



In this issue of the *Bulletin* we are publishing an excellent paper on the "theology of technology" by Dr. Ton Meijknecht from the University of Delft and an article written thirty years ago by the late Dr. Elmer Arndt. In many ways they both are concerned with the same subject — "the vastly enhanced power at man's disposal to affect his natural and social environment. . ."

The more I thought about it the clearer it seemed that technology, allied with science, is both humanity's great glory and worst fear. In a real way, technology is the human response to original sin: "With sweat on your brow shall you eat your bread until you return to the soil as you were taken from it." There is no technology that does not in some way require human "sweat." Nature's harmonious link to mankind, wished for by the Creator, has been seriously disrupted by sin.

Yet, all is not lost. Man's fascination with making things is at once a response to God and an occasion of hubris and further sin. The more we make and the "better" our life becomes the more we are tempted to "go it alone." We don't clearly see the need for God in our lives and in our aspirations. So the making of new things can and does become freighted with our own sinfulness. Yet, redemption is promised both to the individual and to the community. God has so arranged it that perhaps even despite ourselves our technological urge moves us closer to Him.

Basically, I agree with Dr. Meijknecht that, rather than concentrating exclusively on faith/science questions, we would do well by turning our attention to faith/technology as well. Certainly science and technology in the modern world work hand in glove. It is fruitless to argue which comes first and which is the result of what. What is important is that they work together. Does biotechnology precede bioscience? In some cases it may; in others, not. What is important is that together they are changing the *humanum*, something of vital interest to all.

Overall, I think we can rest assured that Christ works with us in "humanizing" and therefore "divinizing" them both. Rest assured that the Christian in science or technology is the presence of Christ in science and technology. Read Mark 4:26-29 to your consolation. God is with us.

*Robert Brungs, S.J.*

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## ANNOUNCEMENTS

1. **PLEASE NOTE:** Change of venue for the October 16-18, 1998 workshop on *The Future of the Family/The Family of the Future*. We have learned that St. Louis University has put up for sale the Fordyce Conference and Education Center. Thus, any use of the Center has been cancelled after September 30. As a result we had to do quite a bit of scrambling to find another suitable location on very short notice. Most retreat houses and conference centers in the St. Louis area and environs are booked solidly for weekends in the Fall. We did manage in the end, however, to schedule the Archdiocesan Pastoral Center (the former Kenrick Seminary) for our workshop. More information will be given to workshop participants when we send workshop materials (essays, directions and so on).

2. If you are planning to attend the workshop on *The Family ...* and have not registered yet, remember that pre-registration will insure you a place at the workshop. Space limitations necessarily impose on us a total of no more than 40 participants. Again, our essayists and their papers: Professor Robert Bertram, "Sain"\* Sex; S. Timothy Prokes, FSE, *Convergence of Trinitarian Mutuality and Technological Truth*; Peggy Keilholz, *Family in the 21st Century: Speculation about the Family of the Future*; Kenneth Schmitz, PhD, *Philosophy of Marriage and the Family*.

\*Old term for the sign of the cross.

3. *Christianity, Science, and Art: Toward an Updated Christian Doctrine of Creation* (1998) (spiral bound, 161 pages) by Rudolf Brun, PhD, (biologist) Texas Christian University. We have a copy of the book which is presently unavailable in print but may be downloaded from his own personal Web Site <<http://www.webfeats.com/rbrun>>. We plan to review the book for a future bulletin unless someone would like to review it within the next few months. A cursory glance at it indicates it to be a worthwhile volume. Let us know if you would like to review it. We could send you the book or you could download it from the web site. It includes a representative bibliography of related literature as well.

4. We regret (on the human level — not on the divine) to announce the death of John Joseph Cardinal Carberry at age 93. The Cardinal, a longtime member and supporter of ITEST, died on June 17th. His death was probably a very gentle one. We wish to thank him for all he did for our organization .

5. **NOTE FROM** Francisco J. Müller, Varela Academy of Science, Philosophy and Faith, Miami, Florida. Dr. Müller highly recommends this book to our colleagues in ITEST. *The Soul of Science* (Christian Faith and Natural Philosophy), by Nancy R. Pearcey and Charles B. Thaxton, 1994, Wheaton, IL: Crossway Books.

Müller writes, "It is simply written and comprehensive, touching the fundamental topics on the history of science from the viewpoint of its Christian roots, and delving into contemporary problems in mathematics, relativity, quantum physics and biology (DNA)...." He reflects further that, "The authors...do a marvelous job in revealing to the layman the hidden connections that positivism and positivist historians have ignored for more than a century and that have "brainwashed" common peoples into the supposition of irreconcilable enmity between science and religion." [Dr. Müller can be reached at (305)-264-7062.]

