West toward the scientific and materialistic aspects—outer-tradition[7] direction -- while the East remains technologically underdeveloped (Lasswell, 1959, as cited in McHale, 1971, pp. 289-290). During this period, logic and scientific rationality prevailed. Western societies are now moving toward outer-future direction—or post industrialization, as preferred by many Western scholars, or information-centered or multichannel society, as preferred by Hayashi. In general, most futurists see a scientifically sophisticated society, where Computers play an ever-significant role in information dissemination and where technology will accommodate social diversification, a society where human needs will be satisfied and human comforts made possible by technological and scientific achievements. Nevertheless, since the concept of the post-industrial society is somewhat utopian, one may want to moderate his forecast about the future in such a way as to make it more pragmatic (Bell, 1973).

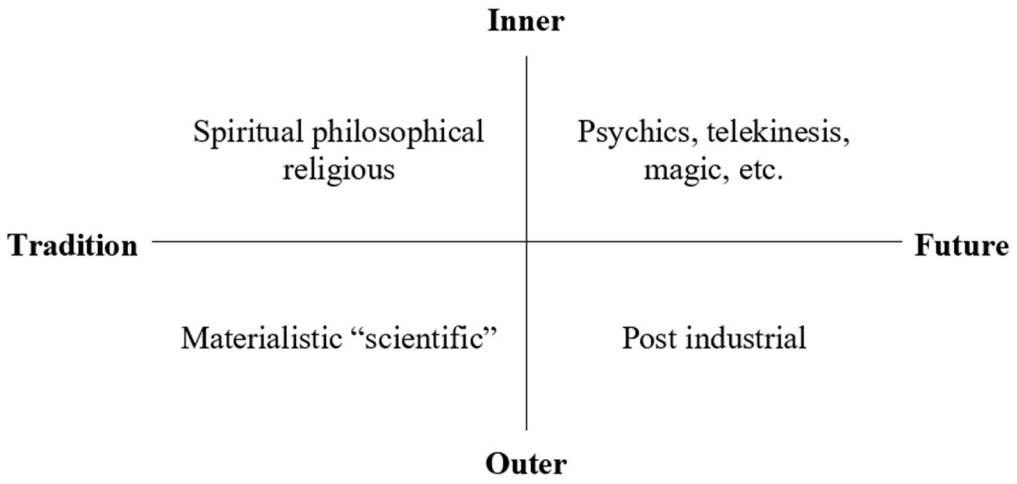

Fig 6: Relationship of Futurism to Planning

The inner-future orientation should be intensively investigated for possible direction. Thus far, there are attempts to understand the human mind through the study of psychology and through some unsystematic flirtations with transcendental natures, especially among members of the "drop-out" generation. Obviously, Westerners cannot understand the "mysticism" or "supernatural" activities of the East and tend to dismiss them as superstitious, illogical, unscientific, or even nonsensical -- in the same manner in which they once belittled futurism. Acupuncture, which was discredited in the West until recently because of its unscientific explanation of human physiology, has become acceptable, despite the fact that no one can actually and satisfactorily understand it on the basis of Western knowledge. But neither can anyone disprove it. There are many other "supernatural" happenings in the East that Western knowledge cannot explain nor Western minds accommodate. Should not "scientific" Westerners be more open-minded and not dismiss "clues to wider human horizons beyond the everyday 'natural' world"? (Wren-Lewis, 1972, p. 179)

Winston Churchill once stated that "the empires of the future are the empires of the mind." Quoting Moles, 1970, p. 312. This statement can be interpreted in four ways. First, the creativity of the mind will bring about new inventions and technological advancements. It is also possible that science and technology may play a major role in

improving minds through biological engineering and other scientific techniques such as brain transplants, etc. Secondly, the war of the future is the war to control man's mind. Advanced technology will make possible psychological manipulation and behaviour control. The nation that can control man's mind may control the world. Many governments, especially those in authoritarian countries, may attempt to conquer the world with ideologies and psychological warfare, as well as keep close control over their own population. Thirdly, scientific and technological sophistication has created psychological stresses, so that minds must be trained to cope with, and adjust to, progress. At present, mental problems are increasing; and in a more technologically advanced environment where, the pace may become too fast for human beings, mental problems may become disproportional. Many Westerners have, resorted to psychiatric treatment, but to no avail. Some Westerners, especially Americans, are turning toward an Eastern technique for controlling the mind—transcendental meditation. Many major universities, e.g. Harvard and UCLA, offer courses for credit in theoretical and practical aspects of transcendental meditation; more than sixty large corporations have instituted transcendental meditation programs for their employees; and the legislatures of Illinois and Connecticut have passed resolutions recommending transcendental meditation to their citizenry (Newsweek, 1974, January 7). it is also reported that transcendental meditation has successfully helped businessmen and individuals in other professions cope with pressures, because

