

3-1-1972

Theology, News and Notes - Vol. 16, No. 01

Fuller Theological Seminary

John Hoagland

Paul K. Jewett

Donald F. Tweedie Jr.

Follow this and additional works at: <https://digitalcommons.fuller.edu/tnn>

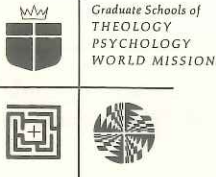
 Part of the [Religious Thought, Theology and Philosophy of Religion Commons](#)

Recommended Citation

Fuller Theological Seminary; Hoagland, John; Jewett, Paul K.; and Tweedie, Donald F. Jr., "Theology, News and Notes - Vol. 16, No. 01" (1972). *Theology News & Notes*. 38.

<https://digitalcommons.fuller.edu/tnn/38>

This Periodical is brought to you for free and open access by the Fuller Seminary Publications at Digital Commons @ Fuller. It has been accepted for inclusion in Theology News & Notes by an authorized administrator of Digital Commons @ Fuller. For more information, please contact archives@fuller.edu.



Theology, News and Notes

PUBLISHED FOR THE FULLER THEOLOGICAL SEMINARY ALUMNI

MARCH 1972

The Future We Face

JOHN HOAGLAND

A Theologian Responds / A Psychologist Responds

PAUL K. JEWETT

DONALD F. TWEEDIE, JR.

Theology and the Baron Frankenstein: Cloning and Beyond

CHARLES STINSON

Explorations in New Liturgy for Man of the Future

GEORGE F. REGAS

Fear of an Unknown Future

DAVID HUBBARD

Editorial



EDWARD R. DAYTON

Why think about the future? Has it not always been there? Are not the problems of today sufficient?

The problems of today are the children of yesterday. Our ability to respond to them is greatly dependent on whether they caught us unaware or whether we had anticipated their arrival. This is true at every level of life.

Of all men, the Christian should have the greatest sense of inner security. His past is forgiven and his future secure. But this inner peace will not give him answers to the questions of a worry weary world unless he is aware of the world around him into which he is moving at breakneck speed.

The surest prediction we can make about tomorrow is that it will come. Almost as certain in this day and age is the fact that it will be radically different from today. The more energy we use concentrating on today's needs the less able we will be to handle tomorrow's.

Some men are given the role of leadership in the Church. Leadership assumes a sense of direction and an ability to lead through the troubled waters that may yet lie across our path. Leadership has to do with the future. It is of the leader that we ask, "What do we do next? Where are we going?" Answers to such questions are increasingly dependent upon a knowledge of what lies before us.

In this issue of *Theology, News & Notes* we have asked John Hoagland to summarize for us one aspect of the future—the changes that may occur to man within man himself. John and I have been associates at the Missions Advanced Research and Communication Center for the past four years. He brings to his task a poet's understanding of life and a Christian's deep commitment to the Person of Jesus Christ.

Edward R. Dayton, B.D. '67, is director of the Missions Advanced Research and Communication Center of World Vision International, Monrovia, which is devoted to applying business and science technology to the mission of the Church.

He was graduated from New York University with a B.S. in aeronautical engineering, and for the next fifteen years moved through a series of engineering positions until he left industry in 1964 as assistant engineering division manager for systems of Lear Siegler, Inc., of Grand Rapids. He enrolled at Fuller at that time, and has been director of MARC since.

Mr. Dayton holds a number of patents on aircraft instruments. He has edited three books and has authored numerous papers dealing with both industry and Christian missions.

To John's summary we have invited a number of people to respond from their discipline or position. These come in different forms. Paul Jewett gives us his terse evaluation of the whole and points to a few specifics for clarification. Donald Tweedie agrees with Jewett that men have always been afraid of the future and always able to forecast his imminent demise. To their comments we have added an article by Charles Stinson calling us to the need to answer theologically some of the questions raised by Hoagland.

But there are other responses to the future. George Regas explores for us new liturgies for man in the future. David Hubbard gives us a biblical ground for confidence.

We have included reviews of books (mostly secular) that may provide helpful background to an ever more controversial topic.

We hope that you will be able to find some answers for yourself as you read through these reflections. If nothing else, we hope that your concern for the society in which we are rapidly moving will be heightened and that you will be better able to help others through these times of tension and stress. ▲

In this Issue . . .

THE FUTURE WE FACE, by John Hoagland	3
A THEOLOGIAN RESPONDS, by Paul Jewett	9
A PSYCHOLOGIST RESPONDS, by Donald F. Tweedie, Jr.	10
THEOLOGY AND THE BARON FRANKENSTEIN: CLONING AND BEYOND, by Charles Stinson	12
CLASS NEWS	14
PLACEMENT OPPORTUNITIES	14
ALUMNI REPORT	15
EXPLORATIONS IN NEW LITURGY FOR MAN OF THE FUTURE, by George Regas	16
FEAR OF AN UNKNOWN FUTURE, by David Allan Hubbard	19
ANOTHER RESPONSE	23
BOOK REVIEWS	23

Theology, News and Notes

VOLUME XVI, NUMBER 1, MARCH 1972

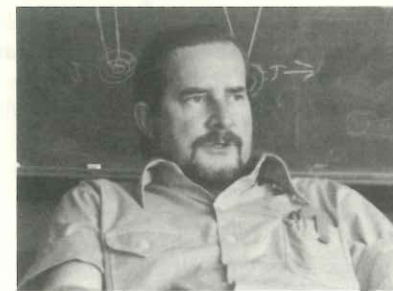
EDITORIAL BOARD: Frederic Wm. Bush, B.D.'58, Th.M.'60, chairman; Richard J. Anderson, B.D.'62; Jay Bartow, B.D.'70; Edward R. Dayton, B.D.'67; James S. Hewett, B.D.'57; James H. Morrison, B.D.'56; Lewis B. Smedes.

INTEGRATOR, MARCH ISSUE: Edward R. Dayton.

MANAGING EDITOR: Bernice Spencer Bush.

A publication of Fuller Theological Seminary, 135 North Oakland Avenue, Pasadena, California 91101. Published four times a year in March, June, October and December. Second class postage paid at Pasadena, California.

The editorial content of *Theology, News and Notes* reflects the opinions of the various authors and should not be interpreted as necessarily representing the views of Fuller Theological Seminary trustees and faculty.



The Future We Face . . .

JOHN HOAGLAND

. . . appears paradoxically bleak and promising beyond imagination. One is reminded of the opening lines of a Dickens classic of 1859 describing yet a previous period:

It was the best of times, it was the worst of times,
it was the age of wisdom, it was the age of foolishness,
it was the epoch of belief, it was the epoch of incredulity,
it was the season of Light, it was the season of Darkness,
it was the spring of hope, it was the winter of despair,
we had everything before us, we had nothing before us,
we were all going direct to Heaven, we were all going
direct the other way —
in short, the period was so far like the present period,
that some of its noisiest authorities insisted on its being
received,
for good or for evil, in the superlative degree of com-
parison only.

In many respects what observers describe as "the future" appears outright terrifying—in other respects utopian, largely depending upon the observer's particular bias and value system. Thus something terrifying to some will bode well to others, and what is constructive to some will to others be interpreted as destructive.

Today "the future" is being discussed on every hand and from every viewpoint. Our purpose in this essay is to look at the future from one limited aspect—that of man himself. Our approach is to summarize the trends that others seem to see as important. The role of this essay is not to make predictions, but rather to give us ground to reflect on our Christian response to other's predictions. As we proceed, one might ask:

- What difference will this development make, if even partially true, in how I think about my God, myself, my service and those I influence?
- What practical, changing effect will this have on the day-to-day life of my particular world of people, their attitudes and openness?
- What feelings and responses does this information cause within me as I consider the probabilities?
- Or is this whole business (or a particular trend) just

John Hoagland recently assumed the post of director of the new Bible school associated with the Hollywood Free Paper of Jesus People, Inc. At the time he wrote this article he was a futurist on the staff of World Vision.

He previously served as editor of publications for Far East Broadcasting Co., and with his family was a missionary in Japan.

one more manipulator's panic button, contrived to steer us into another creative confusion between fantasy and reality?

■ Does the margin of safety in our responses and in our planning lie on the side of assuming and facing the worst? If so, can we not then turn and realistically seek ways to optimistically and beneficially bring remedies to man within the coming situation as we see it?

Thinking about the future or trying to write a history of the future is not simple. Dr. Martin Marty cites seven approaches that practitioners use to get at the future. The first he calls *prediction*. Here the past is surveyed, rhythms and cycles identified, and a future depicted based on the assumption they will reoccur. The second follows present identifiable trends by a common-sense drawing of graphs and charts which are projected into the future while attempting to make allowance for every foreseeable factor. A third way approaches the subject within a *philosophy of history*. An outlook is devised on the basis of any and all impressions assuming a sort of knowledge about the outcome of history. Still a fourth deals with *the current obsessive interests of a society*. Where should our energies be directed with regard to, say, the crucial racial or ecological picture until in some way the problem is resolved? His fifth approach concentrates on certain *requirements of the social or life-support system*. What are the possibilities within the constraints of that system's framework? A sixth entry point into the "usable" future of Dr. Marty is utilized by those who look at the *sources of power*, the establishment, dissent or bureaucratic continuity. Which way should we "bet?" His last reference is to the writing of so-called *alternative futures* or "scenarios" by persons who may be agents of change themselves. These are disposable or revisable "scripts" working with alternative "looks as ifs" about the future—"imaginative predictions based on a range of possibilities." The idea is to produce a description about which others may reflect and to which they may respond.

Our approach here is dependent upon a combination of the third and the last entry points. As Christians we are looking over the shoulder of those doing the predicting—watching and organizing their identified trends—noting and describing what they see and then reporting their observations and bringing to bear our Christian viewpoint of world history.

As mentioned earlier, the data gathered and presented

here is limited to what might happen specifically to *man himself* in the foreseeable future. It is designed to be only one revisable, or disposable, possible future for man. It is not intended to be a deterministic, hard prediction based on comprehensive, primary research. It is, however, "documented" in that someone has stated every predictive concept herein and that "someone" is a credible observer or credible reporter of observers. Our query to the reader is: "If this happens, what do we do about it now?"

During the last few years my associates and I have been monitoring trends within the major categories of *Man Himself, Quality of Life, Societies, Attitudes, Personal Well-being, Change Itself*, and others.

No observer so far reviewed seems to doubt that the people of our generation are living in a period of substantial and relatively abrupt changes in our society, our perceptions, and possibly, of ourselves. Students of history might be quick to point out that it has been ever thus. But we seem to be more aware of changes in our society than we are aware of changes ourselves—within (or to) us as persons. We seem to see changes outside us sooner than we do those inside us. For this reason this paper focuses on those trends that have to do with *man himself*. What is happening to man or *within* him?

In order to deal with the subject in easier chunks, this scenario on the foreseeable future of man himself briefly covers the following major elements:

1. Effects of the cybernetic revolution.
2. Alteration of human beings by other human beings.
3. Control of specific human traits.
4. Revolution in human biology.
5. Psychological chemistry and machinery.
6. Alteration of mental ability in the individual.
7. Effects upon man of an apparently increasing tension between technology and human values.
8. Personal identity and meaning.

EFFECTS OF THE CYBERNETIC REVOLUTION

The word "cybernetics" was coined to describe the comparative study of automatic control systems, both human (as from brain to nervous system) and electronic (as from computer through electronic communication system). This revolution has been typified by research into how the *human* communication system works so that we may better understand and upgrade any communication system.

Psychological practices and awareness are affecting the life of our institutions, our leadership and our daily life. Psychological testing and profiling, for example, are expected to increase in use for the indefinite future.

What ramifications does this have for those responsible for placing people vocationally? Will the information thus derived from such testing lead to control of people by leaders without the people's consent?

The revolutionary consequences of present and anticipated biological research are expected to give us better understanding of all living systems. Such understanding would include the human brain and nervous system. Present research along this frontier is now relatively wide-

spread. Greatly increased understanding of human behavior and motivation is forecast.

But will our understanding of human government, leadership and social controls advance at the same rate? Will leadership understand itself sufficiently to increasingly act for the benefit of the society for which, and to which, it is responsible. Will it want to? What is a biblical view of the individual's submission to such tests and their possible, subsequent consequences?

HUMAN ALTERATION BY HUMANS

Predicted within the foreseeable future are extensive advances in the field of artificial organs. It is expected that this will accompany actual biological regrowth of body parts which have been severely damaged or removed—not just mechanical replacement. It is foreseen that one of the possible effects upon the individual will be a perceived loss of individuality due to surgical or biological implantation.

Present lines of research indicate the clear possibility of eventual tissue culture reproduction of *the entire human anatomy* from cells which have been placed in some kind of effective storage. It is predicted that by the year 2000 (barring war or a disaster on a scale sufficient to change the present curve) regeneration of individual human organs will be technically possible but not widely available. Sometime after the turn of the century this will be followed by the development of intact human anatomies from so-called "slips" or "cloned" people.

The possibility of human anatomies being reproduced in this manner means that it will be feasible to determine, to a large extent, the characteristics of the person produced since these characteristics will be identical to the person from whom the "slip" was taken.

How do we respond to that *idea*? How will we respond to the *reality*? How do you explain human incarnation or regeneration to a "clone"? What does such an even remote possibility suggest to us as to how the naturally reproduced human shall think about, and socially cope with, the admixture of an anthropoidal, "artificial" social entity similar to himself within his immediate environment? How will this alter our psychological insights, lines of diagnosis, therapy and investigation of incidence of neurosis in "true" man when he encounters the practical possibility of a pre-programmed, non-competitive or hyper-competitive "other" man?

CONTROL OF SPECIFIC HUMAN TRAITS

The so-called "breaking" of the human genetic code could give man-the-manipulator the ability to control desirable and undesirable human traits, both behavioral and physical. The term "human prescriptions" appears in literature. It is assumed that nearly any kind of man desired eventually will be produced. The factors of intelligence, talent, ability to endure extreme climates, rarefied atmospheres and so forth could be thus controlled. Discoveries related to the nucleonic acids, the so-called "building blocks of life," lead some to believe that we shall be able to alter cell heredity itself. Some biologists even foresee con-

trol of mutations by genetic surgery or by the use of artificial wombs. Manipulation of the genetic structure is one of the revolutionary aspects of the biology of the future.

What, if any, cogent biblical questions arise here? Is a prefabricated "man" *human*? Does "it" possess *pneuma* or *psyche*? Do the questions of personal character and perception automatically disappear where we have eventually achieved a sub-creation so like ourselves that only "they" know who "they" are and who "we" are? Or are these questions absurd and based on slightly less absurd predictions? What happens to man when he tries to change himself? What models do we have of this? How has it worked in the past?

But can we afford the luxury of ignorance of alternatives? Some of these aspects of a future which could otherwise unnecessarily destroy or benumb large numbers of us may be preventable. If depersonalization is wrong and artificialization may really be creeping dishonesty, what better options are there and how can they be discovered and supported? How much current effort should be going into the search for alternatives?

REVOLUTION IN HUMAN BIOLOGY

A lengthening of the average human life span by 50 years is predicted in the foreseeable future as the result of genetic intervention with the body's protective system. Resistance to disease declines as old age advances, allowing illness or infection to become fatal. This resistance may be increased through practical control of heredity. Understanding the aging process itself could extend the average life span, as could a specific understanding of the actual body processes which are thought to control life itself.