6. We will keep you updated on the progress of our planning for the ITEST 30-Something Anniversary celebration in Chicago, Loyola University, August 1 - 5, 1999. The Theme: the Genome: Human, Animal and Plant. Cardinal Francis George, OMI, archbishop of Chicago, has agreed to be one of the main speakers. Essayists secured thus far are, Brendan Niemira (plant genome); Richard J. Cusack, writer/film producer (the genome in film, and so on); We will keep you updated on other speakers as soon as we have firm commitments. We are in contact with several people from whom we have not received a reply.

7. We have noted the publication of the Proceedings of the ITEST Workshop on *Creation and Evolution* on the ITEST Website. We have also included *Readings on Faith and Science* there as well. We have given the Web Manager copies of many ITEST publications from the 1970s — all prepared for transfer to the Web site. He has not yet put them on the site. We hope that they will show up there soon.

8. Please pray for several ITEST members who are seriously ill. ITEST is more than just simply a "think-tank." We hope that all perceive it as a "Christian fellowship," with members sincerely interested in each other. Your prayers will be living proof (if any is needed) of that aspect of ITEST. In this regard, please remember John Matschiner and Rose Quinn who are especially in need of your prayers.



## SAINT PROMETHEUS: DOES TECHNOLOGY HAVE A RELIGION?

Dr. Ton Meijknecht

[*Dr. Ton Meijknecht is Student Chaplain at Delft University of Technology. He spent the last year at The Center for Process Studies at Claremont College in California on sabbatical. The Center facilitates development of a holistic-relational worldview based upon the process-relational thought of Alfred N. Whitehead and his intellectual associates, most notably Charles Hartshorne. Dr. Meijknecht is a long-time ITEST member.*]

***Philosophy builds cathedrals before the workmen have moved a stone, and it destroys them before the elements have worn down their arches. (Whitehead 1925, xxii)***

I want to discuss the relationship between theology and technology. As a Catholic campus chaplain at the Delft University of Technology for 22 years, I consider it part of my profession to develop some ideas about this relationship.

My thesis is that in our time of growing criticism of technology and its effects on our life, there can be no hope of steering technology in a different and better direction if we do not acknowledge the theological roots of technology. Technology is not just some behavior like smoking or drinking which can easily be changed, coupled and decoupled as we see fit; but it is deeply rooted in the prior belief in its own possibility, its usefulness and its fitness. I do not hesitate to call that belief religious. As I see things, theology is the study of religion, be it religion of technology or any other kind of religion. So I say technology needs a theologian to understand it.

I am certainly not the first person to talk about this subject. Many others have done so before. In America, you will find some very competent and concerned philosophers of technology, among them, of course, Frederick Ferré and Ian Barbour.

The American branch of philosophy of technology, like the parallel French branch headed by Jacques Ellul, goes back in its own way to Martin Heidegger, a very influential German philosopher. In a 1953 lecture *Die Frage nach der Technik* (The Question concerning Technology), he sets the tone for postwar critical interpretation of technology. He may be regarded as one of the initiators of the change in attitude towards technology that according to Samuel Florman took place about 1950 (Florman 1994, 11).

Heidegger's fundamental thesis in his lecture is that technology like all modernity alienates us from our true being. It is ontology he is discussing. He had already developed this thesis in the nineteen twenties

and it became a radical critique in the fifties (Zimmerman 1990, 17). His example of the dam that was built in the Rhine River is famous. First there was a river and people used to walk along its banks and to admire its strength, its beauty and its history. They sang songs and wrote poems about it. Saints and merchantmen had sailed for centuries on its waters, some with gains, some with losses. Then suddenly, somebody got the idea of building a hydroelectric power station. They constructed a dam and a generator in that place. After that, when people took their evening stroll alongside the river, they did not see the good old river any more. They had become unable to relate to its former riches. All they saw was a source of energy. The river had become a store of power. No longer can people get behind the new image to reach the other one, the poetic and holy one. They simply can not return to their previous contact with being. Technology affects our relationship with the ground on which we stand and we are not even aware of it. Technology exists before we do. There is a high proportion of "it-character" in Heidegger's view of technology: technology becomes a certain neutral "it." Somehow it is just there, mysteriously. It is not merely a human doing. It is not entirely at our voluntary disposal (Ferré 1988, 68).

