

INSTITUTE FOR THEOLOGICAL ENCOUNTER
WITH SCIENCE AND TECHNOLOGY
(ITEST)
NEWSLETTER

Volume 15, Number 2-3

April, July, 1984

Announcements:

For Your Calendar:

1) The October meeting will be a combination of a conference and a workshop. We are planning to have two speakers and three or so pre-papers. The topic will be "Positive Contributions of Science to Christian Theological Understanding." The meeting will be held at Fordyce House near St. Louis on October 12-14, 1984.

We hope to have a rough print of the ITEST film ("Lights Breaking") for help from the participants for evaluating it.

Further detailed information will be sent out with the invitation to the Conference. These invitations will be mailed in July or August.

2) The March, 1985 Workshop will treat the topic: "Science, Technology, and Social Systems." This meeting will be organized by Dr. John Cross (Psychology Dept., St. Louis University, 221 North Grand Blvd., St. Louis, Mo. 63103) and Dr. Robert Bertram (Lutheran School of Theology at Chicago, 1100 East 55th Street, Chicago, IL. 60615). They would be grateful for suggestions for faculty for this Workshop. As in all the March meetings, the Workshop format will be followed. The papers will be sent to the participants before the Workshop.

3) The present schedule calls for a Conference in October, 1985 on the topic of Space Exploration and Colonization. We are also tentatively planning to revisit the topic of Brain Research and Human Consciousness in March, 1986. We dealt with this topic in October, 1975. Much has happened in brain research in eleven years.

If there is a group of ITEST members who would like to host one or other of these meetings in their region, please let the Director (Robert Brungs, S.J., ITEST, 221 N. Grand Blvd., St. Louis, Mo. 63103) know. The invitation would be forwarded to the Board of Directors for approval. ITEST is completely willing to hold its semi-annual meetings outside the Saint Louis area, if we receive a viable invitation from another region.

Notes

1) SURVEY OF ITEST MEMBERSHIP

In the January, 1984 Newsletter, we included a three-page survey vehicle. We hope to use this survey to help inform our members about each other. The survey is intended to help us establish

more avenues of communication and cooperation. So far we have received only about 70 of the surveys from the members, only about a 15% return. In order to improve this, we are again enclosing the survey with this Newsletter. If you have already filled it out, please ignore this one. If you have not, we would deeply appreciate your cooperation. We feel that it is very important to helping us carry out the goals of mutual encouragement and cooperation called for by the participants at the October, 1983 Conference.

2) The Proceedings of the October Conference on the "Role of Christian Men and Women in Science in the Mission of the Church" has very recently been mailed. If you have not yet received a copy, it should be arriving shortly. There are many suggestions in the Proceedings about making ITEST a much more vital organization. We hope that you take these to heart and make ITEST more and more your group.

Dear Colleague,

In March of 83' I participated in my first ITEST conference as a "brand new" member. For the first time, too, this neophyte had prepared a pre-paper (study paper) for the conference on print media portrayal of new developments in science and technology.

I remember the sense of excitement I felt as I shared my experiences as a public relations practitioner with ITEST members, qualified professionals all, willing to ask hard questions, to listen and to evaluate in an atmosphere of openness and trust.

During that springlike weekend I often asked myself,

"If this be the 10 percent of ITEST membership, what of the other 90 percent?
Are they also as dedicated to and interested in the goals of this ecumenical group, ITEST, as those present?"

My musings on the "white knuckle" flight home ranged far and wide. Two points emerged, however: 1) was there some way we could translate to our absent brothers and sisters that sense of shared meaning we experienced at the meeting; and 2) was I, a "twice-degreed" musician and communications specialist, going to be able to interface with the exalted scientist, philosopher, theologian and other experts in this entity labeled ITEST?

My first question already contained an answer, the ITEST newsletter published quarterly. It is true that the written word remains a poor substitute for the interpersonal, face to face approach. Nonetheless, we dwellers in the McLuhanesque "global village" should be able to communicate a sense of our experiences to our absent sisters and brothers.

My second question lay fallow until the October '83 ITEST conference.