This prediction of increased life span is a good example of how complex and intertwined is our entire social system. It faces us with such questions as:

- Will there be a need for increased numbers of transportation vehicles due to a substantial (although temporary) influx in population?
- What steps would be needed, or desirable, to control the number of new people being born into the total system?
- How will the job markets be affected by a drastic increase in the ratio of adults to non-adults available in the labor markets?
- What would the effects be on the real estate, recreation and medical sub-systems?
- How will urbanization and the urban-rural ratio be affected?
- Will the distribution of affluence or poverty through various sectors of the society be substantially altered?
- As the average age of a working population increases relatively abruptly, what changes will take place in the quality of life of marginal groups within the labor force?
- How shall minority age groups be affected by changes in legislation instigated by those of an older majority?
- Will personal, group, and organizational religion play

more or less of a role within a senior citizenry which is now a majority? Will more of their numbers mean less loneliness, anxiety, guilt and fear—or more?

PSYCHOLOGICAL CHEMISTRY AND MACHINERY

The chemical control of emotional states could become a standard tool in United States industry or government. Predicted, for example, are chemical combinations which will bring to the surface submerged feelings of residual guilt, which even the expert psychoanalyst of that day will not be able to eliminate. It is expected that formulae will be found which will reduce tension without loss of acuity or dynamism such as might be required to fulfill a management task. An assumption here seems to be that energy and response levels can be maintained even in an emotional state where perceived tension is kept at a considerably lower level than would be normal without chemical augmentation. Our ability and willingness to condition man by addition of chemicals, it is said, will greatly increase during the 1970s.

Who shall decide what persons shall be treated and which chemicals shall be used? Do we know what we are doing?

One responsible student of the future flatly predicts the extensive modification of the mind and reconstruction of human personality by the year 2000. Wider use of "improvement" chemicals in biological therapy and improvement of the memory is expected in education. (Notice that the use of chemicals to help hyperactive children perform in a school environment is already widely used and accepted.) Another less specific forecast predicts the continued development of techniques for behavior manipulation and change. As an example, for an executive whose particular character makeup may be something of a handicap in a particular work situation, there will be devised specific prescriptions for adding to or diminishing particular personal characteristics as desired. We are advised that there will be such a thing as an "aggression booster" dose for the individual who tends to be passive in the leadership role, should that need arise.

How is an informed, Christ-aware person best helped to respond and think about possible developments such as these? Is it more healthy to ignore such data and "let it happen out"? What can be done about it anyway? It may be impossible to judge from our time perspective which of these predictions, if any, will occur. It may be equally difficult to determine whether what might be considered as "tampering with man's nature" is categorically "wrong" in every case. It may appear to us that a veritable flood of such difficult-to-evaluate, or even clearly negative, developments are about to "sweep us away." Or will they *gradually* develop, spread and alter our life style, and perhaps our nature, in often unperceived increments? Is this happening already? If so—so what?

Is the act of altering man's nature necessarily either a suspect or a beneficial action? Does even God *basically* alter man's intrinsic essence or structure per se, in regeneration, sanctification or even in physical resurrection? Is resurrected humanity still

basic humanity in its essential nature or not? Can man alter man to his long-term best interests—in any case? Is God willing to do so even for His own benefit?

More traumatic to some than mere chemical alteration of man's behavior or consciousness is the augmentation of the body or nervous system with certain electronic, animal or mechanical components. Reference to such links occur throughout the literature. Examples given include interface with highly sophisticated, computer tied machine systems which can reproduce a variety of complex, "human"-like functions: artificial organs used within the human body containing extreme electronic miniaturization, and man-machine communication characterized by idea and thought transfer rather than mere word transfer. One prediction asserts such bio-chemical-mechanical syntheses "sometime after" 2000 A.D. ("Sometime after" seems to mean "not before" but "not too long after" the year 2000.) That man's ability to control the formation of "new beings" could be an extension of his rapidly expanding skills in bio-chemistry, electronics and physics is not illogical, or is it?

Will it really happen? Is it already happening? One observer refers to such mixing of human and non-human components as a "humanizing of machines and mechanizing of humans." What does that mean? A Christian might ask whether it means that just because we can eventually link human and non-human components chemically, electronically or physiologically either "he" or "it" has been necessarily either essentially or functionally improved? Are we altering him so that we may only extend our own, or collective, egocentric control more effectively? In effect, will the toy maker inadvertently construct his antagonist or even his own functional replacement? Will Pinocchio always move to the overall benefit of his creator when he has been created from the mind of a creator who does not always so move? If we cannot control ourselves, how can we control our humanoid machines?

Jacques Ellul imagines in his *The Technological Society* that natural human reproduction will be eventually forbidden by social controls. Predicted is a commercial market for human embryos which will allow a prospective mother to buy an embryo in much the same manner as she now purchases morning glory seeds. She then takes it from the supermarket shelf to a doctor and has it implanted in her womb to be carried and born in the "normal" manner. Her alternative choices of embryo are taken into account within a system of commercial biology which is capable of controls and production of the tangible alternatives from which she chooses.

Further, it is forecast that human eggs will be experimentally fertilized artificially by 1975. Some intelligent men are telling us that the traits of these eggs can be controlled to some extent and that a stable population of the "highest human types" can eventually be achieved. Who in recent European history does that remind us of? The storage of human sperm and eggs for an indefinite period by 1975 is predicted.

What does all this say, if anything? Or are we confronted merely with the formula elements of some un-

promising but preposterous societal horror story — in its conceptual stage of writing? Who is mad? Who is afraid? As we assume greater and greater control of heredity and behavior, at what point should value judgments be added into the stream of thought and planning? Should we wait "until something happens" before we move to correct it? If not, what is to be done now on the basis of a previous awareness, if indeed we have one? What can be done?

ALTERATION OF MENTAL ABILITY

The mental ability of the individual, particularly the manager and leader, will come into increased attention and review. His ability to concentrate and his memory will receive prime attention. Brain modification and therefore behavioral modification can become a possibility, we are told. There is a prediction that "sometime after 2000 A.D." there will be a successful surgical disembodiment of the human brain.

Words and phrases occur in the literature such as "memory erasure," "memory injection," "memory editing," and "direct education of brain cells." Experiments with animals indicate that some brain tissue chemicals appear to transfer information when implanted in another brain. Untrained rats have been so chemically conditioned as to perform unlearned behavior by being injected with material from the brain of trained rats. Will this process work in man? Experiments with animals involving chemical or electrical stimulus of cells in the brain are said to have calmed monkeys, altered the basic needs of rats, and "even stopped a bull in mid-charge." New understandings of the human brain appear certainly forthcoming. Can further applications in medicine and psychology be far behind?

What effect will the knowledge that intelligence drugs and intelligence alterations are available and in use have on those who want the benefit of higher intelligence? Will lifelong formal education become a reality or will "education" as we know it now disappear altogether? Will the social system alter itself drastically as the demands for intelligence alteration are placed upon it? How will chemical alteration affect race relations, personal and social relations? Can the present competitive socio-industrial apparatus handle a quantum jump in human capability and performance? As human control is extended to alter mental ability, mental health and personality, at what point does it cross the line from being mere research to becoming medicine, psychology, social organization, government, politics or totalitarianism? What is a Christian response to pervasive, socially and culturally acceptable coercion, if it be coercion? What is the gospel in an age when standard medical or pharmaceutical treatment can reduce the symptoms of sin to tolerable or imperceptible levels of guilt, fear, anxiety or even hatred?

"Will 'it' come to this?" But if it does, what effect will it have upon *me* and upon *us*? The demands of competitive economic systems and component business sub-systems for faster and better decision, action, communication, and products will require that men be "tuned up" to meet such demands. Is that good? What

price will be paid in terms of real human values and needs? Is culture "Christian" — is technology? What is? A steady rise in the intelligence quotient of the average school child is expected to increase to 125 or even to 135 on the present scale. It is then expected to increase at some rate for the indefinite future. This substantial enhancement of I.Q. in man is predicted flatly for onset "by the year-2000." Who shall decide who shall be enhanced, and on what criteria? Will the standard be those requirements for the health of the person or the benefit of "system"? When are these the same and when are they not necessarily the same? Who shall say who shall be enhanced — those who have been enhanced — or those who have not?

TECHNICAL-SOCIAL TENSION

This has been perhaps the most quickly perceived and most widely analyzed polarization of our era. There is little question that both the tension and sense of need for its amelioration will continue. There is a stated conscious need for the humanities or other "person-oriented" interests to question the means and ends of those making social and political choices. There are those who feel that the effects of technology will continue to be more pervasive than the effects of programs for more direct human welfare, wherever those may be mutually exclusive.

In the case of American "civilization," the pessimist may have some grounds for his prediction that we will continue to be committed to improving our efforts and means toward carelessly examined objectives. Paradoxically, there is expected a substantially increased demand for balance in this sector, for ministry to humankind and welfare rather than for merely building redundant structures and technologies vaguely and hopefully designed to "serve" us.

One might ask: can human planners, no matter how artificially upgraded or tuned-up, take into account all the data and factors needed to make decisions that will benefit a larger and larger society? Eventually will they default to subtle aberrations such as involuntary tyranny or effectual rule by the content of their own computers? Can man live in an essentially technological world and still know when that technology has ceased to be his servant and has become his master? Can he recognize points of diminishing returns and self-canceling side effects in time to prevent them? Will any "advanced" system allow him enough control to alter that system should it become destructive to human well-being? Would such a system have to include a way to receive, store and respond to human value stimuli? Is this being done? Is it possible? Can a technological-economic system ever be made to correct itself in terms of human well-being and survival? Can a system be built which demands self-correcting stimuli of such a nature, or can it not? If not, why? If so, how? When do we begin to alter our alterations — too late, or in time?

Or, is technology one of the most potent forces for personalization? Does it, by contrast, result in *more* rather than less perception and appreciation of personhood? Is it a medium through which man can serve man as never before?

OUR SEARCH FOR IDENTITY AND MEANING

Predictions relating to a pervading technology by no means constitute the overwhelming percentage of the total forecasts being made, as might be suggested by the foregoing sections of this article. Those watching the "gauges" of trends in the humanities, social-psychology, psychotherapy, philosophy, art, aesthetics and so forth are as equally earnest as those measuring the progress of technology. Those concerned with trends which might balance or check the dominance of technological goals and pursuits are watching with probably *more* scrutiny. The minister, artist, clinical psychologist, poet, internist, writer, ecologist, sculptor, philosopher or theologian may be observing the advance of technical procedure and applications of technical goals with intense concern.

In the interesting case of those who use technology *directly* to benefit human beings, the modern era may induce a fascinating tension. The clinical psychologist, medical researcher, internist and ecologist are committed to use the best and latest technology available to remove the obstacles to human health and well-being. It is important, therefore, that we look at the pursuit of human values from their standpoints as well. Their perspective is that of the practitioner who is attempting to meet human needs while straddling the apparent crevasse between the "human" and the "technological" points of view and implementation. Perhaps by so looking we can note clues which will lead to functional amelioration of some of the major dichotomies which seem to divide the mind of our societies and sub-systems. Will technical-social dichotomy polarize or ameliorate?

One prediction asserts that during the final third of the 20th century there will be an increased emphasis upon the "meaning and purpose" of life for human beings. The value of the individual as a subject surfaces in one way or another in the writing on techno-social-personal tensions. A "multiplied concern" for individual human value and a philosophy of life is forecast.

Could this return to a concern for the individual in the midst of a technological age actually be the setting of the stage for the entry of an enlivened body of believers in Jesus and his Person? Is such a personal appearance through his alive ones more clear and meaningful by contrast with such a society so pervaded? Does such an incarnate appearance point current preparation for a direct, personal appearance in the last act? Which act are we in?

We are told that there will be a continued search for freedom from materialism. We are told that this search is already well under way, having emerged during the 1960s, through the youth and counter-culture movements. Corresponding to such a withdrawal is forecast a growth in hedonism and a demand for personalized pleasure, experimentation with astrology, scientology, mysticism, drugs, sensitivity training and awareness stimulation. "Do your own thing" is said to be accurately descriptive of a pervasive attitude increasingly prevalent, almost regardless of who else is "doing their thing" or who is not (or what their "thing" is). What if "one's thing" is destructive?

It is said, paradoxically, that in the 1970s there could also well be a rebound return to certain Hellenic or older

European ideas of the "good life" as a result of unprecedented affluence and permissiveness of the post-industrial societies. This swing of the pendulum is expected to result in turn in a conscious response deferring toward increased search for identity, personal values, meaning and purpose.

In the 1970s it is said that we will have acknowledged as seldom before that our existence as "men" (as opposed to "objects") requires more than a perspective of science, scientific progress or that of the economic and political systems compatible to such perspectives. In short, the human versus non-human perception polarization will continue to exist and also to fluctuate in its intensity.

Those who forecast from a particularly Christian viewpoint see the basic issue of living as a Christian in the 1970s to be neither the authority of the Bible nor the need for personal study of the Bible. Rather the key issue is expected to be the question of how the Bible message shall be communicated in such a way that it leads to an obedient personal response to the Person of Jesus Christ — a response that is relevant to life and to living in the real world. The Judeo-Christian value system is also viewed as being challenged. It is said that the traditional Christian values must be reinterpreted and reaffirmed if they are to continue on the United States social scene.

A WORD OF CAUTION

What is your response — my response to exposure to such data? It is critical that we identify and verbalize our reactions even if we assume that only half the data before us is credible. Does not the personal, group, organizational, institutional and societal margin of safety lie on the side of increasing our awareness, rather than on the side of withdrawing from new stimuli such as these? Why do we defer to the status quo in our frames of reference, perceptions, adjustments and willingness to experiment? Do we think that responses to such forecasts are only dress rehearsals for the future and therefore not important today? Could it be that the rehearsal will have become the real world and closed in around us by the time that rehearsal is completed? At what speed is the future approaching? Is the frequency and level of our responses proportionate?

BIBLIOGRAPHY

This list is for your convenience in further exploration of the subject of the future.

The titles are not all comparable in terms of the writer's direct involvement in primary future studies research per se, but will give you an overall perspective of how the subject is being viewed and handled by writers of different backgrounds. The comments are those of the editor of the World Future Society Magazine (*The Futurist*) Book Service.

de Jouvenel, Bertrand. *The Art of Conjecture*. Basic, 1967, 307 pp. \$7.50.

"This pioneering, deeply original work explores the psychology of thinking about the future" (Review in *The Futurist*, December 1968).

Drucker, Peter F. *The Age of Discontinuity: Guidelines to Our Changing Society*. Harper and Row, 1968, 394 pp. \$7.95.

"Well-argued theses and tantalizing paradoxes" (Review in *The Futurist*, August 1969).

Eurich, Alvin C., editor. *Campus 1980: The Shape of the Future in American Higher Education*. Delta, 1968. 327 pp. \$2.45.

Chapters by John Gardner, Christopher Jencks, Nevitt Sanford, and others on *The Future of Teaching, The College Student of 1980*, etc. (Review in *The Futurist*, December 1969).

Halacy, D. S. *Clyborg: Evolution of the Superman*. Harper & Row, 207 pp. \$4.95.

"A science writer describes the development of creatures that are half human, half mechanical. 'A useful description of the way science may be reshaping man.'"

Fabun, Don. *The Dynamics of Change*. Prentice-Hall. 190 pp. \$8.95.

This puts a hard cover around the 1966 *Kaiser Aluminum News* series on the next 20 years.

"This is a lavishly illustrated book that will go nicely on a coffee table. The text strings together quotations concerning land use, transportation, communications, computers, and problems of abundance. An attractive gift."

San Francisco State College. *Education and Technology in the 21st Century*. 107 pp. \$3.50.