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However, these attempts to design a philosophy of technology have little impact within technology where the works of those philosophers are seldom quoted or discussed. Twenty-two years of campus chaplaincy at the Delft University of Technology have convinced me of this sad, but simple fact. Only within some limited orthodox Calvinist circles is Jacques Ellul, a Calvinist



himself, received and quoted. This fact astonishes me. Why do engineers seem to pay so little attention to the explicit meaning of their profession, a profession they are so dedicated to?

From their side, philosophers do not seem to have sought a dialogue with technology either. In his *Preface to Philosophy of Technology*, Ferré mentions at length many highly inspiring exchanges with students of philosophy, but hardly any with students of technology (1988, xiii).

One explanation for this simple fact of absence of communication could be that technologists as a group are just biased. They might be afraid to hear the truth about their job, about the changes they bring about in physical, social and cultural life. They might refuse to read anything apart from their own professional material. They might just be narrow-minded. Many people hold this explanation.

As a matter of fact, there might be some truth in these prejudices. Technologists are no great talkers. They never have been. The communication among themselves about their artifacts hardly occurs in ordinary language. Looking at an artifact or a design can facilitate perfect communication among them, even without a single word spoken. "Just look what I made." And with their consumers, with their users, with ordinary people, engineers prefer the same wordless communication. What they made articulates itself. How many engineers participate in the public debate on technology's problems, on the media and alienation, on energy and its scarcity?

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***One thing they hate, then, is the implication of their being immoral or amoral, which is often an unintentional by-product of criticism.***

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There is something shockingly normal in this silence. Charles Taylor dedicated the first part of his *Sources of the Self* to this problem (Taylor 1994, 3-107). Willingly or unwillingly, we lost the language we used to have to express our view on such questions. In our time, people hardly possess the language necessary to formulate their opinions about their innermost motives. Such motives do not belong to the category of ordinary, measurable facts that suit our ordinary vocabulary. The question "why" is hardly articulated: "Why do you want to make something like this?" The only question allowed is "how." How do you manage to make something like this? Technologists are part of modern culture that feels deeply uneasy about anything like an inquiry into its own self, its own motives.

But again, engineers never have been very communicative about their job. As a profession, they seem taciturn. They prefer to hide behind their designs, their artifacts, their deeds, as if words could never equal the vision, the touch and the sound of their products. Robert Pirsig, in his famous *Zen and the Art of Motorcycle Maintenance*, gives one good reason. "They [engineers] don't like it when you talk to them because they are concentrating on mental images, hierarchies, and not really looking at you or the physical motorcycle at all" (Pirsig 1974, 111). Even given the modernist's disgust for flowery expressions, technologists are famous for their compact sentences.

Only two groups among them like to talk about what they do. The first group are the very young students, the ones just arrived at university. They say they've come to study because they want to do something useful, they want to serve. They do not say much more, because even they are not great talkers. That is all they say. After some years at university most of them stop talking that way. Then they talk about a career, about getting rich and all that accepted nonsense. They only remember their former dreams when they retire. Then again the theme of their youth returns. "Have I been of any use all these active years?" Philosophy seems to be something for the very young and for the very old, for people not yet or not any longer dependent on public opinion. In between those years, during their most creative and most active years, technologists have driven philosophy underground. Only with a lot of extra energy can it be dug up.

There is, however, a reliable sign of the continuing presence of some moral self-image. Engineers tend to react in a typical way to all kinds of criticism: with moral indignation. They seem to say, and often, that of course there are serious and dangerous risks in the application of this or that technology. Who would know better than they? One thing they hate, then, is the implication of their being immoral or amoral, which is often an unintentional by-product of criticism. A moral standard exists throughout the engineer's whole career, although it sleeps most of the time (Florman 1996, 206-212).

It has always puzzled me why engineers say so little about their own great achievements. In their active years, hardly anyone participates in the many debates, which are connected with technology. They leave it to others to define the meaning of what they are designing and constructing. They do not really seem to care about the common mistakes lay people make about their expertise. A deep gap exists between designer and consumer. The more the one keeps silent, the more the other gets agitated.



I have always been professionally curious about what goes on in their minds? So I started interviewing my friends and collecting their quotes in regard to morality. I have always been convinced that if we see some miscommunication, some gap, the best thing to do is to start a dialogue. Maybe, one of the reasons why technologists are not responding is that they are not spoken to, just spoken about. It is insulting to speak about the consequences of someone's deeds while forgetting to ask about his motives. So I started asking. Why did you choose technology as a profession? what have you gotten out of it till now? what worries you? what do you want from the future? what is the background of the instinctive ideas, which control the activities of successive generations of technologists (Whitehead 1925, 240)? I will try to systematize their answers now.

