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ABSTRACT

If man is to have a future which is desirable, it requires a drastic and prompt shift in the values and institutions of his society. The industrial-state paradigm of the last few hundred years was useful for that time, but for the future it has several crucial failings. These include failures: 1) to provide each person with an opportunity to contribute to the society and to be affirmed by it in return; 2) to foster more equitable distributions of power, wealth, and justice; 3) to foster socially responsible management of the development and application of technology; 4) to provide goals which will enlist the deepest loyalties of the nation's citizens; and 5) to develop and maintain the habitability of the planet. A "new age" paradigm now emerging is characterized by a metaphysic asserting transcendent man and the goal of a person-centered society. A fundamental contradiction exists between these aims and the industrial-state paradigm. The new aims will lead to fundamental transformations in science, education, the economic system, and institutions. The wisdom of present decision-making would be to test the results of decisions against the eventuality that the future will take this path. (JK)

PLANNING AMID FORCES FOR INSTITUTIONAL CHANGE

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(A presentation at the symposium "Planning in the Seventies," co-sponsored by the Washington Chapter of the American Society for Public Administration and the National Bureau of Standards on May 3-4, 1971. An earlier version of the talk was presented at the Jersey City State College Symposium on Human Ecology, April 23, 1971)

In the work of this Center we have attempted to construct a comprehensive set of "alternative future histories" for this nation from now until the year 2000.[1] (This was accomplished by devising an adequately rich coded description of the state of society and then systematically examining which sequences of these states are feasible for the next 30 years.) The results of this analysis indicate that the vast majority of the "future histories" so constructed are clearly to be avoided if possible. The reasons vary widely--from authoritarian governments to economic collapse, from ecological catastrophe to exhaustion from continuous warfare. The very small percentage of desirable "paths to the future"--desirable in the sense of leading toward the national goals implicit in the nation's founding documents--appear to require a drastic and prompt shift in the operative values of the society, and a corresponding change in its institutions.

It will be our purpose here to explore concisely (a) the reasons for considering such a far-reaching cultural and institutional metamorphosis to be plausible and perhaps even likely (though uncomfortable), (b) the nature of the change, and (c) some of the most important implications for our social institutions.

Let us first be explicit as regards the magnitude and pervasiveness of the transformation being posited. This is thoroughgoing systemic change, to a degree comparable at least with such historic transitions as the Fall of Rome, the Reformation, and the Industrial Revolution, involving changes in basic cultural premises, the root image of man-in-society, fundamental value postulates, and all aspects of social roles and institutions.

Lewis Mumford notes that there have probably been not more than a half dozen profound transformations of Western society since primitive man. Each of these "has rested on a new metaphysical and ideological base; or rather, upon deeper stirrings and intuitions whose rationalized expression takes the forms of a new picture of the cosmos and the nature of man."[2] I want clearly to distinguish what we are hypothesizing from other changes which are revolutionary in a social or political sense but do not involve transformation of the basic, implicit, unchallenged, taken-as-given metaphysic. We might apply to it, by analogy, the Greek word for religious conversion, metanoia: "a fundamental transformation of mind."[3]

This is by no means the first suggestion you have heard that we may be at a historic watershed, so I shall make the arguments to that point quite concise. I want to dwell particularly on some aspects of the fundamental nature of the transition (which, with the general speedup of events, may take place in the space of a decade or two rather than the century of religious warfare that accompanied the Reformation), and on what this means for our social institutions.

Bear in mind, I am not saying that metanoia must inexorably take place--rather, that is appears necessary for a desirable future, that some cultural movement toward its accomplishment is evident, and that our social and political choices over the next few years may be fateful, in that by fostering or repressing the forces for metanoia they can drastically affect the future of the human experiment.