"Though not professionally produced, this thin volume includes some serious thinking by Arnold Barach, Maxwell Goldberg, Ralph G. Gerard, and other scholars" (Review in *The Futurist*, June 1968).

Ewald, William R., editor. *Environment and Policy: The Next Fifty Years and Environment and Change: The Next Fifty Years*. Indiana University, 1968. Paperback. 459 and 397 pp. respectively.

These two volumes bring together the papers presented at the 1967 American Institute of Planners' Consultation. "A treasure house of ideas about the future" (Review in *The Futurist*, October 1968).

Prehoda, Robert W. *Extended Youth: The Promise of Gerontology*. Putnam, 1968, 256 pp. \$5.95.

"The aging process may lengthen human life to 200, 300 or even 1,000 years." (See Prehoda's article in *The Futurist*, February 1969.)

McHale, John. *The Future of the Future*. George Braziller, 1969, 322 pp. \$7.95. 80 illustrations.

"A good book to recommend to newcomers" (Review in *The Futurist*, October 1969).

Toffler, Alvin. *Future Shock*. Random House, 1970, 505 pp. \$8.95. Bantam Books, 1970, 561 pp. Paperback. \$1.95.

"Brilliant description of the phenomenon of social change and its impact on human lives. A significant and fascinating work."

Staff of *Wall Street Journal*. *Here Comes Tomorrow: Living and Working in the Year 2000*. Dow Jones, 1966. Paperback. 196 pp. \$1.85.

"Based on interviews with various experts, the book looks at the future of population, food, computers, energy, air travel, space, communications, automobiles, cities, homes, medicine, education and war. 'A good job of Journalism.'"

Rosenfeld, Albert. *The Second Genesis: The Coming Control of Life*. Prentice-Hall, 1969, 327 pp. \$6.95.

"Based on articles in *Life*. Includes sections on: The Refabrication of the Individual, Exploration of Prenativity, and Control of the Brain and Behavior."

Dunstan, Mary Jane and Garlan, Patricia. *Worlds in the Making*. Prentice-Hall, 1970, 370 pp. Paperback. \$4.95.

"An anthology of the future for school and college."

Kahn, Herman and Wiener, Anthony J. *The Year 2000: A Framework for Speculation on the Next Thirty-Three Years*. Mac-Millan, 431 pp. \$9.95.

"A brilliant, somewhat ponderous description of major trends in western society" (Review in *The Futurist*, February 1968). ▲

A Theologian Responds

PAUL K. JEWETT



May I begin my response to John Hoagland's article by observing that I doubt that tomorrow's world will be as radically different from today's as the sources he quotes imply. When God created man in his image and likeness, that made a *radical* difference on a planet until then populated by flora and fauna that did not know they were created. And when man revolted against his Maker, that made a *radical* difference too; and of course, the coming of the Savior has made a *radical* difference. But the rapid accumulation of scientific knowledge and the concomitant acceleration of technology makes only a difference, not a *radical* difference. Nothing, from control of fire and the domestication of plants to man's space odyssey in the twentieth century has made a *radical* difference. (I do not share President Nixon's opinion that the day an American planted his feet on the moon was the most important day since the Creation — it wasn't even the second most important.)

But I agree that such things have made *some* difference and as man more and more changes his environment and himself — so far as he is a biological organism, which is the sort of change this article principally deals with — it will make a *significant* difference for man. Whether this different world of the future will be a worse or a better world depends on how man uses his newly acquired power, which brings me to my second point.

I do not believe man's future will be either hell or heaven, but something in between (purgatory is not the right word here). Just how much we can weigh the future on the positive side by discussing it, I do not know. Probably not much. Since man has largely ignored the lessons of history which are clear and so been predestined to repeat his mistakes, it does not seem likely that he will benefit greatly from trying to anticipate the future which is anything but clear in those complex areas with which this article deals.

I will venture a couple of observations on certain details in Mr. Hoagland's discussion of the future we face:

1. Mr. Hoagland says: "The possibility of human 'anatomies' being reproduced in this manner (cloning) means that it will be possible to determine, to a large extent, the characteristics of the 'person' produced, since these characteristics will be identical to the person from whom the 'slip' was taken." There seems to be an inconsistency in saying that characteristics which are determined "to a large extent" are "identical." If "identical," then are they not determined completely by the parent stock? In any case I do

Paul King Jewett is professor of systematic theology at Fuller Seminary, where he has taught since 1955. A graduate of Wheaton College, he received the Th.B. and Th.M. degrees from Westminster Seminary and the Ph.D. from Harvard University.

He is the author of Emil Brunner's Concept of Revelation, Emil Brunner, and the just released The Lord's Day.

not see that cloning would make another individual who would be "identical" with me or even "to a large extent" like me as a *person*. He might well be identical with me as a biological organism (minus an infirmity from a birth injury which would make no inconsiderable difference even at this level), but as *person*, he would be his own man, the result of his environment and his response to that environment. My clone, for example, even to be to a large extent like me would have to be put in a time machine and hurried back to a small town in south central New York and grow up during the depression of the 30s. But not even the most imaginative human engineers have any idea of reversing time. So the cloned person would be like, but by no means identical with, his "parent." How would I respond to him, Mr. Hoagland asks? Probably like any parent to an offspring that looks and acts like his parent.

2. The question is asked: Is the act of altering man's nature necessarily either a suspect or a beneficial action? The answer is no. Does even God, it is further asked, *basically* alter man's intrinsic essence or structure per se, in regeneration, sanctification or even in physical resurrection? Well, since we are said to become a new creation in Christ, I suppose there is a basic alteration in man's "intrinsic essence," when he is redeemed, if that essence is thought of as a moral reality. But I gather that Mr. Hoagland means, Does God alter man's genetic inheritance, essential chemistry, or biological endowment when he redeems him, as present medical science does in a small way now and will soon do in a more significant way, hopefully eliminating sickle cell anemia, cancer and so on. The answer to this question, again, is no. Adamic genes were not bent by original sin (Flaccus to the contrary notwithstanding) nor do they undergo any salvific mutation in regeneration. As to what happens in the "physical resurrection," a further question raised by Mr. Hoagland, I should answer: Only God knows. But whatever it is, it will not "alter man's intrinsic essence"; we will still be human, not divine. It will rather be a new order of existence which has nothing to do with this present world, since this present order is marked for death. As human engineering cannot back the clock up, so it cannot keep it from running down. Therefore there is no point in comparing what God will do in the resurrection to give us victory over death with what man may do by human engineering to enhance a child's I.Q. ▲

A Psychologist Responds

DONALD F. TWEEDIE, JR.



I find myself at a loss as to a starting point in the response to *The Future We Face*. In the first instance, some hundred and a quarter significant questions are a bit overwhelming simply from their quantity. Additionally, the requisite apocalyptic vision for an adequate response is not afforded me. I have more than a little trouble providing worthwhile suggestions to a ten year plan, let alone sage comments on the early phases of the next millennium.

However, the article was of considerable interest to me as it recalled to mind much of the currently popular pessimistic writings of the futurists, which I tend to regard lightly and negatively, and also focused on matters with psychological import.

The first characteristic of a Christian comment on the future would seem to be that of confidence. We have no certain insight into details, but Christ bids us be of good cheer as he vouchsafes the future. The transition may be difficult, but it is Christ's *eschaton* to which it leads.

Not only is the outcome assured, but, if the past provides a clue, man will tend to produce technological tools in a utilitarian fashion in time of felt need. The auguries of a catastrophic future seem at a loss to decide whether the ecological problems will outpace technology and the earth become an uninhabitable planet, or whether technology will advance beyond bone fide social need and create a dehumanized society.

While there are countering aspects, I am continually amazed at man's flexibility, adaptability and creativity. The better mousetrap shortly follows meaner mice. History is certainly no success story in terms of moral growth and the rule of righteousness, but it is an annal of fascinating progress in the subduction of the earth. However, each victory

is followed by a new task. Difficult wars are followed by more difficult times of peace and, in turn, more difficult wars.

New scientific discoveries are met with warnings of their catastrophic consequence. The new tools then coalesce into the social fabric. The frightful response to the terrifying speed of the 19th century locomotive and turn of the century automobile, coupled with the sagacious scientific essays detailing the impossibilities of functional heavier than air craft stir nostalgia in their droll futility. The SST now occupies us.

I recall a rather emotively pointed discussion with a prominent physiological psychologist just a decade ago. He made several assertions concerning the impossibility of human existence in weightlessness and supported his contention with assorted empirical data. My rebuttal was not on the basis of superior intellect or information, but rather on the ground that the past had suffered so many "impossibilities" to be established that I would prefer a "wait and see" attitude. It was no small satisfaction for me to be with him in a research lab at the time of the initial extended earthorbital flight!

Thus my bias is that the future will unfold with a steady demand upon our resources and ingenuity, and our response will be a coping response. "Radical breakthroughs" are public relations descriptions of these coping responses, which, in reality, are slow, arduous reactions to the exigencies of the social process. The incipient optimism in terms of the technological/social dialectic is not a result of my feelings about any inherent goodness or necessary progress in man, but rather the wisdom of God in creation and the goodness of God in the restraint of evil.

More specific to the article, there seems to be concern that the future may be radically problematic in a new order of creation, a new level of coercion, and a new kind of consciousness. I would like to address these briefly.

A NEW CREATION

A part of future shock is purportedly the creation of new men in the part and in the whole. He will be relatively imperishable, like the "wonderful one horse shay," and perhaps a new order of being, having neither mother or father. He will be unlike Melchizedek, however, since his parentage

will not be merely unknown, but rather a frightfully new control of cell mitosis.

While the new citizen, Clone, is not ready for his naturalization papers (and may never be), he will arrive only when society is ready for him. The *Zeitgeist* will detain him until the "fulness of time." In the meantime, his cousins — the heirs of artificial insemination — have been *in potentia* for a long time and have been only sparingly admitted to the social scene.

Whether or not a "spirit" or "psyche" that is human will substantiate the new creation is a moot question. In the unlikely event of his arrival, I would suppose the affirmative. I have no rationale for this, but, in a similar vein, I have no rationale for such a state of affairs when a ripe ovum and a viable spermatozoon conjoin in the normal (inter)course of human events, and the result is apparently invariably inspired.

The longevity of the "new creation" will create no greater problem I presume in the doubling of life expectancy in the next century than has the doubling of life expectancy in the last century. "White House Conferences on Aging" will still be in fashion.

It seems to me that the fascinating advances in genetics that are, and those that may be, must be evaluated in the context of the great modifying influence of the social environment. We have identical twinning at present and observe considerable individuation in every case.

I do not desire to discount the problems involved in increased longevity, or in new modes of conception and gestation. Nonetheless, a peek into the clearer past rather than the misty future indicates that medical and social technology emerge simultaneous to the event and its problematic consequences.

Population control is a much discussed problem. Famine, disease and war have shepherded this problem in the past. New trends in prophylactic medicine and agriculture seem to obviate the two former, while the latter will continue on a small scale unless a general nuclear war should emerge and resolve population pressures for a period of time. Given resources for nutrition, infrahuman populations tend to inhibit unlimited population expansion. Perhaps on the human level, contraceptive and abortive advances are revealing this same process. The resistance to these social devices has "softened"; and there are some indications of shifts in social theology, even in conservative Christian circles, to accommodate this trend.

In any case, the spectre of a human or humanoid on each square foot of soil (both above and under water) just as the biosphere sours in the last phase of ecological pollution seems more likely a scenario for cinema than an eschatological reality.

THE NEW COERCION

B. F. Skinner has been a recent prime mover in the questioning of the value of freedom. His highly publicized thesis is that more careful control of man is indicated rather than an increase of "too costly" freedom. He apparently believes that close control of behavior is the only way to maintain a "free," growing society. The *hoi polloi* can no longer be trusted.

Before we react too strongly, it should be observed that

this seems to be the functional philosophy of every legislative body. The evidence of *homo homini lupus* rather than neighbor love seems to press for optimal freedom *with* and *from* my fellow citizen by means of zoning laws, traffic laws, criminal laws, tax laws, busing laws, etc.

The present president of the American Psychological Association, Kenneth Clark, suggested in his inaugural address that drugs be administered to persons in power to inhibit their aggressive impulses and thus deter the precipitation of war or other decisions of social violence. This drew a considerable amount of negative flak, but it was an intellectually respectable proposal (though a psychologically naive one) to use the present means of biochemical technology to attain present social needs.

The means of coercion have always been technologically available. The contemporary chemicals for controlling behavior may seem more cordial than the inquisition rack, but would have to be instituted by the powerful political elite to serve their ends. Humans will often ingest a variety of enervating drugs as a voluntary social or personal protest, but they also tend to resist utterly such ministrations by the politically powerful. The benignity of a perceived philosopher-king as in Plato's mythic Republic has no more motivating force than the malignity of Hitler in the involuntary social control of the citizenry.

We do not have to wait for the year 2000 to have a stock of substances to bend the mind to servility. They are already in the pharmacopoeia. I do not think their prescription as national or international policy is a social reality.

Perhaps Skinner and Clark can serve to help us to re-evaluate the concept of freedom for the Christian. After all, acceptable freedom is to be found only in doing gladly exactly what the Master desires. Man is not free not to serve a master; at best, perhaps, he can choose which one.

THE NEW CONSCIOUSNESS

Part of the futurist anxiety, or euphoric hope, depending on the general approach of "things to come" is the quantum leap into a new generation of genius level intellect, instant education by injection, and new levels of consciousness. Since my thesis is that "quantum leaps" do not really take place, I find myself not really interacting existentially with this "problem."

Education will certainly be greatly different in the next millennium, but the "Royal Road to Learning" will not be experienced by the reluctant school boy, whether he still reads books, or merely watches more TV aided and abetted by injections. It will still be incipiently onerous and each new horizon conquered will bring into view a myriad more to explore.

In sum, my judgment is that the Christian can face the future with confidence. Its end point is secure. The intermediate phases will be freighted with transitional problems. New insights and technological advances will make mid-twentieth century man seem a bit neanderthalic (still painting on walls and ritually burying his dead), but there will still remain the same problematic human condition. In the midst of new tools, new toys and new task demands, he will probably regret that "things aren't like they used to be" (and never were), and upon re-reflection decide that there really is nothing new under the sun. ▲

Theology and the Baron Frankenstein: Cloning and Beyond

CHARLES STINSON

✦ MORE AND MORE often these days we hear of the coming Biological Revolution — of genetic engineering, the lengthening of life, chemo-cerebral control of personality, "cloning" or asexual reduplication of individuals. Already there is at hand a body of literature on the possible social and personal effects of such scientific advances. As a student of historical and speculative theology, I was particularly interested in the comment of a biochemist, Leon Kass, regarding the religious significance of techniques like cloning. In his article "The Biological Revolution" (Part 4, Enterprise Science Service, 1971) he writes:

We are witnessing the erosion, perhaps the final erosion, of the idea of man as something splendid or divine, and its replacement with a view that sees man, no less than nature, simply as raw material for manipulation and homogenization. Hence, our particular moral crisis. We are left to the accidents of our hasty, biased and ephemeral judgments. That we have a method is no proof against our madness. Thus, engineering the engineer as well as the engine, we race our train we know not where.

A rather eloquently stated pessimism. Should Christians and Jews share it? Is a sense of foreboding and disillusionment the most appropriate response to the prospect of man's approaching control over his own body and mind?