Technology is about dreams, beautiful dreams. When Whitehead (1925, 16) says that science is based on the medieval belief in the possibility of science, on the belief in an order in nature, he might have said the same thing about technology. My thesis here is that modern technology still is based on a medieval belief in a natural order. Technology is based on the belief that the conditions under which we live can be changed. They are not immutable. Hunger and starvation have occurred always and everywhere. Mothers have reacted always and everywhere in the same way: they cry over their dead babies, their children. But only at a certain time, in a certain place and under certain conditions, did people start to realize that this situation was not natural at all. It is not natural that little children die. It is natural that they live their own lifetime. God does not want them to die so early. He suffers when he sees them dying. At their death, he grieves with us. So, it is natural to fight for the children's lives. It is natural to fight blind, cruel fate. Life's conditions can, may and must be changed, if life itself is at risk. As Lynn White puts it, technology is not based on economic necessity, for such necessity is inherent to every society. Ideas make necessity conscious. Historically speaking, Western theology for the past one thousand years has nourished these ideas (White 1968, 72-73). This is the root from which technology grew and grows; this is technology's dream up till now.

I am aware that by stating this I am introducing drama. This is intentional. It is my conviction that we will never understand technology if we do not start from drama. Technology is the drama of people trying to save their life and to enhance it. In this respect it is akin to medicine; the only difference is that in medicine the survival-feature of the profession is recognized more easily.

This dramatic interpretation is Samuel Florman's proposal. Florman is a civil engineer and has an MA in English literature as well. His favorite writing topic is engineering. He has a regular column in the *Technology Review*. One of his books is titled *The Existential Pleasures of Engineering*. He also wrote an essay on *Technology and the Tragic* (Florman 1994, 185-195). Discussing this from both sides, as all good discussions should, he disagrees both with the pessimists and with the optimists, both with the critics of technology and with the technology lobby. The correct view about technology according to him should emphasize the tragic. Prometheus, the Greek hero who brought fire from heaven to earth — and for that reason is remembered as the founder of technology — is essentially a tragic hero. He had to pay a very high price for this act; he earned the permanent wrath of Zeus and was punished by having an eagle eat his liver every day. Nobody should ever forget his mortality. Although I am the only one who ever canonized Prometheus, in the title of this essay, we are all exalted by his accomplishments. At the same time we are sobered by the limitation of those accomplishments. Both, exaltation and sobriety, make an engineer; neither attitude is sufficient by itself. Prometheus's burning torch, his gift to mankind, is the symbol of the Delft University of Technology, my habitat.

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Florman writes:

It is man's destiny to die, to be defeated by the forces of the universe. But in challenging his destiny, in being brave, determined, ambitious, resourceful, the tragic hero shows to what heights a human being can soar. This is an inspiration to the rest of us. After witnessing a tragedy, we feel good, because the magnificence of the human spirit has been demonstrated. Tragic drama is an affirmation of the value of life, (1994, 191).

Every artifact is temporal. Even the Hoover Dam on the Colorado River, the first dam of that size and consequently hugely overdimensioned, will most certainly break down in the end. Maybe not by an earthquake, maybe by some new environmental consciousness, but break down it will. Engineering is a struggle with time, not with eternity. Nobody knows that better than the designers themselves. They ask



how long this or that construction may endure. They are trying to lengthen the accorded time. So they are acutely aware of time. The engineer's dilemma is not the eternal one between good and evil. This is a Hollywood dilemma. It is a dilemma within time, between good and good, between drinking water for the city and the conservation of the natural environment.

This dramatic change of perspective took place at a certain point in history, somewhere in human space and time. At a specific time, at a specific place and under specific conditions, people started to realize that we are not supposed to bend under the beatings of a cruel destiny. On the contrary, we are supposed to fight against it, even if we will not always win. The reason behind this is that human life on earth deserves to be lived fully. We can, we may and we must change our life's conditions. In saying this, I am not referring to the Founding Fathers, or to their predecessors, the Dutch revolutionaries against the Spanish king. I am referring to their common predecessors. I am referring to innumerable, anonymous, ordinary people in Europe, about one thousand years ago, living under the worst imaginable conditions, the first West-Europeans.