"By measuring such physiological effects such as oxygen consumption, lactate levels in the blood and brainwave patterns, researchers at British and American universities have demonstrated that...meditation does in fact stabilize the nervous system and produce a 'fourth' state of consciousness characterized by alert restfulness" (Newsweek, 1974, January 7, p.74.). Newsweek calls transcendental meditation the power of positive non-thinking. The West has again looked toward the East for its traditional wisdom, and has even accepted Eastern mysticism to a certain extent owing to the failure of Western cultures to cope with future shock.

Lastly, going beyond positive non-thinking, the mind can be both positive and mystical—something that is beyond the comprehension of the "scientific" Westerners. One may come across esoteric publications occasionally,[8] but few in the United States and the West take them seriously (Smith, 1972). They have been enveloped for too long in a shell of protective disbelief. Nevertheless, some academic and scientific communities in the West have begun systematically to investigate the powers of the mind. "The intuitive exploration of what is called inner- space attempts to reach the unconscious, to tap its power and drive. Being the older part of the organism, it may possess much more innate energy potential because of being developed over a longer period of evolutionary time" (University Review, 1970, p.11). The slow process of acceptance in the West is in great contrast to the willingness to explore the unknown in Eastern Europe. Ostrander and Schroeder reported that the Soviet Government has generously supported scientists in various universities, technology institutes, and colleges in parapsychology research, a new field in natural sciences. Most Soviet parapsychologists are very enthusiastic, open to new ideas, and willing to explore forgotten knowledge; their research, which is aimed toward technological application, is published regularly in scientific journals (Ostrander & Schroeder, 1971). Eastern Europe is moving toward the parapsychology Sputnik.

Psychic research in the West has just barely emerged and its existence has never been officially acknowledged.' Some universities, e.g., Duke, Fairleigh Dickinson, New England College of Art, etc., have experimented in research and courses on psychics, the occult, and voodoo (Honolulu Advertiser, 1973, December 20). But in Eastern countries, the supernatural is generally and blindly accepted. There are frequent reports of supernatural happenings in the press in Asia; yet, no one has actually probed into them from a "scientific" point of view. If they are studied more systematically and "scientifically," they may turn out not to be supernatural at all. The human mind does possess certain powers which defy rational and logical explanation. The orientation in futurism points ultimately toward inner-future direction, since

> Magic was not the 'science' of the past. It is the science of the future. I believe that the human mind has reached a point in evolution where it is about to develop new powers -- powers that would once have been considered magical. Indeed, it has always possessed greater powers than we now realise … For the past thousand years or so, humankind has been busy developing another kind of power related to the intellect, and the result is Western civilisation. His unconscious powers have not atrophied; but they have 'gone underground.' Now the wheel has come the full circle; intellect has reached certain limits, and it cannot advance beyond them until it recovers some of the lost powers.[9] (Wilson, 1973, p.39)

In contrast to the stages and directions of development of mind in the "scientific sphere," where brain activity is two-directional and is limited only to mental activities, the development of an inner-future orientation must emanate from man's latent and potential "brain" power. There seem to be three stages for the development of inner powers, as exhibited in Figure 7. First, through meditation and other similar techniques, man can reach the stage of positive non-thinking, in which man attempts to control himself both physically and mentally.