To date, the most powerful religious critique of the Biological Revolution has been made by the moralist Paul Ramsey. Attacking the experimental outlook of men like Stanford geneticist Joshua Lederberg (who calls man "a self-modifying system"), Ramsey insists that the "combination of [scientific] determinism and boundless [ethical] freedom" must lead to anomie and chaos. "Usurp[ing] freedom," man will be guilty of "hubris," of "playing God" and seeking "to lay hold of Godhead." Ramsey looks back to Dostoevsky's warning: "When there is no God, no destiny towards which men move and which moves in them, then the self-modifying freedom must be the man-God." While he cautiously approves of a limited medical use of genetic engineering "to correct grave defects in the simple service of creaturely life," he sternly opposes anything more that would alter the present divinely given order of "parenthood" and human life in which we are called to live. That is, he condemns "these grand interferences for man's

self-reconstruction and control over the evolutionary future." Such "grand eugenic designs," he says, should not "frighten anyone out of his ethical wits" (*Fabricated Man* [Yale University Press, 1970], pp. 90-96 *passim*).

It is not difficult to understand the psychological causes of the reactions voiced by Kass and Ramsey. But I cannot see that the Biological Revolution should necessarily evoke a negative reaction. Does advance in knowledge and power really degrade man? Is man less "splendid or divine" when he becomes aware that his mental and spiritual life forms part of an ascending development of nature — that complex and delicate phenomenon which is so open to man's interference? Why is a sense of the divine meaningfulness of life necessarily eroded by an increase in empirical knowledge about the processes of life?

Of course, the Biological Revolution will raise a host of moral and psychological problems, and the confusion and anomie that Kass fears could well be a side effect — to be prevented if possible. We shall need to try to exercise humane control over the biological experimentation of the future. Especially during the earlier stages, there are sure to be tragic errors in laboratory work. No doubt, as Ramsey points out (*op. cit.*, pp. 87 f.), accidental miscalculations and ignorance of variables will result in fetal monstrosities. Not a pretty picture to contemplate. Moreover, there will inevitably be abuses of power on the part of a small minority of insensitive or rash scientists and technicians. But are we to conclude that, because of its risks and possible abuses, all such scientific work is intrinsically immoral? This, apparently, is the position Ramsey takes on ethical grounds — just as he holds on theological grounds that man's attaining power over the processes of life "usurps" the Divine.

Underlying Kass's pessimism are several thousand years of body-soul dualism — the Platonic and Cartesian "ghost in the machine" idea that modern thinkers tend to poke fun at. Long abandoned by most philosophers and speculative theologians, this old view still informs the popular culture. If mental and spiritual life grows out of brain structures, if it is not a "separate entity" beyond genetic manipulation, then such life is somehow not as "true" or "valid" as we had thought; it is a mere "epiphenomenon." This simple assumption, so rarely spelled out, is at the root of the fear about the "scientific destruction" of our human sense of life's ultimate significance. We are, in Kass's melancholy words,

just "raw material" and no more.

Ramsey's outlook is grounded not in a philosophical dualism, but in a faulty theology of creation which assumes that God *intended* certain aspects of natural structures and forces to remain *always* beyond the control of man's intelligence. And if such limits are transgressed by man, then either the Divine Being is "powerless" to stop it — God has been "dethroned"; or perhaps the Divine is a fiction, an illusion finally exposed.

I recall reading a French essayist who suggested that when men were just on the verge of creating life, God would return, smile wryly and announce: "Closing time, gentlemen!" A charming and, in its way, a reassuring picture: God will save us from ourselves at the last moment. But this is an unrealistic theology. God does not protect man from freedom; nor is God a "Being" that must protect itself from human "competition." Genesis depicts Adam as God's special viceroy in terrestrial creation, as the one creature who "names" all the others.

Now, in fact, the classical theologians certainly took it for granted that there were untransgressible limits to man's power. But they did not regard the Divine as standing or falling with the permanence of such limiting conditions. If we read the old account carefully, we see that Adam and Eve, had they gained all the knowledge they craved, would have become "like" God or "as Gods" — would have rivaled God, not supplanted him. Jews and Christians of centuries past, possessing only the crudest instruments, could not even imagine control over natural processes on the micro-level. Augustine proposed the theory of *rationes seminales* — minute "seeds" of biological organization divinely implanted in matter (*On Genesis Literally*, 4, 35, 51). The theory is an intelligent anticipation of modern genetic concepts. Despite his Platonic body-soul dualism, Augustine was quite able to conceive of the organic foundation of life as locatable in matter. It never occurred to him that, some day, man would be able to reach into those "seeds." He and his contemporaries would have been dumbfounded on looking through an electron microscope. But their limited scientific outlook can hardly serve as a changeless norm for the shaping of religious feeling.

Like these people of the past, we too experience a divine meaningfulness manifesting itself in all the processes of nature. Yet we need not make this awareness dependent on our ignorance of the exact character of those processes or on our inability to modify them for humane purposes. The "God of the gaps" theology will inevitably fail as the gaps are filled in one by one. Bonhoeffer's intuition was prophetic here. And Gabriel Marcel's distinction between "problem" and "mystery" is to the point: knowledge progressively solves problems; it never dissolves a mystery. Increasing control over parts of the universe is not incompatible with an unchang-

ing sense of the order, beauty and depth of the universe as a whole. And what is true of the macrocosm is true of man, whom our ancestors once confidently called the microcosm. It would be an utter tragedy if 20th and 21st century men thought that they had to choose: either knowledge or a sense of meaningfulness, either power or reverence.

Religious men and women need to work together with other people of good will to set up and administer moral guidelines in this new area. But believers will be unable to respond intelligently unless they have a theological outlook which discerns some positive value in the Biological Revolution. Pessimism about the human impact of science on man has an apocalyptic ring to it, but in the long run it is a shaky foundation for religious life.

Joshua Lederberg — the Stanford geneticist whom Ramsey attacks so strongly — champions cloning as a method auxiliary to natural sexual reproduction. Cloning has been successfully induced in frogs and other species. Lederberg views it as a technique for increasing individual excellence within a species, while sexual reproduction ensures variety and genetic sturdiness. However, Ramsey is horrified at the very idea of "cloning a man." That, he declares, would be "a fundamental assault upon the human and personal element in parenthood," and it would result in a "depersonalization in the extreme" and "the abolition of embodied personhood." In his condemnation of human cloning, Ramsey rises to almost liturgical fervor: "To put radically asunder what God has joined together, to disregard the covenant of parenthood . . . to attempt to soar so high above an eminently human parenthood, is to fall far below — into a vast technical alienation of man" (*op. cit.*, pp. 87, 89). And why would a cloned human being not feel himself (or herself) to be a "person" or "embodied"? Possibly for a number of reasons, but Ramsey does not specify any.

The German Jesuit Karl Rahner takes a more open-minded view. In his article "Experiment: Mensch" (*Schriften für Theologie*, Vol. 8, 1967) he asserts that man's limitless power to experiment on himself, his "future self-creation," is really a sign of the creaturely freedom given him by God. Rahner envisages this future experimentation as operating within a metaphysical "framework" which transcends man and within which he lives. But inside that context "there is really nothing possible for man that he ought not to do" (p. 285). Obviously, Rahner presupposes the basically moral character of the technical possibility. But Ramsey is simply "astonished" by this statement. It amounts, he says, to "a priestly blessing over everything," a smooth "endorsement" in advance of whatever some adventurous scientist or technician comes up with (*op. cit.*, pp. 139 f.). Rightly he perceives "optimism" in Rahner's view: the notion that, by God's grace, men

Continued on page 22.

Charles Stinson is on the faculty of the department of religion at Dartmouth College, Hanover, New Hampshire. Copyright 1972, Christian Century Foundation. Reprinted by permission from the January 19, 1972 issue of The Christian Century.

Class News

1956

IRVING HOFFMAN is now teaching English at the University of Oran, Algeria.

CLARENCE TWIGG has been called to the pastorate of the First Presbyterian Church of Aberdeen, S.D.

1958

JIM (B.D.'58) and LOIS (M.R.E.'59) WIEBE are on furlough from their post with the Mennonite Brethren Missions in Brazil.

1960

JOSEPH KURTRIGHT is now serving as co-pastor of the Moreland Presbyterian Church in Portland.

JAMES L. WHITE has been ordained and is serving as assistant pastor of the First Baptist Church of Redondo Beach. Dr. LaSor participated in the service. Jim had been a school principal.

1961

DAVID AGNOR, (x'61) died in late December of a hemorrhage from a fall. He leaves his wife and four children in Torrance.

JAY GRIMSTEAD had an article in the December issue of *Eternity* entitled, "Should You Live at Half the Price?"

NORMAN WRIGHT (M.R.E.) has had a book published recently, *Ways to Help Them Learn—Adults*.

1962

JOHN DETTONI is working at the University of Michigan on his Ph.D. in education.

RICHARD ERICKSON has an article in the January 1972 Readers' Forum section of *Pastoral Psychology*.

JOSEPH KIRKWOOD is now the minister of outreach and visitation at Bethany Baptist Church, West Covina. He most recently was a missionary in Alaska.

1963

DAVID BENTLEY has resigned his post in Jordan with the Conservative Baptist Foreign Mission Society and is studying at the State College in San Diego.

JOSEPH (B.D.'63) and BERNICE (x'65) MEAGOR have moved to Long Beach where Joe is the new pastor of University Baptist Church.

1964

ROGER K. BARRETT is presently assistant professor of psychology at Malone College. He recently had articles published in *Eternity* and *Christianity Today*.

RICHARD PEACE has authored *Witness*. RALPH WRIGHT has become assistant director of the Volunteer Bureau of Los Angeles County. He previously served at the Wilshire Presbyterian Church.

1965

DON COUGHENOUR is the new minister of the United Methodist Church in La Palma, Calif.

R. BRUCE HEIPLE is serving as pastor of the First Presbyterian Church in Cut Bank, Mont.

1968

STEVE ARMFIELD has been named the new assistant minister at Montecito Community Covenant Church in Santa Barbara.

WILLIAM DYRNESS has a book recently published, *Rouault: A Vision of Suffering and Salvation*. Bill now serves as minister to students at Hinson Memorial Baptist Church in Portland.

TOM F. JOHNSON and Michele welcomed a baby daughter, Amy Lynn, on December 28.

DOUGLAS MANKELL (x'68) is serving as pastor of the United Presbyterian Church in New Windsor, Illinois. They also have a new daughter born last summer.

1969

JAMES BITNER has been called to the pastorate of the First Congregational Church in Tullia, Texas.

1970

JAMES BIDDERMAN is on the staff of the First Presbyterian Church in Santa Maria, Calif.

ROB JOHNSTON is working on a Ph.D. degree at Duke University.

BARRY PHELPS has been called to the pastorate of the Champion Hill and Emerson-Essex Presbyterian Churches, Iowa.

RANDALL ROTH is serving as co-pastor of the West Hills Covenant Church in Portland, Oregon.

JONNY WIEGERT is serving at Central Presbyterian Church in Merced, Calif.

1971

GREGORY GRAFFT has been called to serve at the First Christian Church in Lynwood, Calif.

JOHN PIPER is working toward a Ph.D. degree at the University of Munich, Germany.

JEFFREY POWELL is studying at the University of Munich.

TED PROFFITT received the Master of Arts degree in history from California State College at Fullerton.

BRIAN REED was ordained January 16, and serves at St. John's Presbyterian Church in Compton as minister of Christian education.

KENNETH BIRCH (D.Min.) is working with the home missions and Bible colleges division of the Pentecostal Assemblies of Canada. ▲

Placement Opportunities

These churches or organizations have contacted the Seminary for assistance in filling a vacancy. If you are interested in any of these positions or other possibilities, please contact the Alumni Affairs Office at Fuller.

PASTOR. Ambassador Heights Baptist Church, Phoenix, Ariz. CBA. Two-man staff. 225 members.

PASTOR. Bethany Baptist Church, Boulder, Colorado. CBA.

PASTOR. Calvary Baptist Church, State College, Pa. BGC. Membership 70, attendance 120. Serves the university community.

DIRECTOR OF C.E. AND YOUTH. Community Reformed Church, Buena Park, Calif. Two-man staff. Membership 310. Responsible for total education program and give direction to youth sponsors.

DIRECTOR OF C.E. First Baptist Church, Sunland, Calif. ABC. Train teachers and youth counselors and work with youth. Two-man staff. Membership 450.

MINISTER OF YOUTH. First Presbyterian Church, Evansville, Ind. UPUSA. 1700 members. Five-man staff.

PASTOR. Grace Baptist Church, Riverside, Calif. BGC. 820 members. Three-man staff. Church has day nursery also.

PASTOR. Montecito Park Union Church, Los Angeles. Membership 100. One-man staff.

ASSISTANT MINISTER, YOUTH MINISTER (2 positions). First Presbyterian Church, Oklahoma City, Okla. 2900 members. Four-man staff.

PASTOR. First Baptist Church, San Pedro, Calif. CBA.

MUSIC AND YOUTH DIRECTOR, Tabernacle Baptist Church, Newport News, Va.

YOUTH EDUCATION MINISTER. Oneonta Congregational Church, South Pasadena.

ASSISTANT PASTOR. Barrington Baptist Church, Barrington, R.I. 400 members. Responsible for youth, C.E. and evangelism follow-up.

YOUTH DIRECTOR. Sunland Neighborhood Church, Sunland, Calif. Ev. Free. Two-man staff. Attendance 350.

ASSISTANT PASTOR. First Congregational Church, Cheyenne, Wyoming. Responsible for youth and C.E. ▲

Alumni Report

B.D. BECOMES M.DIV.!

Upon recommendation of the faculty and by action of the board of trustees of Fuller, a change in the nomenclature of the Bachelor of Divinity (B.D.) degree is effective June 1972, to a Master of Divinity (M.Div.) degree, retroactive.

B.D. graduates of Fuller may obtain the M.Div. degree by returning their B.D. diploma previously awarded and \$25.00 to cover costs. The B.D. diploma will be returned promptly and will bear a label indicating it was superseded by trustee action. Thus, your old diploma will bear the signatures of the men who were chairman of the board of trustees, president and dean at the time of your graduation, while the new one will bear the signatures of trustee Chairman C. Davis Weyerhaeuser, President David Allan Hubbard, and Dean Daniel P. Fuller.

All who request the M.Div. diploma before April 15 may expect to receive the new diploma during early June. Those requests received later will be accumulated for processing with the diploma order for graduation for the following year.

BERNICE BUSH IN NEW POST

Bernice Spencer Bush, who has been serving as assistant director of development with responsibilities for alumni affairs, publications and news distribution, has resigned effective March 1.

She has held down these posts, including the managing editorship of *Theology, News and Notes*, for the past five years.

Bernice leaves Fuller to join the staff of the Russ Reid Co. of Arcadia, where she will be working with various religious organizations in advertising, public relations and marketing.

However, a large part of her life remains at Fuller—in the form of husband Fred Bush, B.D.'58, Th.M.'60, assistant professor of Old Testament, and chairman of the TN&N editorial board.

Her contribution to the alumni program and the Seminary's publications has been most impressive, and we as alumni wish her well in her new endeavors.

DR. REBECCA PRICE RETIRES

Dr. Rebecca Russell Price, who has served as professor of Christian education at Fuller since 1952, has retired due to ill health. She has been named professor emeritus of Christian education.



A convocation service and reception were held in her honor on February 2, at which time this picture was taken. Gary Smidderks, MRE'62, principal of Los Angeles Baptist High School, spoke on behalf of the alumni. A presentation was made to her, which we want to share in total for you who knew her so well.