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*After stating this historical fact of the Western roots of technology, White asks an original question: why did this happen. What are the causes of this particular development in place and time? Questions like this are not often heard. To ask for the consequences of a certain phenomenon is an historian's normal profession; to ask for its causes is much harder. . .*

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Their history has been studied and written for more than a half century, in France as well as in the United States. It is a history of the birth of what we call Western Europe. Western Europe is a concept that is about one thousand years old, not much more or less. The history of its birth is a history with many aspects, agricultural, economical, political, and cultural. It is a history about oxen and ploughs, about manure and traction. It is a history of knights and crusades. It is about the history of art and about theology, about cathedrals and monks. And, this point I stress, it is as well a history about technology. What we call modern technology does not originate in the so-called age of reason, the eighteenth or nineteenth century, the period of the steam engine and electricity, though most of you may think so. It arose in the eleventh and twelfth century.

The technology part of this history of the birth of Western Europe is the work of the medievalist Lynn

White Jr. He died in 1987 after some fifty years of fruitful researching, teaching and writing which brought him in the end many honors. He is considered the founder of the new branch of history of technology. At his death he had established the history of technology as a recognized discipline. In a posthumously published encyclopedic article on western technology, he stresses the medieval character of technology. What is commonly supposed to be one of the characteristics of modern technology, the very invention of the method of invention, is, according to White, not new to the nineteenth century. The concept is thoroughly medieval. And this not only in practice; it was stated as a theory from the early fourteenth century on. A Florentine preacher says "Not all the arts have been found; we shall never see an end of finding them" (White 1988, 652 and 661; cf. Whitehead 1925, 120). We are hardly aware of it and it took me many years to discover it, but to consider technology as a method of innovation is thoroughly Western, even though important singular inventions like gunpowder originated elsewhere, from China in this case. It is the method that matters.

After stating this historical fact of the Western roots of technology, White asks an original question: why did this happen. What are the causes of this particular development in place and time? Questions like this are not often heard. To ask for the consequences of a certain phenomenon is an historian's normal profession; to ask for its causes is much harder (White 1978, xx). His thesis is that Western Christian views provided the fertile soil for the vigorous growth of technology (White 1988, 662-664). Western technology is implicit theology. He enumerates three closely interconnected causes why the Western Middle Ages came to appreciate technological progress so highly.

1. Western Christianity, its theology and its values are anthropocentric. Not even the Christian East, let alone other religions, held the same view of man. It places man in the center of all creation. Nothing transcends the value of a human being. Christianity made the people of Western Europe believe they were given absolute dominion over all creatures. In another essay, White considers this ruthless dominion over creation to be at the root of our actual ecological crisis (White 1968, 75-94).

2. This religion also developed a special feeling for time. Time represents a value, for instance when we say nowadays: we are too late for our appointment. Originally such a sentence used to run: we are too late for our salvation. Death could always overtake us. Time is unrepeatable and unidirectional; it is irreversible. One lost moment never comes back; it will be



lost forever. Every moment is a unique chance to gain salvation (Rosenstock, 506-515).

3. Only in the Christian West is manual labor considered as pleasing to God. "Ora et labora" [pray and work] was the advice Saint Benedict gave to his monks. Working is like praying. And so, apart from daily singing the psalms, they toiled in the earth; they drained the marshes; they constructed the dikes; they dug the canals and built the mills. Under this influence, manual labor became holy for the first time in history. Protestant Puritanism with its work ethic stuck to this belief.

These three characteristics of Western Christianity — its man-centered, time and labor conscious worldview — nourished the tradition of Western technology. The labor-saving power-machines of the later Middle Ages were produced by the implicit theological assumption of the infinite worth of even the most degraded human personality. Without this assumption, there would have been no expedition to Mars. Belief in the incomparable value of a human being and not consciousness of human necessity as such, inspired a small group of men to experiment with steel ploughs, with wind power and with glass polishing. Without such a belief, they would never have started thinking about the possibility of yields of wheat big enough to feed all their children, of non-human energy to dry the marshes and of reading with presbyopic eyes. This belief in humanity is the birthmark of a way of life we call West-European.

David Noble has recently corroborated this thesis, which for conveniences sake I will call the Lynn White Thesis. In his book *The Religion of Technology* (1997), he has made it perfectly clear that what started in the Middle Ages is still very much the case in the present. Every discussion about technology, about its use or abuse, whether affirmative or critical, still has to start from this theological point.