During that time, for one session, the participants met in small groups to brainstorm ways that ITEST could be made more visible and well-known both to the scientific/technological community

and to the church. (We received a list of those suggestions in the January, 1984 newsletter). Sparked by Bob Bertram's probing question: "What do I, in fact, think I do in my calling by way of penetrating the scientific or technological world in which I live my Christian faith?"; John Cross agreed to circulate a simple survey among the ITEST membership to elicit response from the total group.

The results of the survey should indeed reveal the richness of experience in the members and serve as points of contact among us as well.

I completed the questionnaire and returned it to John Cross. (Did you?)

Following the October meeting I returned to Rhode Island renewed in spirit and immediately set out, armed with ITEST brochures, to recruit members. The seed has been planted; the fruit has not yet appeared, but the cultivation continues. (I await the song of the dove in our land.)

In effect I foresee that the newsletter can become even more of a networking opportunity among us if we are willing to share our thoughts and dreams through it.

For those of us whose last written correspondence coincided (ended) with the invention of the tape recorder -- an audio cassette imprinted with your words of wisdom would be welcomed (with apologies to our editor who would transcribe the material).

Then for those messages of distinguished brevity, the carrier pigeon still flies.

In my facetious way I am asking you, my colleagues, for input in the form of letters, short essays, even paragraphs through which we can contribute to building up this body called ITEST now 500 members strong.

Finally (and I really mean this as my closing thought), perhaps in order to achieve this contact we need to move from the marketplace to the mountaintop of solitude where, as Rollo May writes in his Courage to Create, the spark of creativity may be fanned into flame.

I need to hear of what my colleagues have wrought during that solitude in their area of interest.

Our sharing can only make us stronger, joined together in familial attitude and forged by an ecumenical concern which has characterized the ITEST membership from the beginning.

Sr. Marianne Postiglione, R.S.M.
Providence, Rhode Island

Contemporary Biotechnology in the Context of Conflicting Theological Perspectives

by: Donald DeMarco

The unprecedented progress in recent years in man's technological capabilities to modify, reshape, or re-engineer himself evokes a sense of uneasiness and awakens the memory of Eden. Eat

promises the serpent; you certainly will not die, you will be like God. The temptation to be like God is at the root of the ethical dilemmas that contemporary biotechnology poses, particularly that branch of biotechnology that has the power to alter man in a radical way. Should science recreate man? Will Homo futur resemble the superman of the Nietzschean or Shavian dream? Will re-created man be, as the serpent promised, more like God? Because such questions as these are raised, which surely carry the discussion beyond science and into the domain of theology, many social critics perceive a profound antagonism between certain biotechnological projects and Biblical Theology. "The most alarming features in the biotechnology revolution," writes author Wes Granberg-Michaelson, "are not its scientific advances but its theological assumptions."¹

Ethicist Paul Ramsey has entangled upon modern biotechnology's dubious aspiration to Godhood in his book, *Fabricated Man*. So familiar are we with "techno-theologians," he contends, that many of us believe they actually are theologians and that in their writings they are using theological concepts and are doing religious ethics.² These techno-theologians, in fact, are the shaman of an age in which cultic praise of bio-engineering is virtually the only form of prophecy that has social respectability.

The distinguished Roman Catholic theologian, Karl Rahner, in an article titled "Experiment Man," probes the question of what, if anything, a theologian may say about present schemes for man's indefinite self-modification. Rahner argues that man has no alternative but to change himself if he wants a world population of billions to survive. In order to bring about this change, Christians must oppose what he calls "bourgeois conservatism." "Man," he argues, "is essentially a freedom event," a person who is subject to himself and capable of freely determining his own final condition. His "self-determination" is so complete, Rahner continues, "that he can ultimately and absolutely become what he wants to be."³

Rahner's argument can easily be interpreted as offering a carte blanche for unlimited human self-modification, for he states, optimistically, that "there is really nothing possible for man that he ought not do."⁴ Nonetheless, he is still aware of contradictory and destructive forms of "self-creation" man might engineer on a large-scale that could have "irreversible, irreparable consequences in the future which future manipulation will be unable to undo." Ramsey finds Rahner's thinking on this point (and the thinking of Protestant theologians of secular, historical "hope") to be so vague and lacking in moral guidelines that would safeguard man in his own proper nature, as to obliterate the distinction between being men and being God, or, as he puts it: "being men before God and being God before we have learned to be men."⁵ Ramsey's watchword is that men ought not to play God before they learn to be men, and after they have learned to be men they will not play God.⁶