WHEREAS, Rebecca R. Price has served faithfully on the teaching staff of Fuller Theological Seminary since 1952, and

WHEREAS, she has multiplied her ministry by helping young men and women to study the Scripture in a manner that can be taught to others, and

WHEREAS, she has enjoyed a special ministry to the women students who have been in residence on the campus through the years, and

WHEREAS, she has cheerfully labored under the most trying circumstances, leaving to all an example of patience and courage, be it

RESOLVED that on this occasion of her retirement as Professor of Christian Education, we, the members of the Seminary community, trustees, faculty, alumni, students and staff, express to Dr. Price our heartfelt sympathy in her affliction, our gratitude for her noble example of Christian faith, and our thanks to Almighty God for the privilege of serving with her in the ongoing work of training leaders for the Church of Christ.

We would encourage alumni to write to her at her home, 8223 Tiara, Ventura, Ca. 93003, at their early convenience.

MORGAN LECTURESHIP

The faculty and administration have established the Jaymes P. Morgan Jr. Lectureship in Christian Social Ethics. Through the gifts and pledges of Jim's associates, friends and former students, an endowment fund has been established but more is needed. We hope to inaugurate the series during the next academic year. The memorial is intended to continue in a small way the ministry that was Jim's among us.

All of you who knew Jim and his vision are invited to participate by sending your gift or pledge to the Seminary so designated.

NEW DEGREES OFFERED

Three new degrees now are being offered at Fuller.

A Master of Arts in Christian Education (M.A. in C.E.) replaces the old Master of Religious Education degree, with some major curriculum changes included.

Doctor of Ministry (D.Min.) is the new name for the Doctor of Pastoral Theology degree formerly offered.

An addition to the program is the new Master of Arts in Semitic Languages and Literature (M.A. in Semitics), geared for men who plan on further study toward seminary or university teaching positions.

DR. HARRISON'S PORTRAIT COMMISSIONED

A portrait being painted of Dr. Everett F. Harrison is nearing completion.

As a founding professor, Dr. Harrison is being honored in this way. The portrait will hang in the McAlister Library after it is unveiled at Commencement time.

As you know, Dr. Harrison is now senior professor of New Testament, and teaches elective courses each quarter. He still is very much a part of Fuller!

Since Dr. Harrison's life touched each alumnus in many ways, we are asking alumni to contribute to the cost of the portrait. Please send your check, so designated, to the Seminary.

ALUMNI CONCLAVE

The annual alumni conclave will be held on April 20 at the Women's City Club across from the Seminary, from 12:00 to 2:30 p.m.

It is an opportunity to share a couple of hours with a selected group of the entire Body of Christ in an informal time of discussion. Only the first 60 reservations will be accepted for this chance to sit down with several national leaders studying at the School of World Mission, along with Arthur Glasser, Ralph Winter and Peter Wagner.

CONTINUING EDUCATION

Continuing education courses are being offered by Fuller Seminary in Fresno and in San Diego.

"Marriage and Family Counseling" will be taught by Dr. Donald F. Tweedie Jr. on the four alternate Fridays between March 24 and May 5 at the Mission Valley Inn in San Diego.

During the same period Dr. George E. Ladd will teach in Fresno. His course is "The Kingdom of God," held on the 4th Monday of March, April and May. ▲

Explorations in New Liturgy for Man of the Future

GEORGE F. REGAS



John Killinger's new book, *Leave It To the Spirit*, is an invigorating treatment of the "commitment and freedom in the new liturgies." He sets the framework in which I shall discuss Christian liturgy for the man of the future.

Something drastic must surely happen to the church's worship during the next few years. Too much has happened to the world around us during the last half-century, and to the way we perceive reality, to permit the church to go on uninterruptedly conducting worship the way it has for the past three or four hundred years. Two global wars, nuclear fission, cybernetics, Freud, Stravinsky, Picasso, moon shots, wonder drugs, organ transplants, Telstar, ethnic revolutions, confrontation politics, the Beatles, nude theater, LSD — how many light-years are we away from the church that entered this century, the liturgy it brought with it, or even the kind of God it confessed to in its creeds?

What contempt the church shows for the world by going on, business as usual, as though nothing had happened, either outside its walls or in the consciousness of those who enter to worship! What gall is displayed by the numerous conciliar groups which begin their work of reforming the liturgy by turning to the past and trying to

George F. Regas is rector of All Saints Episcopal Church in Pasadena, where he has served since 1967. He previously served parishes in Tennessee and New York. A graduate of Tennessee Military Institute, he received the B.A. from the University of Tennessee and the B.D. from Episcopal Theological School.

He currently serves as a member of the Commission on Religion and Race of the Southern California Council of Churches, is a member of the board of governors of the Urban League and of Pasadena Community Planning Council, is vice chairman of the California Conference on Human Relations, and is vice chairman of the Interreligious Coalition to End the War.

discover ever 'purer' original forms instead of looking to the present or — heresy indeed! — even to the future, where they might descry modes of belief and action much more significant to contemporary man (p. xiii).

With deep reverence for the liturgical heritage of the Christian Church, I nevertheless believe the freezing of language, form, exploration and risk within liturgy is one of the Church's great tragedies. It insures our doom from within. A radical social and technological revolution is taking place in the world outside and many sociologists surveying our contemporary situation see very little relating of the liturgical forms actually used to the changes actually taking place in society. Tragedy? Yes, because the Church can refuse to change its liturgy, but we cannot opt out altogether from the changes taking place in society.

Hence the paper's thesis is that liturgy must be rooted in the technological environment of the 1970s if it is to be an effective instrument of communicating the Christian faith. "At the heart of modern man's long search for community there is also a quest for an adequate liturgy which will express his metaphysics in the new world that history has fashioned" (Charles R. Stinnette, Jr., *Learning in Theological Perspective*, p. 17). There are few areas of inquiry more worthy of the Church's concern and labor than that of how to express its living heart, its liturgy, in this new age.

I. FOUR PRESUPPOSITIONS

1. ENVIRONMENT. "Man does not live either by bread or by the word of God alone, but also by the airplanes, telephone, automatic dishwasher, and television sets that surround and support him" (William Kuhns, *Environmental Man*, p. 127).

The new liturgy must consider man's relationship with his total environment. Christianity has grown and matured on the basis of a consciousness of man in relationship to God and to his fellow man. The world takes on value as the stage upon which the drama of religious life takes place. Looking diagrammatically at this, historical Christianity has thought of man within a triangular framework: the individual, the human community, and God. William Kuhns contends "that the consciousness of environment and its 'massaging' effects upon man has, however, opened a new dimension to the framework. The triangular conception of life can no longer adequately express the total scope of Christian existence in today's world. A rectangular conception is necessary, including the presence of the total, technological environment" (p. 28). My debt to Kuhns is obvious in this paper for he has revealed to me new insights — rarely explored — of the "environmental interface" and its significance for liturgy and Christian life.

Learning is not an individual affair but comes through participation in the totality of corporate life. As the Church explores the meaning of man's existence, let it use his total environment and allow him to meet God in the "facticity of an objective world, a world of color and texture and form, a world of sensory impressions" (Killinger, p. 49). The new liturgy is Incarnational, and refuses to take God's revelation of himself in concrete events lightly. Worship should put us in touch with the world again, with ourselves — and with God.

Dean Thomas Trotter of Claremont writes that the task of the minister and theologian "is to make distortions of the Gospel appear as distortions to a people grown accustomed to seeing them as natural." If he is right — and I think he is — we must piercingly reveal the unreality of the present environment of liturgy. If we live at a time of revolution, how can the cultus of worship be so placid and pietistic?

In Charles Morrison's fascinating book, *The Social Gospel and the Christian Cultus*, he makes the observation that the social gospel of the 1920s never really took hold of the Church because it never infused the Church's worship. Although the social gospel was the hope of the Church in the minds of the great leaders of the day, it was always preached as a sort of addendum to the inner life of individuals.

Writing in 1933 Morrison said the whole Christian cultus had to be radically changed if the gospel was to take root and grow.

I use the term 'cultus' because there is no other term, apparently, available. . . . The word 'cultus' is the only word I know which connotes the total cultural expression of a religion as an organic historic phenomenon. It is in this sense that I shall use the word. . . . The beliefs, aspirations, and emotions cherished by a religious group inevitably take on an objective form within the general system of culture. Religion has a way of fostering and celebrating its values through group ceremonials, organization and various activities regarded as appropriate to the recognized values. Religion, that is to say, has its place in the general body of human culture as well as in private personal experience (p. 28).

If Christianity is to survive, Morrison continues, the Christian cultus must be dramatically and thoroughly re-

constructed so that the social dimensions of the gospel may be made to feel at home within it. This means, above all, a new socialized liturgy which does not make prophetic preaching and the liturgy incongruous.

If our understanding of the learning process and communications has changed; if our theology has been substantially altered; if our sense of mission has undergone a revolution, then how can the cultus of worship remain untouched?

2. CELEBRATION OF MAN'S FREEDOM. Within the pervasive technology of contemporary society, the task of liturgy is to celebrate man's freedom, his full potential as a child of God and give birth to meaning within the deep recesses of his being.

Much in our technologized and computerized environment can destroy our humanity; we are constantly threatened by its objectivizing tendencies, and the task of the Church is to discover and celebrate how technology can heal rather than destroy. Kuhns says the greatest challenge facing Christianity today is to keep alive the "wellsprings of the human" and to keep man aware of "his emotional and spiritual resources and the range of his possibilities as a human being."

So this viable Church of the future — through its liturgy — keeps us aware of the great potentialities of contemporary life but also points to its ominous dangers. Perhaps we should redefine evil in this new age as "any systematic, organized attempt to reduce the scale and possibilities of human life."

Let worship be celebrated within a milieu which pulsates with a new social-prophetic dimension. It will be a radicalization of the Church's ancient mission of setting the oppressed free yet communicated in a new environment.

3. SECULAR SYMBOLS OF ULTIMACY. Samuel Miller reminds us that "it has always been the function of faith to supply a structure of myth and symbol, and to enact in appropriate rites a vision of reality capable of sustaining the larger inferences of meaning in the life of a people . . ." (*Saturday Review*, 11/14/59).

Secularity is an affirmation of life in the world, of our ordinary daily existence among the things and people that compose our immediate environment. As modern man looks at his monumental technological achievements, his physical comforts, his intellectual prowess, he is moved to inquire, plaintively, "Is that all?" "What does it profit a man?" Deep within himself, he dissents from a totally secular definition of life for he knows it does not bring the fulfillment of human potentiality. We still grapple with guilt, anxiety and the threat of meaninglessness. Secular man needs symbols of the ultimate.

There are two important aspects to our secular symbols. One is that language must be derived from and related to this secular environment if it is to be effective. Symbols must be secular enough to be symbolic and illumine ordinary life and give reality to our theology (See Langdon Gilkey, *Naming the Whirlwind*, p. 251 ff).

Second, symbols communicate adequately only within a community of shared experience. "Without the symbols the experienced world would be 'meaningless' because . . . communication would be impossible; without the common felt levels of experience, the symbols would be meaningless

... empty, rootless and without intent." Gilkey argues that there is a close relationship today between our loss of the capacity for intense feeling and the isolation of traditional religious symbols from the surging currents of life. Meaning, he insists, depends on a vital link between a felt experience and a shared symbol. This means theologians and liturgists have the ambitious task of relating the archetypal symbols of faith to the experiences people are really having in the 1970s.

4. **WORSHIP INVOLVES CHANGE.** The purpose of worship is response. When a person meets the Living God in the community of faith, this creative act involves deep change — transformation of the heart as well as the mind. We are reshaped by what we know and experience. Authentic worship must be permeated with Isaiah's words: "Whom shall I send, and who will go for us?" Liturgy has truly rooted itself in modern man when he is able to answer in those ancient words, "Here am I! Send me."

II. A METHODOLOGY FOR THE LITURGIST

Without intending to be inclusive, I would mention seven characteristics of contemporary worship.

1. **LITURGY INVOLVES ALL THE SENSES.** Tom Trotter articulates our problem poignantly as he talks about a culture that is excessively verbal and rationalistic — a culture that has cost us greatly. The price is the rationalization of existence, the flattening of wonder, and the ultimate risk of boredom within life that is reaching epidemic proportions.

For centuries the sense of the reality of worship has been diminished in proportion to the way attention to man's sensory environment has been allowed to diminish. It is imperative that within the liturgical life of the Church we renew our appreciation of the body, the depths of emotion and the power of the visual arts. The Church must do more to bring the sensory world into our midst and celebrate it and discover the glory of being human and the intimate presence of God in creation.

With sound, which affects so intimately the inner person; lights and bright colors to transform our gloomy structures; the smell of incense which enforces the gospel at a sensual level; cinema and photographs which give a close-up feeling of participation; and the strong-beat, electronic music which liberates the body — we experience totally the wondrous world of God.

Alexander Lowen observes that modern man is getting more and more schizophrenic because he has lost touch with his body in his increasingly non-rhythmical and artificial environment. Liturgy fails if it does not quicken all the senses and make us feel fully alive. That is impossible unless we communicate with more than our minds and mouths. We must feel with our hands, taste with our tongues, smell with our noses. We must exist as persons at full potential. Then we are participating in sacramental worship and not merely a cerebral exercise.

Often we want to cry in worship: "Shut up and just show me." A picture of a Vietnamese mother holding her bleeding and dying child speaks with a directness and ferocity unavailable to words.

There should exist a precarious balance between feeling and thought; but thought has prevailed and we are the poorer for it. Environmental man knows that religion is

basically sung, whistled, danced, clapped, more than it is thought. We can easily overstate this, but my fear is we shall continue in liturgy to leave the deep emotions of man untouched.

2. **MAN'S NEED FOR PARTICIPATION.** Among the personal needs that must be met in liturgy, one of the most vital is inclusion. We all thirst to be part of things, to be truly seen and known as someone distinctive. In a world of spreading technology it is important that motivation for learning and change be located in the people through participation. It is through participation that the individual claims his own responsibility for shaping his and his community's future. Here worship is experienced at the deepest levels.

3. **LITURGY COMPLETED BY ACTION.** Worship should elicit total involvement of the person so that the experience is not easily dismissed. Liturgy is the beginning, not an end in itself. It ought to probe and jab the conscience so deeply that we feel pain and joy for the right things. When our blindness, dullness and carelessness have been so pungently confronted that we want to change, then authentic worship has been celebrated. Somewhere within the liturgy there must be a vivid channel through which we enter the world in the name of Christ to redeem it.

4. **TRADITION IS AN ESSENTIAL PART OF WORSHIP IN THE FUTURE.** We must not forfeit the magnificent tradition of worship as a price for our modernity. Even contemporary worship for "environmental man" must retain, I think, two traditional expectations:

(a) They should have an emotional resonance and a dimension of mystery, for dull occasions are not worship. Our soberness and moral earnestness about this violent and anxious age should not squeeze "glory" out of our experiences.

(b) Some traditional and ancient forms should be part of the liturgy even within a technological environment to express our rootedness in the Church through time. Occasions in which we think we have created something completely new are not worship, for Christians are heirs of a history.

5. **RADICALIZING LITURGY.** The liturgist who communicates effectually must also be willing to dare radical changes. The danger of worship is that it be too timid, too deferential to our paying constituents. We think we have done something spectacular when we alter "thee" to "you"!

The only way we are going to sear the imagination in such a way that man never again forgets to think and feel is by daring to be wrong, daring to carry liturgical change too far. "The world would stand still if no one ventured beyond the limit of the familiar" (Michael Seuphor).

6. **WORSHIP WITHIN OUR TECHNOLOGICAL ENVIRONMENT REQUIRES NEW MUSIC.** "Jesus Christ, Superstar" is the Decca record that may or may not be the record of the era, the decade, or the year; but it has, for certain, created much comment from all quarters. It's an opera on the Passion of Jesus in the music of our age, Rock.