I. Necessity of paradigm change

It will be helpful to introduce another term. In his seminal study of the structure of scientific revolutions T. S. Kuhn[4] uses the term "dominant paradigm" to refer to the basic way of perceiving, thinking, and doing, associated with a particular vision of reality, largely embodied in unquestioned, tacit understanding transmitted primarily through exemplars. Thus, applying this concept to the whole society, a paradigm is more than an ideology or a world view, and less than a total culture. Kuhn documents the sequence of phenomena that tend to accompany the breakdown of influence of an old paradigm and its replacement by a new one. Growing awareness of problems which appear to be intrinsic to, and unresolvable within, the old paradigm is one such sign.

In historical retrospect we can see that a paradigm which began its climb to dominance several centuries ago, has since influenced all aspects of Western society. This industrial-state paradigm, sharply differing from the dominant paradigm of the Middle Ages, is characterized by:

Development and application of scientific method

Wedding of scientific and technological advance

Industrialization through division of labor

Progress defined as technological and economic growth

Man seeking control over nature; positivistic theory of knowledge

Acquisitive materialism, work ethic, economic-man image

Born out of this paradigm are the fabulous products of modern industrial organization and modern technology. The beginnings of breakdown of the paradigm are dramatically shown in the fact that its successes underlie all the serious social problems of our day. Table I illustrates this. The left hand column lists the achievements of industrial society; the right hand column shows the corresponding problems to which these have led. These problems are ultimately unsolvable in the present paradigm precisely because their origins are in the success of that paradigm.

"Successes" of the technological era	Resulting problems of being "too successful"
Prolonging the life span	Overpopulation; problems of the aged
Weapons for national defense	Hazard of mass destruction through nuclear and biological weapons
Machine replacement of manual and routine labor	Exacerbated unemployment
Advances in communication and transportation	Urbanization; "shrinking world"; vulnerability of a complex society to breakdown (natural or deliberate)
Efficiency	Dehumanization of the world of work
Growth in the power of systematized knowledge	Threats to privacy and freedoms (e.g., surveillance technology, "bioengineering"); "knowledge barrier" to underclass
Affluence	Increased per capita environmental impact, pollution, energy shortage
Satisfaction of basic needs; ascendance up the "need-level hierarchy"	Worldwide revolutions of "rising expectations"; rebellion against "non-meaningful work"; unrest among affluent students
Expanded power of human choice	Management breakdown as regards control of consequences of technological applications
Expanded wealth of developed nations	Intrinsically increasing gap between have and have-not nations
Development of prepotent high-technology capability	Apparent economic necessity of continuous war to use up the output of the "megamachine."[5]

Table I. Summary display of the ways in which major contemporary societal problems are consequences of the successes of the industrial-state paradigm.

This breakdown of the industrial-state paradigm is at least fivefold:

1. It fails to promote further accomplishment of one of the most fundamental functions of a society, namely to provide each individual with an opportunity to contribute to the society and to be affirmed by it in return. This involves much more than a failure to achieve reasonably full employment with an adequate income-maintenance provision. The problem is that of an ever-increasing segment of the society who are defined as "not needed", because in whatever work they feel fitted to do they have been replaced by a machine or could be. (The number clearly would be far greater had we not had a war-stimulated economy for over thirty years.) The psychological consequences of having nothing to offer that the society values are not dealt with by keeping these persons as pets on some sort of income-maintenance arrangement. Ironically, the humane aim of relieving man, through technology, of burdensome and routine labor, results in the end with his being deprived of the privilege of performing educative, mind-forming, self-rewarding, appreciated work.

2. It fails to foster more equitable distribution of power, wealth, and justice. There is a fundamental power instability intrinsic to any conceivable society: The having of physical, political, economic, or knowledge power is conducive to gaining more; the lack of such power makes for vulnerability to further loss. (Them as has, gets.) Every stable society has had to devise some way of counteracting the ultimate disruptiveness of this instability, including some form of legitimized coercion. (This was accomplished in the traditional society by a caste structure with traditional and legal rights associated with each caste level. Some small societies have had egalitarian communist structures and ethics. In every case some limiting mechanism ultimately counteracted the tendency of power to accumulate indefinitely.)