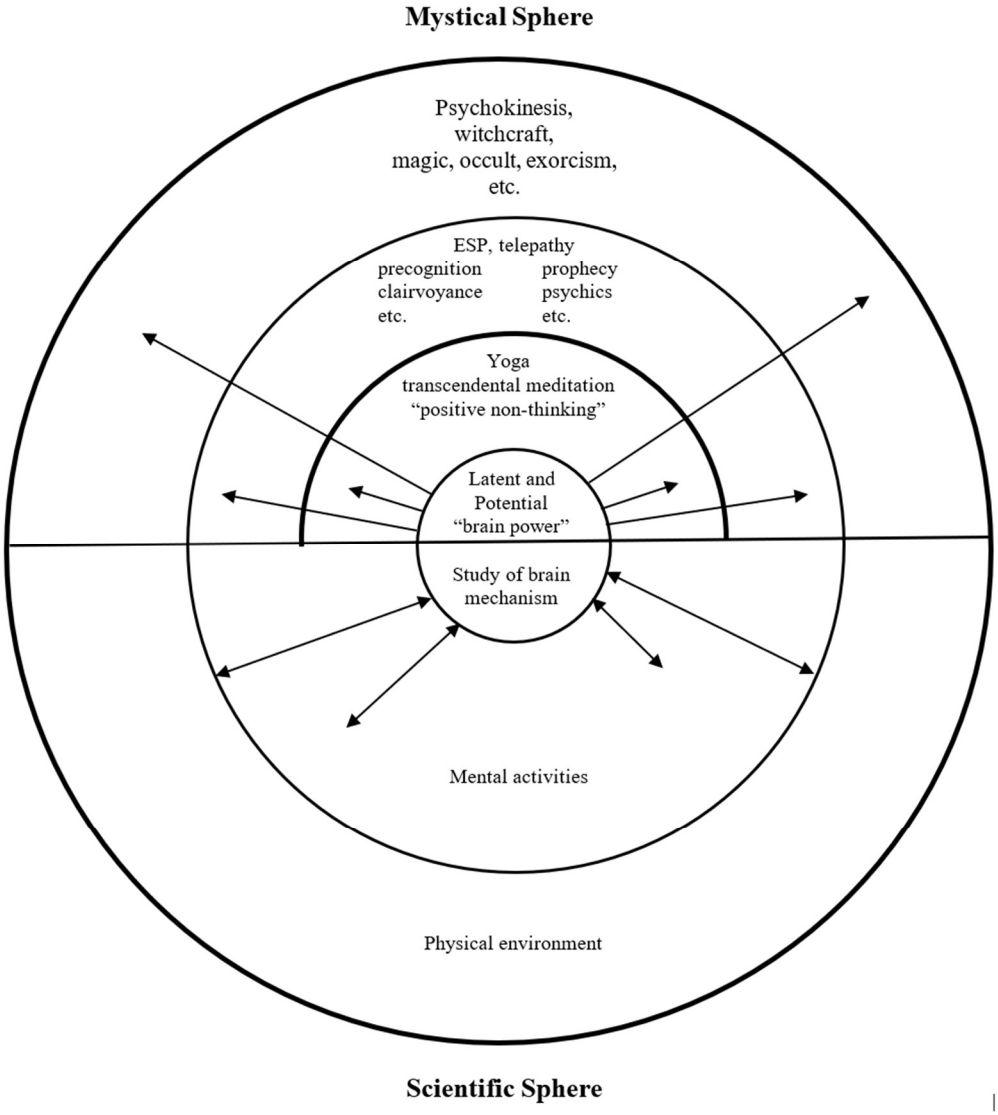

Fig 7. Stages of inner-future orientation

In the second stage, powers of the mind transcend the individual boundary and time, and come into mental contact with other individuals and events in the past and future. In the last stage, powers of the mind assume physical and mental supremacy over individuals, objects, space, and time. This is not to say, however, that the development must follow such successive stages, since certain individuals may bypass the first stage in order to reach the second, or the first and/or second stages in order to reach the third. At any rate, the development of inner powers in advanced stages requires great effort and time; and such development should be systematically and "scientifically" explored.

The East could and should contribute to futurism "mystical" alternatives, since supernatural practices do prevail and are practiced more in the exotic East than in the "scientific" West. Mystical futurism should supplement technological futurism and should bring the future into harmony with nature by recovering nature's greatest gift to mankind—the powers of the mind—and putting it to proper use.

Conclusion

In contrast to the study of futures in Europe, futurism in the United States does not contain philosophical viewpoints but deals mainly with pragmatic aspects of the future. Futurism and other names designed to avoid polemics—futures research, futures study, etc.—have no explicit meanings. Certain dimensions of futurism can be described as follows:

Futurism has shifted toward using quantitative and objective techniques in forecasting futures. However, futuristic methodologies cannot overlook the value of qualitative and subjective techniques, which permit more exercise of imagination, creativity, and intuition. Futurism still needs futuristic mavericks.