Ramsey is not developing but merely alluding to a distinction of fundamental importance, one that separates two competing theological perspectives in which man seeks to become more like God or more Godlike. Since the blurring of these two ethical perspectives is at the heart of the essential ethical dilemma posed by current biotechnology, it is important to attempt to distinguish them clearly and to elaborate upon each in some detail.

The Promethean Perspective:

The fundamental assumption of the Promethean perspective is that man and God (gods) are

essentially antagonistic to each other. Man needs something to fulfill his destiny -- fire, light, knowledge, freedom, courage, and so on -- that God withholds. In order for man to acquire what he needs, he must take it, as Prometheus stole the fire. A theology becomes Promethean, then, whenever it assumes that man's supreme perfection is something God wants to prevent him from attaining. But in seizing from God what God wants to keep for himself, the radical distinction between man and God dissolves and man becomes more 'like God'. At the same time, as explained by Promethean philosophers from Feuerbach to Sartre, God ceases to be.

Feuerbach argues in his book, The Essence of Christianity, that "the distinction between the human and the divine is illusory."⁷ Man, according to Feuerbach, is radically unfulfilled because he alienates the best part of himself in the name of an imaginary God. The task of philosophy, therefore, is to convince men that the God to whom they attribute qualities of perfection and transcendence is really the alienated better part of themselves they have projected upon a non-existent being. Feuerbach simply transfers attributes of God to man and enjoins men to be like God. "Man with man, the unity of me and you: this is God! The love between men must be elevated to the rank of divinity."⁸

Marx, who was Promethean by temperament, later adopted Feuerbach's rational formulations of alienation and the illusory nature of God. In his earlier writings, Marx wrote about Prometheus chained to his rock and expressing contempt for the gods with lyrical enthusiasm and admiration. He saw in Prometheus a symbol of man denying the gods and assuming responsibility for his own creation. "I would much rather be bound to a rock," he exclaimed, "than be the docile valet of Zeus the Father!"

We find a similar Promethean strain running through the thought of Nietzsche and other disciples of the "God is Dead" movement. "God is dead," Nietzsche announces, "now it is our will that Superman shall live."⁹ Emil Bergmann proclaimed in words that anticipated some of today's techno-theologians, that "it is possible to breed not only animals but the man-God." As Henri de Lubac, S.J. has pointed out in his study, The Drama of Atheist Humanism, such thinkers trace their descent from Prometheus, whom they acclaim to be "the first of the martyrs."¹⁰

In Sartre's Les mouches and in Dostoevsky's character Raskolnikov of Crime and Punishment we find important landmarks in modern literature referring to man's attempt to rise above himself through his own heroism and claim the Godhead for himself. The Promethean themes of heroism and taking control are amply presented in modern thought and application to the ethics of bio-engineering is clearly evident.

Ethicist Joseph Fletcher, who is also an ordained Protestant clergyman, is perhaps the most outspoken of today's Promethean techno-theologians. "To be men," he expostulates, "we must be in control. That is the first and last ethical word."¹¹ Fletcher regards it as a sacred duty for modern man to take control of his own heredity. Yet he advocates more than that and even welcomes the opportunity "to bio-engineer or bio-design para-humans of 'modified men.'"¹²

The Promethean perspective is not only anti-theistic but anti-humanistic as well. Man's nature, given its mortality and finitude, must be transcended. And since God, or the idea of God, resists this

transcendence, God cannot be an object of hope. Thus, man must attempt the heroic (perhaps the impossible) and try to become God himself, a man-God, or a self created being who is like God.