In the modern industrial democracy this accumulative tendency has been held in check by a tradition of equality of opportunity and of mobility through socio-economic classes, backed up by a variety of regulating measures--anti-trust laws, fair trade agreements, graduated income tax, checks and balances in government, collective bargaining arrangements, regulatory commissions, and so on. These mechanisms are

proving inadequate to move toward a more equitable distribution of power and wealth, partly because of the growth of a network of giant corporations with such enormous economic power that they are relatively immune to normal processes of community control, but more fundamentally because the basic paradigm contains within it no rationale for redistribution. That rationale has always been provided by an altruistic ethic based in transcendental values which were external to the basic paradigm of the industrial era. That ethic was seriously eroded during the twentieth century by the rise of positivistic, materialistic science. With the decline of "American civil religion"[6] comes a decline in the efficacy of those social-regulation mechanism which require it for their smooth functioning.

3. It fails to foster socially responsible management of the development and application of technology. We listed earlier the societal problems resulting from the "Faustian powers" of technology. These have been the direct result of the unspoken policy that whatever technology could make a profit for an individual or a corporation, or could contribute to a nation's ability to carry on warfare, that technology would be developed and applied. The values and policies that have thus far governed industrialization and technological development clearly will not suffice to insure that these ever more potent powers will be used for the overall benefit of humanity. Our past practice has been to allow arms races, pollution, environmental degradation, ecological imbalance, or denuding of the land to proceed until the situation obviously became intolerable, and then to attempt some corrective action. Some sort of transnational control over scientific and technological innovations is essential,[7] clearly involving some new institutional forms. But if these are to work, they have to be backed up with a changed ethic which gives the general good a more commanding position.

This failure, and also the failure to achieve more equitable distribution of wealth, relate directly to what Heilbroner[8] terms "a central weakness of the market system--its inability to formulate public needs above those of the marketplace". It does appear that some more socialist forms of the industrial state can distribute wealth and regulate technological impact more successfully than the forms in which more dependance is placed on the market system. The costs of this gain are a centralist tendency, and risks of

bureaucratic stultification and authoritarian inflexibility. As Heilbroner puts it, "The central problem which is likely to confront the societies of tomorrow is nothing less than the creation of a new relationship between the economic aspect of existence and human life in its totality."

4. It fails to provide goals which will enlist the deepest loyalties and commitments of the nation's citizens. The implicit goals of expanding economic growth and affluence are not adequate. Having contributed to the solution of most of the how-to-do-it questions we can imagine, the paradigm fails to shed light on the question of what is worth doing. Again it is important to note that those goals which have, in the past, enlisted the nation's deepest loyalties and commitments, are part of the "American civil religion" which grows out of a competing paradigm (Judeo-Christian tradition, Western political tradition) whose force has declined as the industrial-state paradigm gained in dominance. (The Declaration of Independence asserts, "We hold these truths to be self-evident", and to the deductions from those truths concludes, "we mutually pledge...our Lives, our Fortunes, and our Sacred Honor". Science had pronounced, by early in this century, that such action was either conditioned or neurotic behavior.)

5. It fails to develop and maintain the habitability of the planet. To the contrary, the ethic of man "controlling" and exploiting nature leads ineluctably to greater and greater disruptions of previous ecological balances, spoliation of the environment, and squandering of life-sustaining resources.

These failures are intrinsic, built into the paradigm itself and awaiting only the unfolding of consequences until they become critical. Population pressure, itself a consequence of the technology-aided prolonging of life span, alters the timetable, making problems crucial earlier than they might be if population were reduced. But population limiting along will not resolve the problems. (This fact is immediately apparent if one imagines population to remain constant but affluence and consumption levels throughout the world to be raised to those presently enjoyed by the American upper middle class.)

II. An emerging "New Age" paradigm

Victor Ferkiss,[9] analyzing the unavoidable problems to which the technological ethic leads, concludes that the required "new guiding philosophy" must contain three basic and essential elements. First is what he terms a "new naturalism," which affirms that man is absolutely a part of a nature, a universe, that is always in the process of becoming. The second element, a "new holism," recognizes that "no part can be defined or understood save in relation to the whole." The third, a "new immanentism," sees that the whole is "determined not from outside but from within."