Noble proves this extended Lynn White Thesis in two ways. One way is the diachronic way, the other the synchronic. Part one of his book takes the diachronic approach. It is called *Technology and Transcendence*. He starts from Antiquity, from Saint Augustine and his interpretation of the crafts. For Augustine, human skills are at their best but a fragmentary solace, allowed to us in a life condemned to misery, after the fall. Noble emphasizes that there was a fundamental break with this antique vision when John Scotus Erigena, a ninth century scholar from the Carolingian court, started to regard technology as a means toward transcendent ends. He broke away from the path of Augustine when he argued that the useful arts were

indeed a part of mankind's original endowment, of his God-like image, rather than merely a necessary product of his fallen state. With Erigena, the arts became a part of the good creation and never relinquished that position in Western-European civilization. He was the first to lift human skills from the level of sinful need to the level of spirituality; there they have stayed till the present. They are, Erigena wrote, "man's links with the Divine, their cultivation a means to salvation" (Noble 1997, 17).

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*According to some of its designers, the A-bomb with its apocalyptic thunder and fire would bring salvation into history. And many astronauts considered their mission in space as a way to prove the existence of God by admiring his fingerprints.*

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However, most of this first part is filled with a well-substantiated attempt to show the millenarian roots of technology. Starting from the twelfth century Calabrian hermit, Joachim of Fiore, and continuing right into the nineteenth century, with American engineers like Thomas A. Edison and novelists like Edward Bellamy, Noble draws a firm picture of technology's millenarian inspiration. The coming of the Thousand Years Empire, the expectation of a totally new world incited dreamers and prophets, artisans and engineers. Not only the austere Franciscan movement but daring seafarers like Christopher Columbus, not only lofty scientists like Francis Bacon, but polytechnicians like August Comte, saw visions of a new man, of a new Adam. All of them considered technology and its inventions as a way to penetrate into God's mind and to participate in His act of creation. Although the fall into sin had troubled man's mind, with technology's aid much, if not all, of the original clarity could be restored. Man could be made to look God in the eye. Columbus wrote in his unfinished *Book of Prophecies*:

God made me the messenger of the new heaven and the new earth of which he spoke in the Apocalypse of St. John after having spoken of it through the mouth of Isaiah, and he showed me the spot were to find it (Noble 1997, 33).

After this first diachronic part, Noble offers a synchronic approach, largely based on American experience. In a slight but significant difference from part one, this part is titled *Technologies of Transcendence*. As you may remember, the first part was called *Technology and Transcendence*. The technologies of transcendence he describes at length in this part are conspicuous high-tech projects. He chooses four of



them, the invention and production of the atomic and the hydrogen bomb (Manhattan project), rocket and spacecraft technology (NASA), artificial intelligence, artificial life and, finally, the technology of genetic engineering. He shows that all four of them, one more explicitly than the others, were and still are based on the presumption that man can be like God. According to some of its designers, the A-bomb with its apocalyptic thunder and fire would bring salvation into history. And many astronauts considered their mission in space as a way to prove the existence of God by admiring his fingerprints. In the two other examples Noble offers, the allusions to religious roots occur less often and are sometimes rather implicit, but nevertheless very clear. In the world of artificial intelligence and artificial life it is the image of God as a creator, which inspires: "I feel like God; in fact, I am God to the universes I create" (Noble 1997, 171). And within genetic engineering, the idea seems to be to improve creation, surpassing the old and weak Adam with a second edition, Adam II. In his conclusion, Noble presents technology as alienating us from our basic human needs. Noble writes:

On the deeper cultural level, these (new) technologies have not met basic human needs because, at the bottom, they have never really been about meeting them. They have been aimed rather at the loftier goal of transcending such mortal concerns altogether. In such an ideological context, inspired more by prophets than by profits, the needs neither of mortals nor of the earth they inhabit are of any enduring consequence. And it is here that the religion of technology can rightly be considered a menace" (Noble 1997, 206-207).

That is why Noble advocates a decoupling of technology from its religious foundations and pretensions. Not any more in the interest of the happy few, but in the interest of the world's poor; not on behalf of the other, the transcendent world, but on behalf of our one and only earthly existence. One just seems to hear a reborn Francis Bacon, once more scolding science and philosophy for their idle speculations and their refusal to elevate or assist mankind (Bacon 1620, 117).