Gerald Feinberg, a physicist at Columbia University, is the author of The Prometheus Project. In this work, Feinberg urges mankind to press on to "transcendent goals" which "require the creation or achievement of something qualitatively new." Since man, as Feinberg reasons, despairs at the recognition of his own finitude -- a recognition which prevents him from achieving abiding contentment -- we must inaugurate "a transformation of man into something very different from what he is now called for..."¹³

It should be clear that projects such as those proposed by Fletcher, Feinberg, and others, are rooted in a despair over man as he is. This despair is the natural and inevitable reaction to the human condition which is mortal and finite and the awareness that man can find neither satisfaction nor hope in his limited and fallible human nature. The Promethean call invites man to attempt a quantum leap beyond mere humanness into the realm of the gods. Such a call summons heroic courage. But in the end, after rejecting both God and human nature, man is left with no place to find rest, no place to stand. At the same time, in the spirit exemplified by Malraux and Camus, it may be that the struggle itself is enough to satisfy the mind and heart of the Promethean figure. Yet the techno-theologians have more ambitious hopes.

Humanistic psychoanalyst Erich Fromm, in The Sane Society, remarks that life is so burdensome that it is truly surprising more people are not insane.¹⁴ A few years later he wrote a book bearing the title You Shall Be As Gods, affirming the promise of the serpent.¹⁵ We are left to wonder how Fromm can place any credence in such a quantum leap, or whether he envisages a race of gods verging on insanity.

The Biblical Perspective:

At the heart of the Biblical perspective is the conviction that man and God are friends. In fact, this friendship (or sonship with God) is such that it constitutes a world of grace. To put it another way, grace is testimony to the harmonious continuity between God and man. Accordingly, nature is the soil of grace and through nature man is able to return to God. Grace means that there is no opposition between man and God, and that man is able to be sufficiently united within himself (not alienated) to live without opposition to God. If there is an infinite abyss that separates God from man, there can be no grace and finite man is thus left to his own natural resources to achieve his ultimate perfection.

God in no way is resentful of man's innermost natural needs. Everything that God creates is good ("There are no dustbins in the house of the Lord," as G.K. Chesterton says). He "hates nothing that He has made." He does not oblige man either to save his soul by a Promethean tour de force, or come crawling towards Him on his stomach. God creates man in such a way that he makes it possible for man to participate in His own Divine life, that is to say, to become more Godlike. Because the world of human nature and the world of God are united by grace, man, by becoming more Godlike, not only fulfills his human nature but surpasses it, satisfying his deeper longings for the eternal and infinite which mere nature itself cannot fulfill.¹⁶

The philosophical-theological vision of Thomas Aquinas is in perfect accord with this notion of the harmony and continuity between nature and God. Etienne Gilson, the well known Thomist and historian of philosophy, has remarked that "The central intuition which governs the whole philosophical and theological undertaking of Saint Thomas is that it is impossible to do justice to God without doing justice to nature, and that doing justice to nature is at the same time the surest way of doing justice to God."¹⁷

In the Promethean perspective the assumption is made that man comes into possession and entitlement of what he needs through conquest. According to the Biblical perspective, God offers man what he needs as a gift that needs only to be accepted. Here, salvation belongs to the order of love and acceptance, rather than to the order of resentment and conquest. Man becomes more Godlike as he freely accepts the gift of God that exists within his own soul. Something belongs to man, then, not because he has taken it through power, but because he has received it through love.

Genesis 1:26 reads: "Let us make mankind in our image and likeness." First, man is created in God's image. This "image" is in the structure of man's soul, whether he is aware of it or not. But this "image" becomes a "likeness" of God when the intelligence is enlightened in a spiritual understanding of God and when the will raises the whole soul in love for God. The "likeness" of God (being Godlike) is the perfection, through knowledge and love, of God's "image" in man. According to St. Augustine, "In this image (which is the soul) the resemblance of God will be perfect when the vision of God is perfect."¹⁸ Aquinas adds that likeness, which is a kind of unity, "signifies a certain perfection of image."¹⁹ It is not enough for man to recognize the "image" of God within himself which makes him potentially Godlike; he must actualize this potential through knowledge and love.

In the Promethean approach, man raises himself up by his own powers. This represents merely an intensification of powers that are already present in human nature. According to the Biblical perspective, on the other hand, man is raised up by supernatural gifts for which his nature has a passive and obediential potency.