Appearing as though in response to this inferred need for a new guiding philosophy is a "New Age" paradigm, dimly defined as yet but featuring a kind of ecological consciousness that satisfies Ferkiss' three conditions. It is characterized by (a) a metaphysic asserting transcendant man, and (b) the goal of a person-centered society. Whether this seemingly spontaneous emergence of a new outlook is fortuitous coincidence or response to a subliminally perceived need of society is a moot but unimportant point. In either event, the coincidence of the need and the emergence of a possible answer to the need increases the likelihood that we are witnessing the beginnings of a thoroughgoing paradigm shift.

Clues to the nature of the "New Age" premises are to be found in the swelling interest in religious, metaphysical, psychic and arcane literature and discussion groups; in the "consciousness-expanding" activities of the "human potential" movement, ranging from yoga and transcendental meditation to psychedelic drugs and efforts to develop "psychic openings"; in the juxtaposition, in underground newspapers and other activities of "the movement", of revolutionary messages with material on religious, esoteric, and psychic topics.[10] Most significant, as an indication of the growing challenge to the prevailing positivistic premise of conventional science, is the growing scientific and popular interest in "altered states of consciousness",[11] that is, in that realm of subjective experience in which is rooted the most fundamental beliefs and value postulates of this or any culture.[12]

The basic premises of the "New Age" paradigm are by no means new. The belief in transcendant man, with unlimited potentiality to comprehend the innermost workings of his universe, to have immediate perception of a supersensible reality and of his intimate relationship with it, has been the esoteric tradition of all the world's religions for thousands of years.[13] The goal of a person-centered society was the foundation stone of this nation. "The Declaration (of Independence) put the individual squarely at the center, as of supreme importance. It completely reversed the age-old order; it defined government as the servant of the individual, not his master."[14] It would be the becoming dominant and operative of these premises and goals which would be new--which would comprise metanoia.

The 1960 report of the President's Commission on National Goals stated emphatically that "The paramount goal...is to guard the rights of the individual, to ensure his development, and to enlarge his opportunity...All of our institutions--political, social, and economic--must further enhance the dignity of the citizen, promote the maximum development of his capabilities, stimulate their responsible exercise, and widen the range and effectiveness of opportunities for individual choice...The first national goals to be pursued...should be the development of each individual to his fullest potential...Self-fulfillment is placed at the summit (of the order of values). All other goods are relegated to lower orders of priority...The central goal, therefore, should be a renewal of faith in the infinite value and the unlimited possibilities of individual development." What was not clearly understood in 1960 and is more apparent now, is that a fundamental incompatibility exists between these aims and the dominant paradigm of the industrial state.

III. Some specific implications for society

Thus we have argued that (a) the industrial era, which can be thought of as (in historical terms) a gigantic unprecedented step toward new possibilities for man, has been based in a paradigm which, however well suited to that step, seems now fundamentally inappropriate to the task of constructing a humane world on the base of those technological accomplishments;

and (b) a new and suitable paradigm may be in process of replacing the old.[15]

If this (admittedly audacious and non-demonstrable) proposition turns out to be accurate, and the claimant "New Age" paradigm does become dominant, it will--as we have noted--amount to a profound and pervasive systemic change. All institutions of the society will be affected.

The meaning of the metanoia can be better grasped if we attempt to guess at likely changes in specific areas. We do this, not as an attempt at prediction, but in the endeavor to better understand what this change might mean for the society.

Science. Science, in the claimant paradigm, will be clearly understood to be a moral inquiry. That is to say, it will deal with what is empirically found to be good for man--in much the same sense that the science of nutrition deals with what foods are wholesome for man. It will place particular emphasis on the systematic exploration of subjective experience, the ultimate source of our value postulates. In this respect it will resemble the humanities and religion, and the boundaries between these three disciplines will become less sharp--as is already presaged in the recent writings of some psychotherapists[16].