Futuristic studies in the early stages tended to possess a pessimistic or an optimistic character, and a determinative or normative nature. Modern futurism attempts to take a neutral position between pessimism and optimism, and between determinative and normative natures. At any rate, such a position leans toward optimistic and normative futures, owing to the fact that man wants to create a desirable future and prevent an undesirable future from happening. Nevertheless, he cannot reach utopia; nor does he possess unlimited capability to control or create futures.

Most futuristic forecasts do not embrace a similar time span. In fact, there are differences among them on a time continuum. Between the concrete present and the abstract future lie immediate, probable, possible, and distant futures. Desirable or undesirable futures can be designed at all points on the continuum, although the degree of feasibility may be greater in the more distant future time than in the nearer futures.

Futurism implies action through planning and implementation of plans, in order to achieve desirable futures or avoid undesirable futures. Planning has become the other side of the coin for futurism. And through plans at various stages, futures are bridged to the presents Such a linkage, however, should permit man to constantly seek alternative futures and to resort to alternative actions.

Most futuristic studies emphasize scientific and technological futures for man. Some futurists attempt to study man's relationship to science and technology. Such outer-orientation may be supplemented by inner-orientation. Eastern mysticism or supernaturalism. Could be the answer to technological development: it could even become an alternative in the development of man's future

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Footnotes

[1] Wescott has compiled twelve alternative names for the study of the future; they are: allcotics, mellology, stoxology, futuribles, futurism, futuristics, futurology, posthistory, future studies, future research, future study, and the science of the future. See Roger W. Wescott, The Anthropology of the Future' as an Academic Discipline," in *Human Futuristics*, ed. Magoroh Maruyama and James A. Dator (Social Science Research Institute, University of Hawaii, 1972), p. 221.

[1] Michael Young gives a very liberal definition for the science of futurism:

"The purpose of science, either natural or social, is explanation, not prediction. But prediction is one of the best means of testing explanation, although not the only one. An explanatory theory ... may be perfectly satisfactory if it fits the facts about the past, and is only predictive in so far as it implies that anyone in thefuture who tries to test it by reference to the past will acknowledge its explanatory power.

" But many theories are not so limited. Deductions from them can be tested in the future in another sense beyond the one just mentioned—that is by the theoriser or others proceeding in the future to check whether future events do turn out as deduced, or predicted" (Forecasting and the Social Sciences, ed. Michael Young [London: Heineman, 1968], p. 20).

[1] For descriptions of various methodologies, see Theodore J. Gordon, "The Current Methods of Futures Research," in Toffler, Futurists, pp. 164-189, or Erich Jantsch, Technological Forecasting in Perspectives (Paris: OECD, 1967).

[1] Platt suggests in his wagon-train model that the inertia period is about 2-10 years, the choice-and-control period 10-20 years, and the uncertain future over 20 years ("How Men Can Shape Their Future"). Marvin G, Cetron, however, suggests that the fore casting period should cover a tiihe span of 20 years (Technological Forecasting

[New York: Technological Forecasting Institute, 1969], pp. 83-84).

[1] Gerald Feiberg divides long-range goals into developmental and transcendent goals. Functionally, he also divides long-range goals into environmental, reconstructive, and divertive goals. In another dimension, these goals are either individual or collective goals (The Prometheus Project [Garden City, N.Y.: Doubleday, 1969], p. 96).

[1] Francois Hetman, "Discussion on Future Research," in Jungle and Galtung, Mankind 2000, pp. 337-338. Brian Berry divides planning into four modes: (1) planning for the present or ameliorative problem solving, (2) planning toward the future or allocative trend modifying, (3) planning with the future or exploitative opportunity-seeking, and (4) planning from the future or normative goal-orientation ("A Paradigm for Modem Geography," a paper presented to the International Geographical Union, Montreal, August 1971).

[1] It is possible to consider materialism and scientific attitudes as being traditional in the sense of status quo, and in the same manner as Hayashi's logical present vis-a-vis the sensory future.

[1] For example, see Susy Smith, How to Develop Your ESP (New York: Pinnacle Books, 1972). Some other terms related to ESP are: mental telepathy, hypnotism, faith healing, precognition, psychokinesis, brain control, astrology, levitation, sightless vision, dowsing, witchcraft, occult, prophecy, alchemy, psychotronics, clairvoyance, psychics, parapsychology, crypto-spiritualism, exorcism, etc.

I G. Puri recommended yoga as religious technology for the future society in his speech to the Plenary Session of the Special World Conference on Futures Research, Rome, 28 September 1973.