The Promethean approach is intensely humanistic in that it calls man to realize his full potential as a human. Nonetheless, it is anti-humanistic in that it demands that man go beyond his human nature, recreating himself according to a pattern that is not human. Because the Promethean approach requires extraordinary courage and heroism, its fundamental appeal is to the individual. Indeed, for the Promethean individual, everything converges upon the self. According to Biblical theology, however, the self is fulfilled by selfless love for other persons. The notion of biogenetic perfection that is discussed among techno-theologians is one that devolves upon man in his material individuality alone, for such spiritual realities as fellowship in God, love of others, and faithfulness to God are not subjects for biotechnical operations. At the same time, it is important to acknowledge the courage the Biblical perspective demands. Whereas Promethean courage is needed for the individual to stand alone and accept his struggle, the Biblical approach demands a sterner and yet more humble courage to accept the human condition with all its painful finitude and to accept the reality that we cannot be like God. Here the virtues of humility and faith complement courage and protect it from degenerating into fanaticism. The Promethean seems pre-eminently heroic only because all of his

strength is concentrated into a single virtue - courage. Realistically, however, he is prone to a host of disabling vices, including intemperance, pride, and arrogance.

Thomas Merton offers a summary distinction between the Promethean and Biblical (Christian) perspectives in describing The New Man that emerges as more Godlike rather than more like God:

The union of the Christian with God is the exact opposite of a Promethean exploit, because the Christian is not trying to steal something from God that God does not want him to have. On the contrary, he is striving with his whole heart to fulfill the will of God and lay hands upon that which God created him to receive. And what is that? It is nothing else but a participation in the life, and wisdom, and joy and peace of God Himself.²⁰

Biotechnology in Perspective:

The radical limitations of the Promethean perspective are many. We draw attention to but four. The first represents a virtual rejection of religion, at least traditional Biblical religion. The Promethean perspective does not justify this rejection, it merely assumes that no justification is necessary. But in rejecting religion, it accepts excommunication from a possibly real and loving God who confers vital benefits upon his creatures. It also disavows the type of ultimate meaning that only a religious framework can provide. Andre Malraux, whose life dramatically illustrates the Promethean attitude, writes in The Human Condition that it takes sixty years of incredible suffering and effort to make a unique individual, and then he is good only for dying. The Promethean attitude, which begins in despair must also end in despair. Marx's defiant revolutionary phrase, "I am nothing and should be everything," is a perfect articulation of this despair.

Secondly, the Promethean perspective focuses narrowly on man as a material individual and fails to embrace his whole nature as a being who is both spiritual as well as material, free as well as determined. It also neglects the importance of moral values that are simply not amenable to biotechnological control but spring from the heart of man. Kindness and generosity of spirit are at least as important for a better world as a perfectly designed genotype. Bio-chemist Leon Kass makes a point that is more difficult to refute than to ignore when he writes:

It is probably as indisputable as it is ignored that the world suffers more from the morally and spiritually defective than from the genetically defective. Thus, it is sad that our best minds are busy fighting our genetic shortcomings while our more serious vices are allowed to multiply unmolested.²¹

In addition, the Promethean approach is incapable in principle of overcoming the more radical weakness of the human being - his mortality and finitude, including the unannullable facts that he is not God, not his own creator, and not the object of his own beatitude. Ernest Becker concludes his Pulitzer Prize winning work, The Denial of Death, by asserting that "a project as grand as the scientific-mythical construction of victory over human limitation is not something that can be programmed by science."²³ Concerning the ineradicable limitations that the Promethean spirit is wont

to deny, he writes: "There is no strength that can overcome guilt unless it be the strength of God; and there is no way to overcome creature anxiety unless one is a god and not a creature."²³

The fourth limitation is perhaps the most significant and has to do with the fact that the Promethean perspective, rooted as it is in despair over the human condition, is essentially anti-humanistic. Thus, it is a perspective that is not so much interested in serving the needs of human nature, as in responding to needs that transcend human nature. An exaggerated interest in what Paul Ramsey calls "questionable aspirations to Godhood"²⁴ can easily displace a normal interest in the human role of medicine and science as a human enterprise that serves human beings. Human nature, limited as it is, is a good. Moreover, the immediate and common universal needs of man which biotechnology can remedy are health needs.