The new psychology will incorporate, in some form, the age-old yet radical doctrine that we perceive the world and ourselves in it as we have been culturally "hypnotized" to perceive it. The typical commonsense-scientific view of reality will be considered to be a valid but partial view--a particular metaphor, so to speak. This new psychology will include some way of referring to the subjective experiencing of a unity in all things (the "divine Ground" of Aldous Huxley's The Perennial Philosophy), and of a "higher self" (Emerson's "Oversoul"), and will view favorably the development of a self-image congruent with this experiencing. It will allow for a much more unified view of human experiences now categorized under such diverse headings as creativity, hypnosis, mystical experience, religious insight, extrasensory perception, self discovery and personality growth. It will tend to be evolutionary and emergent, viewing human needs and values as varying in a hierarchical way as the individual's development proceeds (as exemplified in Maslow's postulated hierarchy of needs[17]).

Applied science, particularly educational research, will look strongly in the direction of new potentialities suggested by the newly appreciated powers of belief, imagination, and suggestion. To conscious choice and subconscious

choice (repression, projection, sublimation, etc.) will be added what might be termed "supraconscious choice"[18] (intuition, creative imagination, choosing "better than we know")--with as much impact upon our policies regarding education, welfare, criminal rehabilitation, and justice as the Freudian concept of "subconscious choice"--e.g., repression, projection, sublimation, etc.--had some years earlier. Finally, the new science would become also a sort of "civil religion", supporting the value postulates of the Founding Fathers rather than being neutral or undermining as was the old science.

Institutions. Clearly the new metaphysic would tend to support effective institutionalization of such values as society serving the self-fulfillment of the individual, equality of justice before the law, individual fulfillment through community, human dignity and meaning, honesty and trust, self-determination for individuals and minority groups, and responsibility for humankind and the planet. However, values do not become operative simply by being deemed "good". Let us look at some arguments that suggest these values might become operative because they work.

As the social system becomes more and more highly interdependent, the need becomes greater for accurate information to be available throughout the system. Just as the modern banking and credit system would not operate smoothly with the low trust level of a warrior culture, so highly complex task operations (such as putting a man on the moon) require a higher level of honesty, openness, and trust than suffice in advertising and merchandising. For quite practical, rather than moralistic, reasons, the demanded level of honesty and openness can be expected to increase.

Similarly, as the complexity of societal operations increases, hierarchically organized bureaucratic structures tend to communication overloads near the top and discouragements to entrepreneurship and responsibility-taking lower down. Adaptive organic forms, with relatively autonomous subsystems, seem better adapted to complex taxks and provide more satisfying experiences to the people involved.

In general, the more significant a fraction of the whole is a subsystem, the more important it becomes that its goals be in close alignment with those of the overall system. It would be quite practical to foster (through changes in corporation, tax, and anti-trust laws, credit policies, special subsidies, etc.)

the development of profitmaking corporations whose operative goals include active response to social problems (as of those of nonprofit corporations already do) and fostering the educational growth and development of all persons involved (as the goals of universities already do). In fact, if something like this does not take place the amount of government regulation required for pollution control, fair business and employment practice, resource conservation, etc., can only increase without limit.

In short, the institutionalization of the values of the "person-centered society" would appear to be not only morally desirable, but "good business" for the nation.

Economic system. The portion of the industrial-state paradigm underlying the present operation of the economic system includes such concept as man as infinite consumer of goods and services (providing his appetites are properly whetted through advertising), profit maximizing and economic growth as pre-eminent goals, and government as master regulator of employment level, growth rate, wage and price stability, and a modicum of fair play. The new paradigm would remind us that the root meaning of "economics" is "home management", and that the planet earth is man's home. Managing the earth, with its finite supplies of space and resources and its delicate ecological balance, and conserving and developing it as a suitable habitat for evolving man, is a far different task than that for which the present economic system was set up.

Furthermore, an economic theory is inevitably based upon a theory of social psychology. If man is not "economic man" in a self-regulating free market, nor an infinite consumer with manipulable motivations, but something quite different, then we need a radical correction to economic theory.