The Church cannot afford to ignore these new sounds of music. Skip them and you skip the main form of expression for over half of America's audience; forget its impact and we will never reach the mentality of the majority.

Continued on page 22.



Fear of an Unknown Future

DAVID ALLAN HUBBARD

Man's imagination sharpens his sense of fear. This great human ability of ours to thrust ourselves forward and anticipate tomorrow's happenings ahead of time makes us highly vulnerable. There's a lot of uncertainty about tomorrow, and that is hard for us to handle.

Robbie Burns, the Scottish poet, saw the issue clearly. He was plowing one day and his plowshare dug into the carefully built nest of a field mouse. Almost in penance, he wrote a poem, "To a Mouse." You remember the well-known line about "the best laid schemes of mice and men" and how they both go wrong. But then, Burns went on to say that our human problems are much more painful than the mouse's. To the mouse he said (and I'll translate this into English from Scots):

Still thou art blest compared with me.

The present only touches thee.

But, ach, I backward cast my eye on prospects drear,
And forward, though I cannot see, I guess and fear.

The anxious present, the haunting past, the fearful future—these are the three tenses by which we conjugate our human verbs. And we can probably make a case for claiming that fear of the future is gripping us all the tighter as life changes ever more rapidly.

Future Shock is what Alvin Toffler called his best-selling book. In some ways it is more frightening than a horror story. It describes the frantic pace of modern life and the toll that change is apt to take on all of us. Confronted by countless varieties of goods, we have to make endless decisions about brand and size and quality and price. We are a society on the move. Every year since 1948, one out of every five Americans has changed his address. We meet more and more people in the process and have to cope with new names, new faces, new relationships, new problems. The ratio of the familiar to the strange is changing sharply. New information by the truckload or, perhaps better, the

David Hubbard is president and professor of Old Testament at Fuller Seminary, posts he has held since 1963. He also is executive vice president of the Gospel Broadcasting Association and speaker on "The Joyful Sound."

A graduate of Westmont College, he received the B.D. and Th.M. degrees from Fuller, and the Ph.D. from St. Andrews University.

This article was taken from a chapel address given by Dr. Hubbard.

computer load is being dumped upon us. Leaflets, magazines, brochures, pamphlets, paperback books, newspapers threaten to smother us. Information overload, Mr. Toffler calls this, and warns us that we may actually suffer physically as the result—insomnia, heart palpitations, tension, fatigue.

We need help, help that goes beyond what education and technology can do to cushion us against future shock. Jesus' disciples had their own fear of future shock to contend with. From their experiences we can gain light for ours.

What frightened the disciples was Jesus' talk of leaving them. They had cut their ties with their past to go with him. Their businesses they had abandoned; their homes and family they had left behind. For three years or more their lives had been wrapped in a bundle with Jesus' life. Where he went, they went. What he commanded they tried to do. His ministry was their prime concern.

Now he was leaving. And part of his legacy to them was a promise of hostility and persecution in the world. This did nothing to comfort their fears. A conversation between Jesus and Peter brings the problem into sharp focus.

We listen to the conversation just after the famous, "Do you love me?" questions, which Jesus concluded with the simple command, "Feed my sheep" (John 21:15-17). Three times Peter affirmed his love of the Master and three times he was ordered to give himself to the service of the Master's people. What Jesus says to Peter is the surprise. The blustering fisherman has been restored to fellowship after his night of shame. He who refused to count himself with Jesus' men was singled out for special attention. The restoration was complete.

But Jesus had special plans for Peter, and here is where the surprise comes in. Jesus promises Peter not recognition or reward but death—a special kind of death at that: "Truly, truly, I say to you, when you were young, you girded yourself and walked where you would; but when you are old, you will stretch out your hands and another will gird you and carry you where you do not wish to go" (John 21:18).

I. THE FEARS WE FACE

To a strong man at the peak of his powers, Jesus promises death. To a valued disciple joyously restored to fellow-

ship, Jesus predicted crucifixion, as the mention of stretching out his hands to be nailed or bound to a cross suggests. The Gospel itself makes clear Jesus' meaning: "This he said to show by what death he was to glorify God" (John 21:19).

How did Peter feel? We was confident in his love for Jesus; he was ready to feed his sheep. Then like a slap in the face, the news of his coming death was handed to him. No use questioning Jesus' word. Long since Peter had learned how trustworthy, how accurate, how infallible Jesus was. And the Master had deliberately introduced his promise with the words of ultimate credibility: Verily, verily—truly, truly.

Peter's certainty of the grim news of his coming crucifixion was shadowed with uncertainty. When and how would it come? How much feeding of Christ's flock could he complete before others led him away to his death? What would it be like to die? Would his faith hold firm under pain and persecution?

Even when we know what is going to happen, fear of an unknown future may creep in upon us and begin to work on our insides. No matter how calm we seem to be, the twinges of uncertainty are there. Sometimes they jab us sharply and go away for awhile. Sometimes they clutch us tightly and hang on, so that no matter what else we feel they are always there.

Sometime ago, one of my neighbors calmly packed his bag and walked with his wife about two miles to the hospital near our home. He checked in and went to his room. He did not come home again. He knew he had cancer, and a fatal form of it. He had no car, so he walked. He knew to an almost absolute certainty what was going to happen, and he and his wife did all they could to face the inevitable with poise and composure.

Yet, even then, there was a lot unknown that lurked in their future. A man only dies once, so he can hardly be casual even if he is calm. What about his loved ones? How will they get along? We know that Peter was a married man, his wife's welfare was bound to be on his mind. And so was the question about the fate of his friends who also were called to share their faith in the risen Christ.

Peter turned and saw following them the disciple whom Jesus loved, who had lain close to his breast at the supper and had said, "Lord, who is it that is going to betray you?" When Peter saw him he said to Jesus, "Lord, what about this man?" (John 21:20-21).

John was on Peter's mind. They had been close since the early days of Jesus' ministry. The two of them, along with John's brother, James, had been an inner circle, especially close to the Master, the three obvious leaders among the twelve.

Peter's lot was clear—crucifixion. But Jesus had said nothing to anyone else, and Peter was curious, even puzzled. His question was a natural one. Am I the only one of the eleven remaining disciples (remember Judas was dead by now) singled out for this kind of treatment?

Jesus' answer did nothing to ease Peter's puzzlement. Jesus said to him, "If it is my will that he remain until I come, what is that to you?" (John 21:22). So indefinite was Jesus' answer that a rumor arose stating that John was not to die but live to see Jesus come again.

Not only Peter's curiosity was squelched by Jesus' answer, but John's was too. We can be sure that he was concerned about his future. Though he was somewhat younger than Peter, he also had questions about tomorrow and the next day. He had not missed what Jesus had said about tribulation and persecution in the world. But not one ounce of information did Jesus give him about the future.

Peter knew how he would die, yet his certainty was clouded with a lot of uncertainty. John did not know what would happen to him, yet his uncertainty was brightened by a lot of certainty. The risen Lord had broken the back of death and ruined its ability to conquer Christ's people. Love that would die for a sinner and power that could defeat death are an unbeatable combination. Peter in his certainty and John in his uncertainty both knew this.

Sometimes we are well aware of our dying. My neighbor got the message and walked to the hospital. Sometimes we do not have it in mind at all. My father finished a sermon on love, closed his Bible and dropped dead in the pulpit. Whether the fear we face is the certainty of death or its uncertainty, Jesus' words are directed to our fear.

II. THE MASTER WE FOLLOW

In both parts of the conversation with Peter, fear was neither Jesus' final word nor Peter's final response. When Jesus predicted Peter's death he concluded the prediction with a brief and powerful command: "And after this, he said to him, 'Follow me'" (John 21:19). And when Jesus refused to comment on John's lot he snapped the conversation shut with "What is that to you? Follow me!" (John 21:22). Not the fears that we face but the Master that we follow should be the center of our concentration.

The future holds nothing beyond his coping. His disciples sensed that. One of their own had betrayed him, yet he did not turn bitter. A cruel political plot had been mounted against him, yet he did not panic. Sharp rejection, extreme pain, death itself were baptized into God's purposes. Everything that men meant for evil God had turned into good. When Jesus said, "Follow me," Peter was ready. Temporarily he had gone his own way and it led to a dead end street. Now he was ready to follow. The love and power of Christ compelled him. He had to say yes, even though the shadow of his coming cross hung over every step he took.

Even death is glory if it comes from following Christ. Peter knew that. He had heard Jesus speak of his own death as glory.

The hour has come for the son of man to be glorified. Truly, truly I say to you, unless a grain of wheat falls into the earth and dies, it remains alone; but if it dies, it bears much fruit (John 12:23-24).

No death, no obedience to the Father; no death, no demonstration of love; no death, no forgiveness for the Church. Christ's death was a moment of glory. So was Peter's: "This he said to show by what death he was to glorify God" (John 21:19). And so can your death be a moment of glory, if your life's response is to go with Christ.

To his mouse Robbie Burns confessed: "And forward, though I cannot see, I guess and fear." To his men, Jesus said: "Take heart, it is I; have no fear" (Matthew 14:27). When we hear that voice and those words, we can follow anywhere. Even into the unknown future. ▲

CLONING AND BEYOND *Continued from page 13*
will turn out to be "good enough" to control themselves.

Indeed, Ramsey labels Rahner's idea of the work of theology as "a rear-vision-mirror reaction." The phrase is a bright one and not unfair, since Rahner admits candidly that the theologian cannot judge scientific feats before they happen. Ramsey, however, thinks that theologians should be more active, more aggressively judgmental; they should not sit and wait; they should take the initiative and pose hard critical questions to the biologists and geneticists. Certainly, Rahner's speculative view is vulnerable to the charge that it is oversanguine about the degree of man's goodness. Ramsey's outlook is more prudent and cautionary. As a moralist of rather conservative instincts, he has a sure eye for the evil possibilities in any new situation.

Nevertheless, Rahner's approach may prove more serviceable to us in the long run. Theologians must do more than warn prophetically about "depersonalization," issue resonant prohibitions, or wring their hands over the men in the labs. Judeo-Christian values no longer control the mainstream of Occidental culture. So the question arises: What are theologians to say if and when men like Joshua Lederberg, with the majority culture concurring, go ahead and produce exactly what Ramsey warns against?

Now of course it may be that this will not happen. Ramsey's conservative viewpoint might well prevail. The secular community might shy away from techniques such as cloning. Stringent laws might — just might — be passed forbidding biologists and geneticists to go beyond a certain point in practice of what they know in theory. Even then, if we are realistic, we must prepare for what is inevitable: some bold scientist will break the law and clone a human being. This feat would certainly not invalidate Ramsey's ethical norms, but it would make them irrelevant speculatively. The existence of even one cloned human being would be all that were needed to confront theologians with some fairly basic questions — questions of the sort that Rahner is trying to anticipate.

A hundred years from now Western society will take for granted some degree of responsible biological and genetic engineering. And this will no doubt include the socially regulated cloning of individuals who are deemed to be especially valuable to the community.

Arresting Questions

A cloned human, started from an artificially fertilized cell, would be a perfect duplicate of an earlier person. Would this duplicate have an "individual soul" — that is, would he or she have personal

ethical, aesthetic and religious experience? The obvious answer would seem to be Yes. Each cloned individual would be a separate psychosomatic organism with a lived-experience of his or her own, and thus capable of the full range of human feelings. Though very strange to us now, the genetic identity of these clones and their mode of production would in no way affect their genuine humanity provided they were raised in a loving familial environment. In principle, their case would seem to be not much different from that of identical twins or triplets. The chances are that Ramsey's fear of "depersonalization" and lack of "embodied personhood" will turn out to be unjustified.

Questions more arresting than these could lie beyond the cloning process. What about totally artificial human beings — "androids" produced from cells manufactured out of the appropriate organic materials? "Androids," of course, have long been a staple of science fiction, but the feat of producing them is almost certainly some centuries ahead. Even so — given the ever more precise human control over biochemical processes — we would be unwise to rule it out as impossible. Now, what would be a properly theological response to such artificial human beings? Would they have "souls"? It seems that they would, if they were so constructed as to have emotional experiences — moral, aesthetic and religious. If the androids were full duplications of man, then they would be complete, with a brain and a nervous system. Technically they would not be children of "Adam"; but to the degree that they were copies of human beings, they would be capable of the same feelings that humans are capable of. In Rahner's phrase, they would be "spirit-endowed persons."

Assuredly, it might be possible to "program" androids in such a way that they would lack certain distinctively human emotions — wonder or humor, irony or regret. They might be designed as purely knowing and willing creatures. In that case, moral difficulties might arise in connection with their social behavior and treatment; but no specifically theological problem would be involved, since religious experience would be precluded. However, the existence of such artificial humans, not "naturally" capable of religious feelings, would resurrect some of the speculative questions of 19th and early 20th century theology: whether there is a universal "religious a priori" innate in human consciousness, and whether "objective" revelation can be identified with subjective historical experience. The artificial designing of human beings in the distant future — and the manipulation of the human mind in the near future by means of chemical and electrical stimulation — might have very considerable effects on how we interpret the category of "revelation."

Let me hazard a key theological concept for the future: it is the ongoing content of human life that is spiritually significant—not its origin, whether natural or artificial. Ramsey's anxiety about the future of parenthood is intelligent, but it cannot serve as the final theological judgment on religion and experimentation with basic processes of reproduction.

Life-content will determine the possibility of religious experience, celebrative, contemplative and penitential. Androids might have such experiences as readily as "natural" men and women do now—perhaps more readily if they were better engineered. We need not assume, as Ramsey appears to do, that all the scientists who are able to accomplish these things will necessarily be irreligious people.

"Engineered"—that most American of terms—is a cold and unpleasant adjective, I concede. We in the industrialized nations are now in a period of intense revulsion against scientific inquiry and praxis. There is ample social justification for much of this feeling. Urban and environmental problems press us hard. But the wave of revulsion will pass, having done its corrective work. Science will still remain and will need to be controlled morally and interpreted theologically. It cannot be destroyed by Luddite assaults or by the back-to-the-land enthusiasm of the counterculture. Nor can we permanently avoid it by flights into romantic irrationalism. We shall have to live with science and give it meaning.

Do we find cloned human beings and androids a disturbing prospect? No doubt we tend to. Ramsey voices our instinctive response to such far-reaching changes on the horizon of the future. But let us remember that the early 19th century, the era of Mary Shelley's *Frankenstein*, would have found equally disturbing the possibility that the chemical code of life could be broken—broken in a laboratory, not merely in a Gothic novel; and that, in turn, Mrs. Shelley's imagination would have unnerved the men of the Middle Ages and the Renaissance, who found the Faust story disquieting enough.

It is not too early for Western religious thinkers to start developing a speculative theology capable of interpreting coming biological advances. Rahner's essay is a kind of first sketch of what will be needed. For those who sympathize with Ramsey's attitude, the views expressed here might seem rather anti-humanistic. But that is not the point. What matters is that the theological community—and wider circles in church and synagogue—begin to discuss these questions. We have no choice, in fact, if we are to be responsible. There will be no other way to prevent or cure that deepening sense of spiritual "erosion" about which Kass and others warn us. ▲

EXPLORATIONS *Continued from page 18.*

If we like being out of touch with life in the '70s, then stop our ears!

Decca Records President Jack Loetz says, "I think young people are looking for meaningful subject matter. While there is a movement away from the Church by young people, creative people may be able to stimulate a new interest in religion through the kind of music that questions and stirs controversy." Perhaps the themes in youth culture of alienation, disintegration, the quest of transcendence, the search for meaning and integrity have made music like "Jesus Christ, Superstar" and its legions of competitors possible. The Church must have a new pluralism in the styles of music acceptable in worship, a greater tolerance for experiment and, hopefully, a new level of sophistication and discrimination in the sounds of the '70s it chooses to echo within its hallowed walls.