The vast array of health remedies that biotechnology possesses and promises -- from gene therapy to the regeneration of organs -- provides a great service as well as a great hope for mankind. Perhaps the greatest danger to biotechnology's realizing its great potential is the abiding belief that biotechnology has a more important function to play in re-creating man.

The Biblical perspective does not see the world's humanization as first dependent on technical progress.²⁵ At the same time, this perspective demands the full employment of bio-technology in the interest of restoring men to health. Because human nature is regarded as a good created by God, and, through grace, harmoniously united with Him, biotechnology serves a vital function in coming to its aid. Medical technology is good only because human health is good.

At the close of their book, Who Should Play God?, authors Howard and Rifkin express the fear that biotechnology will be applied contrary to the good of human nature. "The very knowledge that we can now be replaced," they write, "should provide a stimulus for us to prove that we are worthy of being preserved."²⁶ Yet how do we "prove" that human nature is a good worthy of being preserved? Such a proof, involving, as it does, a metaphysical valuation, cannot be made by science. Is not the whole moral force of the Biblical perspective nothing other than conveying the truth that man is good (and worthy of being preserved) because he is the creation of a God who Himself is all good? Paul Ramsey makes the point in these words:

We ought rather to live with charity amid the limits of a biological and historical existence which God created for the good and simple reason that, for all its corruption, it is now -- and for the temporal future will be -- the good realm in which man and his welfare are to be found and served.²⁷

All men by nature seek God. In practice they either seek to be God or to be with God. In either case, they need a transforming force that allows them to advance toward their ultimate destinies. This force is either a natural power that exists within man, or a supernatural love by which man participates in the life of God. These two distinct approaches -- one Promethean, the other Biblical -- are irreconcilable. In the former case man seeks to be like God (equivalent to God); in the latter, he seeks to be Godlike (participating in the life of God). The current discussion concerning modifying man through biotechnology includes a theological dimension which stands to be greatly clarified by

distinguishing between the Promethean and Biblical perspectives. Paradoxically, it is the latter perspective which ostensibly is concerned with man's relationship with God, that is also concerned with man as a good that is worthy of the kind of salutary help biotechnology can offer him. The Promethean perspective, on the other hand, in stressing the importance of man transcending his nature through his own effort, presents the twofold danger of failing in its intent and deflecting interest away from man's basic health needs that are grounded in his reality as an imperfect and limited human being.

NOTES

1. Wes Granberg-Michaelson, "The Authorship of Life," Sojourners, June-July, 1983, p. 20.
2. Paul Ramsey, Fabricated Man (New Haven and London: Yale University Press, 1970), p. 138.
3. Karl Rahner, "Experiment Man," Theology Digest 16 (Feb. 1968) p. 61; Rahner also speaks of "auto-creation." "Experiment Mensch: Theologisches über die Selbstmanipulation des Menschen," in Schriften für Theologie 8 (Einsiedeln, 1967): 260-85.
4. Rahner, p. 64.
5. Ramsey, p. 142.
6. Ibid., p. 138.
7. See also an elaboration of this point in Ignace Lepp, Atheism in Our Time (New York: Macmillan, 1966), pp. 57-72.
8. Quoted by Lepp, p. 63.
9. Friedrich Nietzsche, Also Sprach Zarathustra, Part IV.
10. Henri de Lubac, S.J., The Drama of Atheist Humanism (Cleveland: World Publishing Co., 1963), p. 28.
11. Joseph Fletcher, "Ethical Aspects of Genetic Controls," New England Journal of Medicine, Sept. 30, 1971, p. 782.
12. Ibid., p. 776.
13. Gerald Feinberg, The Prometheus Project (Garden City, New York: Doubleday, 1968), pp. 50-1.
14. Erich Fromm, The Sane Society (New York: Fawcett, 1955), p. 34.