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*. . . in our day people have come to believe that ethics is just about the question what to do. We believe that if we were able to draw the right cybernetic loops, we could, in the end, solve all decision problems.*

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Accepting the main line of the vivid picture Noble offers, I would like to draw a different conclusion. One needs to be a theologian in order really to understand technology. Bad theology, as is often practiced among both technologists and theologians, can be no pretext to abolish theology altogether. I concur with Noble's observation that there exists a firm coupling of technology and theology. However, if there appear within technology certain signs of the well-known human arrogance to become like God himself - and after Noble we can hardly doubt this point - we need the very best theology we have to refute it. Not decoupling, but the right use of the implicit theology, would be the answer to today's concern about the consequences of some technologies.

Let me state my position in a different way. Ian Barbour wrote two wonderful books, one titled *Religion in an Age of Science*, the other *Ethics in an Age of Technology*. Both originated as Gifford Lectures, one for the 1989 season, the other for the 1990 season. My proposal is that the material White and Noble collected may lure Barbour to write a third book entitled *Religion in an Age of Technology*. The bad theology of some "technolaters" — as idolaters of technology are sometimes called — is an unsatisfactory reason for abolishing theology altogether; it is, however, a good reason for finding good theology.

This is where Charles Taylor and his illuminating book *Sources of the Self* come in. He calls this book an essay in retrieval (Taylor 1989, 10). So many useful words do not exist any more or are no longer available to us. Taylor argues in the first part of this book against an impoverished and shrunken vision of the good. Because of some complicated interaction, which he takes a lot of time to analyze, in our day people have come to believe that ethics is just about the question what to do. We believe that if we were able to draw the right cybernetic loops, we could, in the end, solve all decision problems. We do not feel a need to articulate what motivates our choice or what vision attracts us in one direction or another. Everybody just seems happy with our common behavioural approach to ethics. Nobody asks whether the good life we want to live in our dreams has any relationship with the behavior we are adopting.

May I give you an example from my Dutch experience. Holland has a most liberal legislation on abortion and has at the same time one of the lowest rates of abortion in the Western world. The principle on which this legislation is based is simple. Abortion is the woman's own decision, although she has to comply with certain conditions. For instance, no abortions are allowed after a certain date and the woman is obliged



to consult a second doctor. But in the end, it is her decision, and only hers. I feel very proud of this national accomplishment, so much the more as I see this issue so hotly debated in the United States. But my point is this: discussion in Holland is only about the conditions. "Did she consult a second doctor?" Abortion is a highly emotional subject, but we lack the common language to express the feelings it arouses. Society is so fragmented that values underlying such important steps are no longer shared. Is it God's will that we have to implement or is it our free self-determination? People disagree fundamentally on moral values and may nevertheless arrive at the same practical conclusions.

This situation we have in common with the whole Western world. Values that may originate from one and the same Christian root have become opposed to each other partly because we can no longer express our feelings in common terms. Therefore, as a provisional solution in order to avoid mutual destruction, we forget about basics and stick to procedures. Ethics is now about procedures, or else you get the bitter debates the Americans have on the issue of abortion, and we used to have in a not so distant past. I clearly prefer the Dutch situation, but nevertheless do not feel content: we lack a moral language. Because all procedural questions have been answered does not mean that the best solution has been reached. Our society is able to solve these sensitive questions only at the price of stopping to explore its feelings, hopes and fears around the issue. We do not know how to talk about these feelings without hating each other.

Let us return to technology. Dilemmas in the field of technology are very akin to those in the field of health. Medical problems just come closer to our skin because they concern the individual, whereas technological problems concern society. I think that, as in the medical world, in the world of technology the discussion of the original inspiration has gone underground. I already mentioned my astonishment to see how soon young students forget what they intended to achieve with their skills when starting with their studies. Within two or three years most of them are on their way to becoming well-accommodated people with well-accommodated tastes and opinions. Somewhere deep inside, the old feeling still seems to be glowing. It comes back to life at times when an engineer feels arrows of criticism directed against him or her. However, till the years of retirement and disinterested self-reflection, the engineer hardly participates in any open, non-polemical discussion on a topic that once seemed so important that it could influence the choice of a lifelong career.

Taylor proposes a quest for this lost language, in which the good could mean good action and at the same time need not exclude the concepts of longing and delight. In what language do we tell the story of our life, how do we make sense of it? What words prove to be indispensable to clarify our fundamental choices? If they be terms like "courage" or "generosity," then those terms are integral parts of the language we need, even if they have no meaning in describing an action. In a retrieved engineer's language, I see the now shameful terms such as "human needs" or "common good" ranking highly. The beauty of an artifact might become one of the main arguments for its production and therefore heavily debated among decision-makers, and not be something just hinted at.