So some changes will take place in our economic institutions and practices of which we can see only the general directions. One clear need is a network of citizen-participation policy and planning centers at local, regional, and national levels, linked together with a common understanding of the alternatives that lie before the society and some unifying agreement as to the futures to be desired and those to be avoided.

Education. If the society does indeed undergo metanoia, one of the most significant ways in which the transformation will be manifested will be in the

premise that education is the paramount function of society. Robert Hutchins[19] describes "the learning society" as one that will have transformed "its values in such a way that learning, fulfillment, becoming human, had become its aims and all its institutions were directed to this end. This is what the Athenians did...They made their society one designed to bring all its members to the fullest development of their highest powers...Education was not a segregated activity, conducted for certain hours, in certain places, at a certain time of life. It was the aim of the society...The Athenian was educated by the culture, by Paidea." And the central task of Paidea was "the search for the Divine Center[20]."

The individual will have several careers during his lifetime. This is not because they are forced upon him by job obsolescence in a technological-industrial megamachine madly careening out of control and ever faster. Rather, it will be because it is in this way that he best realizes his own potentialities and maximizes his own fulfillment. But this will require institutional changes to accommodate to more or less continuous education throughout life, with particularly intense learning activity during periods of career change.

The precise way in which this will be resolved cannot be foreseen, of course. Perhaps a multiplicity of institutional forms will be required, including new kinds of collaborative arrangements between educational institutions and industrial and commercial organizations. The emergence of new types of profit-making corporations with diversified goals, as suggested above, might help to legitimate the growth-promoting and educational activities which seem impracticable under present laws affecting corporations.

It is along these lines that the society would approach the "unneeded people" problem which was earlier identified as one of the key ways in which the breakdown of the industrial-state paradigm is becoming manifest. The "recycling" of those persons engaged in career change will take the stigma off the recycling of those which the modern industrial state shunts out of the productive mainstream, usually irretrievably--those labeled "technologically disemployed," "unemployable," "dropout," "poor," "delinquent," "criminal," "deviant," and "mentally ill." Appropriate emotional support and educational opportunity will be the assumed responsibility of widely distributed public, private, and voluntary organizations, rather than the charge of a huge welfare bureaucracy which dispenses "income maintenance" but not human concern.

IV. The relevance to present decisionmaking

The intent of this paper is neither alarmist nor utopian, but practical. All policy decisions are guided by some interpretation of the past, and some vision of the future--or of alternative futures. We have examined an interpretation of recent indications of social ferment (as associated with paradigm change) and a vision of one alternative future (institutional changes associated with the new paradigm becoming dominant), both in a most abbreviated form.

A competing view would see neither necessity for, nor evidence suggesting, such a basic paradigmatic change. In this view the future would be approximated by a smooth continuation of past trends[21].

Two observations are crucial: (a) At this point in history each of these two alternative views can be made plausible, and each is held by many reasonable men. (b) The rational national policies which would be derived from the two views differ greatly; some policies which seem sensible in one view appear harmful in the other.

Thus at the least, it would seem prudent to test policy decisions both against the eventuality that the view presented here may prove accurate, and also against the opposite eventuality, that it may simply turn out to be wrong and our current travails will be interpreted in some other way.

Under the assumption that the paradigm-shift interpretation is more or less correct (that is, that the shift seems possible and desirable, but by no means automatic), it follows that the main challenge to society is to bring about the transition without shaking itself apart in the process. Every major policy decision tends either to foster the change or to impede it. Actions which attempt to force it too fast can be socially disruptive; actions which attempt to hold it back can make the transition more difficult and perhaps bloody. For example, there can be little doubt that maintenance of strong economic and legal-enforcement systems through the transition period is essential; yet these systems too must be flexible to change. Seldom in history has such delicacy of balance been required, to achieve a major social transformation rapidly and yet not rupture the social fabric.

Notes and References

1. Various reports of the Educational Policy Research Center, Stanford Research Institute, including:

   Research Memorandum 6747-6, Alternative Futures and Educational Policy; February 1970.