15. Erich Fromm, You Shall Be As Gods (New York: Fawcett, 1966), p. 53: "The Serpent who said eritis sicut dei ('You shall be like (as) gods') had been right."
16. Francis Thompson addresses this paradox in his poem "The Hound of Heaven" when he writes: "All which I took from thee I did but take, / Not for thy harms, / But just that thou might'st seek it in my arms."
17. Etienne Gilson, "Nature and God. St. Thomas Aquinas," Proceedings of the British Academy, Vol. XXI (London: Oxford Press, 1935), pp. 29-45.
18. St. Augustine, De Trinitate, XIV c. 15 n. 23.
19. St. Thomas Aquinas, S.T., I, Q. 93, a.9.
20. Thomas Merton, The New Man (New York: New American Library, 1963), pp. 34-5. Granberg-Michaelson op. cit., draws a distinction between trying "to be like God," orienting life around self-chosen purposes apart from God, wanting to decide "autonomously the intentions for life and creation, and then attempt to carry out that rule by its own power and for its own ends," and being "the image of God," in "serving as the representative of God's rule and purpose in the creation..."
21. Leon Kass, "Making Babies: The New Biology and the 'Old' Morality," The Public Interest, November 26, Winter, 1972, p. 21.
22. Ernest Becker, The Denial of Death (New York: Free Press, 1975), p. 285.
23. Becker, p. 261.
24. Ramsey, p. 138.
25. See Ulrich Eibach, "Genetic Research and a Responsible Ethic," Theology Digest (Vol. 29, No. 2, Summer 1981); "Leben als Schopfung aus Menschenhand? Ethische Aspekte genetischer Forschung und Technik," Zeitschrift fur Evangelische Ethik 24:2 (April, 1980), 111-30.
26. Ted Howard and Jeremy Rifkin, Who Shall Play God? (New York: Dell, 1977), pp. 229-30.
27. Ramsey, p. 149.

PROGRESS REPORT ON FILM: LIGHTS BREAKING

By the time you receive this newsletter we will have already completed the pre-production aspects of our Catholic Communications Campaign grant-funded film, "Lights Breaking: a dialogue on faith, science and culture."

Casting will take place in Chicago under the supervision of Richard Cusack, Executive Producer and Christine Herbes, Associate Producer. Robert A. Brungs, S.J. serves as co-chairperson of this project.

The producers are taking a unique approach to this film: although a detailed plan exists for the film, there is no written script as such. Rather, "kickers", i.e., prepared phrases, short paragraphs, reflections will spark discussion in the areas of faith science and culture.

With this plan in place the five or six characters will experience a greater freedom and spontaneity in their responses, allowing for a more natural style to emerge. We are confident that this method will result in the production of a top quality film.

So that you as members of ITEST really feel part of this production, we are listing some of the "kickers" used in the pre-production phase of the film. Production (actual filming) will begin in mid-August. We would appreciate hearing from you if you have any short reflections we could use. (This may be your one chance to break into the big time) Let us hear from you.

Finally, with thanks to Hugh Beck whose thoughts we are paraphrasing here, we leave you with a kicker that we hope will add salt to your reflections and discussions on all ITEST concerns.

In an exchange that devolved around our witness as God's creation, Hugh Beck spoke of images in the Scripture, one being salt. "You are the salt of the earth..." As salt gives flavor and taste to food, so we too as the salt of the earth help to make the world taste good in the mouth of God. (from the March '84 ITEST conference on Artificial Intelligence)

REFLECTIONS PREPARED FOR FILM PRODUCTION

1. It looks like a zookeeper's prank: a goat dressed in a sweater of angora. But the odd-looking creature that appeared on the cover of the journal Nature last week is no joke. The animal is a crossbreed of two entirely different species, a goat and a sheep. Inevitably, it has been dubbed a geep....

Though such experimenting is sure to trigger debate, scientists point to practical benefits: it should make it easier to rear embryos of endangered species in the wombs of other species or even create hybrids as valuable as the indomitable mule.

2. Cartoon: Cloning lab. Technician pounding excitedly on door marked: Chief-Human Cloning Lab. Technician is shouting: "Come quick! Come quick! All the Einsteins are tap dancing!"