It is stupid to think the great music of the past no longer stirs the hearts of the young; but it is anachronistic to believe the only music for worship in the 20th century is 16th and 18th century hymns and anthems written by Bach and Beethoven.

"A Mighty Fortress" may be a noble comment on the 16th century Reformation struggle, but "If I Had a Hammer," "Let the Sunshine In," "Bridge Over Troubled Water," "Put Your Hand in the Hand," "Let It Be," may be more appropriate hymns for some people now and closer to their lives.

I would never ask an entire parish to accept Rock music as part of its worship services. I am simply saying a new pluralism in musical styles must emerge if the Church is to minister to all sorts and conditions of men of the future.

As worship appropriates the new sounds of the '70s, it removes much of the false dichotomies between religion and life, the sacred and secular, and helps to create a new Christian cultus—a cultus in which the peace movement, the racial struggle and war against poverty are as much at home in worship as is the offertory anthem.

"The test of worship is how far it makes us more sensitive to the beyond in our midst, to the Christ in the hungry, the naked, the homeless, the prisoner" (Robinson, *Honest to God*, p. 90).

7. THE ART OF CELEBRATION. The Church needs a new minister who is technically and experientially competent in celebrations, who gives leadership to the emerging worship. No minister will be equal to the '70s who is not in touch with the spirit of W. H. Auden when he said: "I know nothing, except what everyone knows—if there when Grace dances, I should dance."

The minister must relearn how "to turn every idea and every moment into a privileged moment," to use Camus' words; and to ritualize the joys and watersheds of life as gracious gifts from God. He must once again begin celebrating the wonders and glories of life, and sing with a new beat the greatest, gladdest, best news that ever startled man's ears and shattered the midnight darkness of the earth: "He is risen. Hallelujah!"

Corita Kent said it beautifully: "If we left it to the Spirit, there would be nothing left in churches but Jesus and dancing." That, I think, points us toward the kind of worship we shall see in the future. ▲

A Response

November 19, 1971

Dear Mr. Dayton,

Thank you for sending me the essay by John Hoagland, and for the invitation to write a response to it.

This I cannot do, because of prior commitments that engage my whole time and energies for the next few months.

Courteously, I should leave it at that: my necessary and sufficient reason for a negative response. But if we should speak the truth in love, I must say that no one can in 25 pages give a serious discussion of all eight of the topics listed in Hoagland's paper. Therefore, I would not lend the undertaking my endorsement even if I had all the leisure in the world. Moreover, the bibliography is as deficient as the substance of the paper. I rather expected better of a publication from Fuller Theological Seminary.

Sincerely yours,

R. Paul Ramsey

Harrington Spear Paine Professor

Christian Ethics, Princeton University

Book Reviews

THE GREENING OF AMERICA, by Charles A. Reich (*New York: Random House, 1970*), is reviewed by Frederic Wm. Bush, B.D. '58, Th.M. '60, assistant professor of Old Testament at Fuller Seminary.

This book by Prof. Charles Reich of the Yale University Law School does not deal with predictions about the future determined by extrapolation from our rapidly developing technology. On the contrary, it is a sharp, incisive, and in some respects devastating attack on the whole system which has produced the capabilities and directions that the lead article of this issue so dramatically portrays. But it does not ignore the future. In fact, it sees in the new youth revolution a wholly different future, radically opposed to the high technology system the futurists describe, and for this reason, as well as its popularity, it merits our attention here.

Professor Reich's analysis makes fascinating and rewarding reading for the Christian in modern American society, for it wrestles with one of the fundamental problems of mankind, and of American society in particular, a problem which drastically plagues the American church: the relationship and dichotomy between the individual and the community. Reich begins with an insightful and depressingly thorough analysis of the problems of the corporate state that modern America has become. However one might feel about the rhetoric in which Reich's analysis is couched, the problems he takes as his point of departure are terrifyingly real results of that corporate state. We do have drastic poverty amid affluence. We do have a heritage of exploitation of minorities (especially the black minority). We have indeed so long pictured and used violence as a solution to the problems that face us, both individually (e.g., the "Western") and corporately (e.g., war as a calculated facet of international policy), that the violence that now besets our schools and our cities

ought not to engender the surprise that it does. We do choke in our own air and befoul our own land, even while our youth are forced to destroy another land in a brutalizing war that we lack the corporate will to stop. Most important of all we have found no balance in the struggle between individuality and the interdependence and impersonal demands of corporate existence. In fact, the challenge that faces us is posed by the meaning of freedom of choice when the values that determine our choices are themselves determined by the forces of an increasingly administered society that seems to be out of our control.

Reich's analysis of the historical cause of this malaise is also full of insight and gives helpful structure to the fundamental issue of the book, the dichotomy between individuality and corporate social life. To do this he develops three "consciousnesses" which have shaped and are shaping American society. By "consciousness" he means "a total configuration in any given individual which makes up his whole perception of reality, his whole world view" (p. 14). Consciousness I, the world view from which early America developed, was a reaction to the constraints of class status and the village life of the old world, a reaction to being held back by rigid social customs and hierarchial forms. Its reality centered on the truth of individual effort and achievement. It was preoccupied with individual dignity and advantage, in which one worked for oneself and not for society. Along with this went a harsh self-repression in the interest of efficient effort and a hard competitiveness that was suspicious of others and had more faith in winning than in love. Although Reich rather unfairly gives short shrift to Consciousness I, he has succinctly portrayed a major feature of American life that has been both its strength and its weakness and is still with us today. It nostalgically believes that the government is best which governs least and that all it takes to succeed is character, morality, hard work and self-denial.

Reich is primarily concerned, however, with Consciousness II, the consciousness of the corporate state. It emerged as a result of the failure of Consciousness I and is basically committed to organization and authority and to the "common good." It is a world-view produced by a rationalization of corporatism over against the older individualism. Consciousness II conceals the domination and exploitation that informs the organizational world and assures us that organization and corporate greed will produce the good life. Although Reich again puts his finger on one of the most serious problems of American life, namely the exploitive and destructive elements of the American form of social commonality—the corporate whole which we have made and which makes us—he here engages in such constant and unremitting hyperbole that his treatment has become simply gross overstatement. True, life under the corporate state carries with it great pressure to conform, rampant materialism, much parasitic living, and a conscienceless involvement with the military and war. Much advertising is false and misrepresentative; much work is routine, repetitive and boring. But what does it mean to say that man now lives a "robot life"? How can Reich establish that

What we have is technology, organization, and administration out of control, running for their own sake, . . . and we

have turned over to this system the control and direction of everything — the natural environment, our minds, our lives. . . . we have turned over everything, rendered ourselves powerless, and thus allowed mindless machinery to become our master (p. 88f).

The rhetoric, perhaps, can be excused. There is an element of truth in those statements, however overstated. But Reich's conclusion is that the whole system is irredeemably evil and its whole life-style must be rejected. This he establishes only by hyperbole.

Reich's answer to this "mindless juggernaut" is the developing Consciousness III, the "world-view" of the new generation, brought into being by two forces—"the promise of life that is made to young Americans by all of our affluence, technology, liberation, and ideals and the threat to that promise posed by everything from neon ugliness and boring jobs to the Vietnam War and the shadow of nuclear holocaust" (p. 218). Hence Consciousness III is no accidental emergent from the youth culture but the basic response of the corporate state to its own destructive potentialities and realities. Its foundation is liberation, freedom from automatic acceptance of the imperatives of society and the false consciousness that society imposes. For it, the only reality is the self and its value and potential. It starts from premises based on human life and nature and not on premises that are the artificial products of the corporate state, such as power or status. It is not competitive, rejecting the whole concept of excellence and comparative merit of Consciousness II. In place of the world seen as a jungle, with every man for himself (Consciousness I) or the world seen as a meritocracy leading to a great corporate hierarchy of rigidly drawn relations and maneuvers for position (Consciousness II), the world is a community. In Reich's view, the solution of the exploitation, oppression and mindless manipulation of the corporate state is a non-violent overthrow of it by the emergence and spread of Consciousness III. Reich says:

There is a revolution coming. It will not be like revolutions of the past. It will originate with the individual and with culture, and it will change the political structure only as its final act. It will not require violence to succeed, and it cannot be successfully resisted by violence. . . . Its ultimate creation will be a new and enduring wholeness and beauty — a renewed relationship of man to himself, to other men, to society, to nature, and to the land (p. 4).

In response, let us first note that Reich here analyzes the new youth culture with great empathy, sympathy and tenderness, almost indeed with poetic quality. For this insight alone the book is well worth reading for us who often find this youth revolt so puzzling and so hard to understand. For there is much that is wholesome and refreshing in the refusal of Consciousness III to follow the materialistic and false values they find in contemporary society.

But the positive features of the book cannot blind us to its serious failings. First of all Reich evidences an almost incredible social optimism and romanticism. Inevitable progress underlies his theory of social change, as it did that of Consciousness I. The "new individual," created by Consciousness III, will bring peace and brotherhood through individual "conversions." Here Reich is, at best, naive. He ignores both history and the contemporary scene. Such

radical cultural change as he envisages has never been achieved by a silent non-violent transformation based upon individual reformation. As aware as Reich is concerning the destructive tendencies in the corporate state, so innocent is he about the destructive possibilities of individuals, especially when they have been set "free" in a narcissistic withdrawal into the self in which instincts and desires are cut adrift even from social mores and taboos. Reich confuses selfness and selfishness. Evidence of this is seen in that Reich totally ignores the violent side of the youth revolt. The turned-off generation is far more frustrated and angry than Reich pictures them. It yet remains to be seen if the bombers and bomb-scarers are but a lunatic fringe of Consciousness III, or a symptom of a violent potential integral to this emerging consciousness.

Secondly, Consciousness III in its essentials is as individualistic as Consciousness I. Reich has not only not succeeded, he has not even seriously attempted to include in his analysis the other equally-important dimension of human reality—the corporate dimension of life, with all his talk of "community" and "togetherness." Consequently, Consciousness III is consciously a-political. It withdraws from the political arena in a kind of cultural quietism. But abstinence from political concern with forms of societal commonality is itself a political decision of the first importance. By such inertia it favors the status quo of the extant form of corporate life. It remains to be seen how the small groups of Consciousness III, caught up in "doing their own thing," can possibly destroy the powerful structures of the corporate state, let alone build a new community to take its place!

Thirdly, Consciousness III severs the link with time and history for immediate personal experience and mind-expanding presentness. Its commitment is to an eternal now, often artificially induced by drugs. Evidence of this is the increasing popularity of Eastern religions among its proponents with their negation of history for a timeless acosmic oneness.

Finally, *The Greening of America* has much to say to the Church. The affirmation of life and humanness that Reich so poetically describes, the values which he recognizes must structure life, the longing for community based upon mutual love and trust, are all to be found in the gospel and are exemplified in the life-style of Jesus Christ. Yet, even though he makes rich use of Christian vocabulary: conversion, redemption, rebirth, etc., Reich rejects Christianity. Could part of the reason be that the Church has been so domesticated by the realities of American life that its life-style lies closer to the ideals expressed by Consciousness I and II, rather than the "new man" so naively expected by Reich to emerge from the contemporary youth revolution? A careful reading of *The Greening of America* cannot help but make the American Christian wrestle deeply with the extent to which he is "conformed to this world" (Romans 12:2) by being shaped and misshaped by the society of which he is a part.

ENVIRONMENT FOR MAN: THE NEXT FIFTY YEARS, commissioned and edited by William R. Ewald, Jr., on behalf of the American Institute of Planners' Fiftieth Year Consultation (Bloomington, Ind.: Indiana University Press,

1967, pp. 308, \$2.95); ENVIRONMENT AND CHANGE: THE NEXT FIFTY YEARS, 1968, and ENVIRONMENT AND POLICY: THE NEXT FIFTY YEARS, 1968, are reviewed by Jack B. Rogers, associate professor of theology and philosophy of religion at Fuller Seminary.

Bill Ewald, editor of these volumes, spoke on a Danforth lectureship which I attended a year ago. Discussing the thrust of the future with him was stimulating and direction-giving. He is an urban planner with his own consulting firm in Washington, D.C. But he is much more. He is a man who a few years ago was in a position to move up to the headship of a prestigious and lucrative world-scale development consulting firm. He quit because he felt that the procedures used in that company were too impersonal to contribute to creating a genuinely human environment. For a time he did nothing. Then he mobilized his resources in a proposal to the American Institute of Planners that this organization's fiftieth anniversary be celebrated by a three-year consultation developed as a "structured dialogue of the philosophy needed to bring about the creative development of our environment, our society, and our people; the policies, programs, and techniques to implement that philosophy; and the knowledge, resources and manpower to make these aspirations real and part of a life experience for everyone."

The three volumes here reviewed represent a compilation of papers read at two national conferences. They manifest in sophistication and depth the two concerns which Bill Ewald expresses in simple, ordinary language. (1) Generally, two kinds of people have leadership potential — those who know how to get things done and those who are concerned with what ought to be done. (2) These two must be brought together in creative working relationships. Ewald's experience has been that Christian educators and social psychologists were those most open to facing the future by asking questions of value and priority necessary to guide the technologists' and planners' efforts.

These books seem to arise from a milieu of urban planning which is foreign to most pastors and church educators; yet these books are in fact appropriately directed to church professionals and laymen. For one thing, we are now and will increasingly become an urban nation (and world). This urban environment must be made livable in "spiritual, social, and economic as well as physical terms." *Environment and Change* deals primarily with the philosophy, values and moral judgments which must inform policies, programs and projects of environmental development. The list of contributors whose names are immediately recognizable indicate the competency of the contributors: R. Buckminster Fuller, Gunar Myrdal, Robert Theobald, Max Lerner, Joseph Sittler. University of Chicago Divinity School theologian Sittler devotes his article to "The Role of the Spirit in Creating the Future Environment." A self-conscious concern for values which cannot be computerized pervades not only this article but all the papers and is integrated with computer-obtained information.

Environment for Man, beginning with an article by René Dubos on "Man Adapting: His Limitations and Potentialities," strives toward definition of an "optimum environment" for man. *Environment and Policy* utilizes contribu-

tors including Bayard Rustin and Robert M. Hutchins to apply the moral and philosophical concerns of the first two volumes to "specifics with applicable recommendations."

All three volumes present resources which demand response. Better yet, they stimulate the creativity which makes response to the future possible.

One example must suffice. Buckminster Fuller's "An Operating Manual for Spaceship Earth" in *Environment and Change* provides excitement and mind-expansion enough to motivate more commitment and creativity in doing our regular jobs and a desire to relate our tasks to those of fellow earthbound astronauts. R. B. Fuller's powerful emphasis on over-specialization leading to extinction and the need for comprehensive thinking should open vistas of reflection for each of us. It might make Fuller Seminary alumni even more grateful (as is this reviewer) for the presence at Fuller of three faculties—Theology, Psychology and Missions—representing three different disciplined methodologies in a common context of commitment. That these three faculties are intensely involved with greater integration is a sustaining sign for our future.

FUTURE SHOCK, by Alvin Toffler (Random House, 1970, 505 pp., \$8.95. Bantam Books, 1970, 561 pp., paperback, \$1.95), is reviewed by Jay Bartow, B.D. '70, assistant minister, Lakewood Presbyterian Church, Long Beach, Calif.

Of the many recent books about the future, Toffler's has topped them all in sales, running through ten editions of the cloth and fifteen of the paperback. Why?