   Research Note 6747-11, Alternative Futures: Contexts in Which Social Indicators Must Work; February 1971.

   Research Memorandum 6747-10, Projecting Whole-Body Future Patterns--The Field Anomaly Relaxation (FAR) Method; February 1971.

2. Mumford, Lewis, The Transformations of Man, p. 231. Harper and Brothers, New York; 1956.

3. The word has recently been used in this sense in Pearce, Joseph C., The Crack in the Cosmic Egg. Julian Press, New York; 1971.

4. Kuhn, Thomas S., The Structure of Scientific Revolutions. University of Chicago Press; 1962. Further discussion of the psychological threat involved in paradigm change may be found in Polanyi, M., Personal Knowledge; Maslow, A., The Psychology of Science; Matson, F., The Broken Image, and Rokeach, M., The Open and Closed Mind. These remarks are based on the more extensive analysis of contemporary revolutionary forces by Norman McEachron, A Contemporary Framework for Social Change, EPRC RN-12, June 1971.

5. Mumford, Lewis, The Pentagon of Power. Harcourt, Brace, Jovanovich, New York; 1970.

6. Bellah, Robert N., et al., "Commentary on Civil Religion in America", Daedalus, Winter 1967, pp 1-21. Also Gabriel, Ralph H., The Course of American Democratic Thought, Ronald Press, 1956.

7. Wheeler, H., "Bringing Science Under Law." The Center Magazine 2 (March 1969): 59-67.

8. Heilbroner, Robert L., The Making of Economic Society. Prentice Hall, Englewood Cliffs, New Jersey; 1970.

9. Ferkiss, Victor C., Technological Man: The Myth and the Reality. George Braziller, New York; 1969.

10. See, for example, Needleman, Jacob, The New Religions. Doubleday and Co., Garden City, N.Y.; 1970. Also Roszak, Theodore, The Making of a Counter-Culture. Doubleday, 1969.

11. Tart, Charles, Altered States of Consciousness. John Wiley & Sons, New York; 1969: W. Harman, in "The New Copernican Revolution." Jour. Humanistic Psych. Vol. IX, No. 2, Fall 1969, pp. 127-134, discusses the significance of new experimental tools for studying physical and physiological correlates of inner states.

12. This is not an entirely new concern of scientists, as is evidenced by such works as William James' Varieties of Religious Experience, Richard Bucke's Cosmic Consciousness, and Pitirim Sorokin's The Ways and Power of Love.

13. Huxley, Aldous, The Perennial Philosophy. Harper and Brothers, New York; 1945.

14. Goals for Americans, pp. 1, 3, 53, 48, 57. Prentice Hall, Englewood Cliffs, N. J.; 1960.

15. Platt, John R., The Step to Man. John Wiley & Sons, New York; 1966.

16. To mention a few: Carl Jung, Erich Fromm, Rollo May, Ira Progoff, Carl Rogers, Roberto Assagioli, J. F. T. Bugental.

17. Maslow, Abraham, Towards a Psychology of Being. Van Nostrand, New York; 1962. See also Elizabeth Drews, "Policy Implications of a Hierarchy of Values," Research Memorandum 6747-8 of the Educational Policy Research Center, Stanford Research Institute, Menlo Park, California.

18. Pitirim Sorokin's study The Ways and Power of Love (Beacon Press, 1954) is a pioneering effort by a noted sociologist to initiate a systematic study of supraconscious processes.

19. Hutchins, Robert, The Learning Society, Praeger, New York; 1968.

20. Jaeger, Werner, Paidea: The Ideals of Greek Culture, Basil Blackwell, Oxford Press, 1945.

21. The majority of future forecasts do not assume a paradigm change. One of the most comprehensive of these is Herman Kahn and Anthony Wiener, The Year 2000: A Framework for Speculation. MacMillan, New York; 1967. One which appears to have an alarmingly high probability is Bertram Gross, "Friendly Fascism: A Model for America," Social Policy, Nov.-Dec. 1970, pp 44-52.