3. The population at large has become, all unprepared, the new intellectual arbiter. This is probably no more frivolous an authority than were the frequenters of the drawing rooms and salons of the wealthy in the 17th and 18th centuries.
4. The press conference is rapidly overtaking the scientific journal as the main avenue for reporting scientific breakthroughs.
5. Government funding has a great deal more influence on the direction of scientific discovery than does a "search for truth." Science in the U.S. is driven by federal government funding.
6. The relatively easy availability of computers will rapidly accelerate the pace of scientific discovery and technological advance. The pace of scientific change which we have known will most likely be seen to have been very slow indeed.
7. Twice before in human history our scientific and technological genius has so radically redirected the course of human life and history as to merit from historians of culture the title of Revolution. A third scientific/technological revolution is upon us -- already well begun. Its capacity to redirect the histories of peoples is vastly greater than that of its predecessors.
8. "The manufacture of important biological agents like insulin and interferon by recombinant DNA procedures is the fruit of the basic research of the past. Here (Science, Sept. 19, 1980) are reported the foundations for the future. It would be foolhardy to try to predict specific outcomes. We can be certain only that they will be unexpected and astonishing...."
9. We have, almost without noticing it, entered into the era of deliberate and systematic technological intervention into human life; we are planning to restructure ourselves. The time is quickly approaching when the principal artifact of human technology and industry will be living systems, including human beings.
10. "I am a collection of water, calcium and organic molecules, called Carl Sagan....but is that all?....Some people find this idea somehow demeaning to human dignity. For myself, I find it elevating that our universe permits the evolution of molecular machines as intricate and subtle as we are."
11. In our bodies each one of us is a unique expression of one line of human history from the beginning. Not one of us can ever be replicated. No one, then, now, or ever, can see sunlight exactly as I do.
12. Judaism and Christianity alike maintain that we are made in the image of God. Genetic engineering will give us the option of being made in the image of images of man.
13. Probably one of the first things sentient creatures did was to begin to rearrange their environment. Have you ever watched blue gill move away pebbles so that they could clear a place for their eggs?

14. We cannot not stamp our image, which is His, upon creation. It is at least very suggestive to note that the Hebrew-Christian scripture opens in a garden and closes in a city. Is God an "Urban planner"?
15. Silicon, refined and rearranged sand, one of the most plentiful materials on our planet, when touched by human genius, has taken on -- perhaps in an even better way -- some aspects of human thinking.
16. Our humanity is not something unchanging, given from the beginning and frozen for eternity. We do not look back to the Garden of Eden; we rather look ahead to the New Jerusalem to find our identity.
17. Would we consider a life-supported brain, hanging on a wall and fed sensory data from a computer, to be a fulfilment of what we mean by bodied life. This is not an idée issue. The technical means for this are presently at hand.
18. It is the Church -- so often accused of being hung up on sex, of being puritanical, etc. -- that stands as humanity's one great hope of assuring the proper use of these great new opportunities. Only the Church sees transcendent meaning in the body.
19. 1930's: "better things for better living through chemistry". 1980's where will we build the dioxin bunkers? Times Beach?
20. For more room in the world, breed all human beings down to 16 inches, leaving some 22 inches to play pro basketball. In the process Playboy centerfold becomes life size.
21. G.B. Shaw to Isadora Duncan: "Madam, I'm thinking of the child with my beauty and your wit."
22. Cartoon (Dayton Daily News, 1980) Sperm bank. Woman complaining to doctor who says: "Look, lady. You're the one who asked for a famous movie star with dark hair, strong nose, and deep-set eyes..." In the baby carriage a Mickey Mouse look-alike.
23. We're talking about making better humans when we're not really in agreement on what good ones are.
24. Those who propose the creation of cyborgs (the symbiotic union of human brain and machine body - an ultimate \$6 Million Man) mustn't have taken their care to the garage.

We still need \$20,000. to meet production costs. We would appreciate any help you can give.

Film is a powerful medium of communication as well as a definite influence on value formation. Many of the hopes and dreams expressed through ITEST over the past 16 years may find expression in a unique way through this film and become a source of gradual behavior and attitude change.

In effect, "Lights Breaking" may indeed become that bit of salt which makes the world taste good in the mouth of God.