Certainly it is not because of favorable reviews. *Saturday Review* (Dec. 12, 1970) and *Fortune* (Nov. 1970), of which Toffler was once an associate editor, had few words of praise for *Future Shock*.

No reviewer, however, denied the existence of the malady that Toffler describes as "the dizzying disorientation brought on by the premature arrival of the future" or "future shock." If anything, the author spends too much time attempting to prove the existence of a problem we already feel at the gut level. Things are changing at an unprecedented rate and dimension, and Random House suggests "This book can help us survive our collision with tomorrow." That is debatable, but the book is interesting for the number of trends it forecasts and the broad scope of life it attempts to describe.

Toffler's method is also of interest. He writes: "Previously, men studied the past to shed light on the present. I have turned the time-mirror around, convinced that a coherent image of the future can also shower us with valuable insights into today" (p. 5).

But *Fortune* criticizes Toffler for not taking the past seriously enough, saying: "He seems unaware that all generations have had to bear the burdens of the human condition; that the human past, at least as much as the present, was full of blood, sweat and tears, none of which stain the pages of the book."

In any case, if even a small fraction of Toffler's collected prophecies come to pass, tomorrow will be an interesting time to live as a Christian. Questions run through my mind over the ethicality of serial marriages and professional parenthood or rent-a-person, perhaps because some of these

issues already have confronted me in the pastorate. I wonder if my ministry should take the shape of opposition to "progress," yet I hesitate to make a fool of myself as did brother Christians who opposed Copernicus and Galileo.

Toffler offers some hints at small individual measures we can take to keep our heads together (slow down, wear last year's sports coat, don't trade in your car so soon). On the larger scale, he sees the possibility of society stopping the top-down planning by a handful of so-called experts, and replacing it with a sort of townhall meeting where people could be asked the question that is almost never asked them: "What kind of a world do you want ten, twenty or thirty years from now?" Such anticipatory democracy is technically possible through modern communications, but I wonder if Toffler is a bit naive in his hope that people will care enough to wrestle with such a question. Perhaps it is just such optimism in the face of a malady so wide felt that accounts for the remarkable sales record of *Future Shock*.

HERE COMES TOMORROW!, by staff of the Wall Street Journal (Dow Jones, 1966, 196 pp., paperback, \$1.85), is reviewed by Eric Behrens, student in the School of Theology at Fuller.

Here Comes Tomorrow!, a book consisting of thirteen essays on different facets of the future which were written for the Wall Street Journal in 1966-67, is primarily interesting for the perspective which it offers on history. Although written only five years ago, this book is obsolete in many areas and barely startling in a few.

Admittedly, this book was written for a very specific audience: the wealthy, "expansion and growth" oriented businessmen who read the Wall Street Journal every day. Nevertheless, it is striking that the ecological threats of technology are barely mentioned in it. The article on "Food: Where It Will Come From" blithely points to pesticides as one of the keys to "improved yields" (pp. 20-21); there is not a thought given to the possible detrimental effects of these noxious compounds on the living creatures of the earth. In the article on "Energy: Doing the Work," Westinghouse hopes to build its "dream plant" on a "coastal location," so it can employ atomic water reactors while desalinizing water in the same complex (p. 70); this reveals a discerning eye for economy, but total blindness to the possible effects of atomic water reactors on the neighboring sea life.

The myth of nature's "unlimited supply," which environmental iconoclasts have recently shattered, is repeatedly propounded in these essays. Thus, in "Food: Where It Will Come From" we find the incredible estimate that fin-fish production "could be quadrupled without depleting the oceans" (p. 22). In another article, "Researchers say the Earth still holds enough of the 'fossil fuels'—coal, oil and gas—to keep homes and factories humming for centuries" (p. 61). With such a naive understanding of nature, it is not surprising that the world presently faces a natural resources crisis. Instead of "subduing" the earth and having "dominion over the fish of the sea" (Gen. 1:28), man has raped his environment and is now realizing there is not much left to desecrate.

There is one article which shows a modicum of concern about the environment: in "Automobiles: Cleaner and Safer" the relationship between automobiles and serious pollution in the cities is recognized. In response to this problem, the article states that Ford is developing a car which is powered by batteries (no emissions) and a conventional engine (with conventional emissions). The article then details the purpose of such a double powered vehicle: "It would run on batteries for city driving and then switch to the gas engine when it hits open country, where pollution dangers are lower" (pp. 135-136). An interesting "solution"!

The book's heady technological optimism and total lack of concern for that world which God originally shaped makes many of its "predictions" obsolete in our more environment-conscious age. In one chapter it confidently predicts that an American SST will be flying by 1975 (p. 80). In another, after discussing the increased use of electricity in the future, it cheerfully concludes, "...the supply is expected to be ample in the years ahead" (p. 60). Not so, says a well-documented article entitled "Southland Facing Electrical Power Crisis in the Next Two Years" which appeared in the *Los Angeles Times* on January 23, 1972. The first chapter of this book, "Population: Easing the Crush," predicts that the United States population will surge to 338,219,000 by the year 2,000 and goes on to outline the benefits this will bring to the economy (p. 2). In the same issue of the *Los Angeles Times*, another article also refutes this, stating that "if present population trends persist," the population of the United States will be between 250,000,000 and 270,000,000 by the year 2,000. Not the least of the factors causing this relatively small increase in the U.S. population is the desire of young couples not to contribute to the overpopulation crisis.

What are we, as Christians, to make of all this? Clearly, values and perspectives in this country have changed remarkably in the last five years. The shift might be symbolized by referring to the chapter entitled "Space: Men on Mars." In it the writer states that "National Prestige" is the major justification for the enormous expenditure on the space program (p. 91). This is consistent with the tone of the book: five years ago, Americans stood in awe of a technology which dwarfed man. Today, we are recoiling in the face of a technology which threatens to consume us. Whereas previously technological advances were unquestioned (the book simply assumes the SST will fly in 1975), today they are being scrutinized for their effect on the natural world and on man. National prestige is no longer measured in terms of technological skill, but much more in terms of less tangible, more human values. Whereas *Here Comes Tomorrow!* repeatedly cites economics as the only "stumbling block" to technological "advance," today public opinion greatly influences directions technology will take.

Clearly, the Church should be more at home at the present time than it was five years ago. An article such as the lead one in this issue would probably have been dismissed as "impeding progress" five years ago, because it raises questions about some new directions science is taking. Today, these questions and many more are being seriously discussed in a variety of circles, including scientific ones. Furthermore, the subject matter of the lead ar-

ticle, the effect of various changes on *man*, belongs far more to the present day than to the machine-dominated mentality of five years ago. In the present arena, the Church can offer valuable, biblical insights on man and the created world and can expect the world at large to listen. With "values" playing such a significant role in contemporary definitions of "progress," Christians should be working together to glean biblical standards and guidelines to help direct those who shape the future.

There is another lesson to be learned from *Here Comes Tomorrow!*: in the latter half of the twentieth century, national moods will shift very rapidly and with unpredictable fickleness. Who knows how long the present concern about the pillaging of God's environment will continue? How much longer will the public be receptive to well-argued biblical statements about man and his environment? In light of this, we as Christians should either work to encourage continuation of the present mood or to promulgate biblical values in our society while this mood lasts. Whatever we do, we should begin now, before the opportunity of the present leaves us behind.

THE DYNAMICS OF CHANGE, by Don Fabun (Englewood Cliffs, N.J.: Prentice Hall, 1967), is reviewed by James S. Hewett, B.D.'57, associate pastor of Arcadia Presbyterian Church, Arcadia, California.

The Dynamics of Change is to future studies what a Whitman Sampler is to the candy business. It is a compilation of articles by Don Fabun that originally appeared in a special series of six issues of the *Kaiser Aluminum News*, which he edits.

There is no question that Fabun is one of the most astute and creative students of the future. He has compiled here a book not only about the future but a book that in its very format catches the feel of a *futurebook* in that it represents something of a break from traditional format of the book as such. Cases in point: The pagination is retained from the six original issues of *News* so that each of the six segments is separately numbered.

He also employs the often delightful but sometimes frustrating multi-focus approach of having several things going on at once on the page. While you are reading the copy on the bulk of the page the very wide margins are filled with all sorts of pithy quotations from here and there that deal tangentially with the topic at hand. It is a format that would be the delight of anyone who has ever done research and then in the writing of his thesis found he has a superabundance of quotes that don't fit directly into the main text—so he simply adds them decoratively around the fringe of his work. (On this point our apologies to Mr. Hewett. Space limitations prohibited our use of the same technique. You must see the book to catch this unique flavor. Ed.)

A third obvious and grabbing feature of the book is the graphics. It is filled with really way-out pictures in lush and highly provocative style. The book is rampant with illustrative pictures, charts, comparisons, summaries, as well as quotations from a host of business and professional periodicals.

The six segments of *The Dynamics of Change* deal with four basic areas in addition to introductory and concluding segments.

I. DYNAMICS OF CHANGE. In the introductory chapter he reviews the most important global changes that began subsequent to the second world war and how these have been based on psychological movements having to do with individual innovation. He is concerned in his introduction with defining change in terms of perception and experience, he is concerned with our recognizing the signs of change, particularly in population growth. He uses an analogical argument based on the physical properties of interfaces in matter when under pressure.

He examines the changing thought patterns of our day particularly with reference to the youth subculture as an important historical source of innovation, tracing eighteen of the great historical contributions that have been made by the young men of their times.

Great economic and social forces flow with a tidal sweep over communities that are only half conscious of what is befalling them. Wise are those who foresee what time is thus bringing and endeavor to shape institutions and mold men's thought and purpose in accordance with the change that is silently surrounding them.

(John, Viscount Morley)

II. THE PROMISED LAND. The second segment deals with the changing concepts of resources in a world where population is growing so rapidly. He considers the implications of uses of land, water resources, food supply, mega-structures and changing concepts of time.

We are waking now from the American Dream to realize that it was a dream few Americans lived in their waking hours. The history of the New World has turned out to be not so different from that of the Old. The peril that threatens the last of the American wilderness arises not from the reckless dream, but from the same historic forces of rapacity and cruelty that laid waste the land in the Mediterranean Basin, in Arbia, India and the treeless uplands of China. (Gerard Piel)

III. TELEMObILITY.

For nearly all his time on earth, man has worked to find ways to transport his body to the scene he wants to experience. Now, we appear to be in a transitional phase in which, increasingly, the scene is brought electronically to the man. The result is that communication may replace transportation as far as the human body is concerned.

Let us imagine a particular space and time circa 1986: a home in the suburbs of Phoenix. A man is sitting in the middle of a circular room and on the curved walls around him he can see the ocean—surf breaking over the rocks and foaming up the beach; a fish hawk trembling in the luminescent sky. Across from him sits another man, and the two of them are talking to each other. Once in awhile, the boom of the bursting surf and the cry of the hawk intrude upon their conversation.

Let us now say that the room is underground and has no 'real' view at all; that what is experienced on the curved walls is an image on a 'flat wall' television screen, pre-recorded in Hawaii, and now being replayed electronically. Let us further say that the first man is 'real,' but that the second man is being broadcast by laser beam from a satellite and recreated, in color and full dimension (you could walk around his image and see the back of his head) by 'holography,' so that though he is 'there' in Phoenix at the moment, he is 'in reality' at the same moment sitting in his study at the University of Edinburgh.

Where, in this situation, does 'reality' begin and end?

This will be a question that—by 1986—we will, individually, be asked to answer. There is nothing in the situation just described that does not appear to be perfectly feasible within perhaps the next ten years; certainly within the next twenty. We have *already* entered a new world of experience. (Don Fabun)

IV. AUTOMATION deals with a new kind of world in which the people become themselves the environment in which an advanced generation of electronic brains will be able to "hear, see, speak, reason, learn, repair themselves and reproduce their own kind."

Automation replaces three human performances: "(1) highly engineered mechanization extends and replaces physical strength and dexterity; (2) instrumentation and automatic control extend and replace the perceptive senses and personal control; (3) the electronic computer replaces the simple repetitive decision-making functions of the brain and has a memory." Lest one too quickly dismiss the subtle implications of machines as important psychological extensions of mankind, Fabun cites how deeply we already identify with machinery—beyond the status of a Rolls Royce there is the virtually physical extension of a man that takes place when he is one with his motorcycle.

Someday—not too far from now—people will 'ride' their personal computers with all the excitement that the motorcycle rider feels when he storms down the long tunnel of the night. We will, with computers, explore our mental world with a something that shares, amplifies and defines our experience. In doing so, it will help us define ourselves as human personalities. (Don Fabun)

V. THE LEISURE MASSES discusses the implications of increased leisure and the changing role and importance of work—envisioning a time when work will be a privilege. He concerns himself with the kinds of things that might happen when we turn the corner from an economy of scarcity to an economy of abundance.

We have, in our society at the present time, almost no concept of training people (other than the children of the wealthy) for a life of leisure. We do not know even whether people can accept leisure as a way of life . . . We are on the threshold of a time when leisure is at last possible for most people in our society, and we are doing almost nothing to prepare them for this new dimension of human life. (Don Fabun)

Fabun explores the implications of a guaranteed annual income, pay for students and the economics of it all.

VI. FORESEEING THE UNFORESEEABLE. In the concluding segment of the book Fabun turns to the subject of "What if some of these things that could happen actually happened?"

Already we know, or have in sight the possibility of knowing, how to solve most of the major problems that seem to surround us on every side like a pack of hungry wolves. But we do not apply this knowledge. We cower in the shelter of our primitive sleds, and from time to time throw a baby out to appease the wolves. Perhaps we could do better.

Fabun sees the answer to solving these riddles of the future by turning within and to one another.

. . . by turning inward to ourselves, we will see the outer world we have ourselves created; . . . by turning to each other, we will find the worlds within ourselves.

Specifically he sees one answer in a better understanding and application of our knowledge in the area of "imprinting"—that the early impressions in our lives form the very important grid through which we filter all subsequent experiences. Fabun explores the kinds of things the geneticists will be able to do in determining human characteristics and ponders the nature of a society so built.

Fabun's book does not seek to make hard predictions. Like many futurists he traces and projects the implications of many trends and alternative possibilities. He has a bibliographic type of "Wilbur Smith" mind that draws heavily on the writings of specialists from many fields. As a "sampler" his book pretends to do nothing more than introduce one to the encyclopedia of futurism. Of necessity his treatment is shallow and inconclusive at any one point. Read it for what it is and you will find your mind at once stimulated and bogged.

Fabun combines the sensitivities of a technical futurist with those of a romantic. Yet, he is no wild-eyed dreamer trying to charm us into accepting the notion that Utopia is around the corner and beguile us into thinking that all rapid technological change is being let down from heaven on a blanket. Rather, he is one who is saying to us in a most articulate and well-informed manner—change is happening whether we like it or not—let's guide it wisely, not simply be victimized by it.

"There is a story about one of our great atomic physicists," recalls Loren Eiseley in *The Firmament of Time*.

This man, one of the chief architects of the atomic bomb, was out wandering in the woods one day with a friend when he came upon a small turtle. Overcome with pleasurable excitement, he took up the turtle and started home, thinking to surprise his children with it. After a few steps, he paused and surveyed the animal doubtfully.

'What's the matter?' asked his friend.

Without responding, the great scientist slowly retraced his steps as precisely as possible, and gently set the turtle down upon the exact spot from which he had taken him up.

Then he turned solemnly to his friend. 'It just struck me,' he said, 'that perhaps, for one man, I have tampered enough with the universe.'

He turned and left the turtle to wander on its way.

Theology, News and Notes

MARCH 1972