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*As things went, Darwinism came to mean organisms adapting themselves to conditions, and not changing these conditions. His theory became a one-way theory.*

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White already proposes some of the terms Taylor is looking for, when he speaks about a man-centered, time and labor conscious worldview, as the fertile soil in which technology was able to root. Much of his effort is on distinguishing and connecting these roots and their fruits. Florman offers some words that have faded away, when he describes technology as man's dramatic fight against all odds. Of course, man can never fully succeed. Death can not be avoided. Engineers never expected total success. But they have a professional, though tacit optimism that life may be lived with more decency and more sense, when certain material preconditions are met.

It is the formulation of this typical belief in the value of life that I want to investigate, as it seems to me still the central point in the engineer's credo. Just because death is certain and irrevocable, life's conditions can, may and must be changed. Alfred North Whitehead has a very interesting discussion on this subject. In his still very readable book from 1925, *Science and the Modern World*, in the sixth chapter, he discusses the nineteenth century (1925, 128-141). Of course, he has to picture technology, as it is one of the three sources of the self-confidence of that century. The advance of technology, he says, completely changed the conditions of human life.

And then he has a discussion on change, on Darwin and the theory of evolution. One of his side-remarks is still worth repeating for religious opinion leaders. It is about the ecclesiastic and theological response to



Darwin's theories. While Darwin's theory of old entities evolving into new ones within a new environment was being accepted as the guiding methodology of all branches of sciences, religious thinkers rejected it blindly. None of them seemed to realize that this new evolutionary philosophy might have constituted their best argument in rejecting materialistic determinism. Matter, ideologically conceived, is incapable of evolution. Whitehead calls the blindness of their automatic rejection a deserved penalty for their hasty, superficial thinking. (1925, 134).

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*The technology that came into being possesses certain characteristics. Because of its moral belief, it is driven by a man-centered, time and labor conscious worldview.*

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Whitehead's main point, however, is the mutilation Darwin's theories received, not from his opponents, but from his own adherents. Darwin himself always was a model of refusal to go beyond the direct evidence, but that virtue was not so conspicuous in his camp. As things went, Darwinism came to mean organisms adapting themselves to conditions, and not changing these conditions. His theory became a one-way theory. "The givenness of the environment dominates everything" (1925, 140). So, they, the Darwinists, hardly envision the possibility of organisms changing or influencing their conditions in their turn. But nevertheless, structures are evolving themselves too, under the influence of the organisms that need this evolution for their own permanence. According to Whitehead, the key to the mechanism of evolution is the necessity of the evolution of a favorable environment. "Every physical object which by its influence deteriorates its environment, commits suicide," (1925, 138). Mutual transformation is the technical term often used to indicate this reciprocal process: organism and environment lifting each other up the ladder.

For a long time, these Whiteheadian evolutionary ideas did not appear to apply in the field of physics, where the laws of nature are thought to be unchangeable from their start shortly after the Big Bang. However, Nobel Prize winner Ilya Prigogine has recently given support to Whitehead's philosophical views. In his recent book *The End of Certainty*, he consequently introduces the factor of time as a decisive factor in the whole realm of science, whereas this factor until now was only acknowledged in a distinct part of science: in the realm of thermodynamics. The unchangeability of physical laws, their aloofness from time and history, the rock bottom pretension of science, is all a misconception of modernity, comparable to other modern misconceptions like the "it-

character" of physical phenomena. When the end of classical certainty is accepted, Prigogine sees ahead of us a new era full of adventures, of which self-assured modern science never had the slightest idea (Prigogine 1997).

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*This very Western belief indeed held, and still holds, that man, woman and man, are created to be creative. From the moment that they became conscious, they discovered a belief in the possibility, the usefulness and the fitness to change life's conditions.*

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Now it is time to present some conclusions. In order to refresh your memory, I will first repeat the thesis I laid down before you at the start. Technology needs a theologian to understand it. From the research that followed I will draw four conclusions.

First, I think I proved this thesis by showing that technology as a system is deeply rooted in the popular belief that gave birth to Western Europe as a distinct civilization— about one thousand years ago. This very Western belief indeed held, and still holds, that man, woman and man, are created to be creative. From the moment that they became conscious, they discovered a belief in the possibility, the usefulness and the fitness to change life's conditions. This is the belief that engendered technology. Within creation, man is a co-creator. Lynn White and David Noble lent me the words to express this view.

But I did not want to show just a formal "that," proving a plain fact that technology depends on a certain belief system. I wanted to go in to this fact and show how those theological roots functioned and are still functioning. This brings me to the second conclusion. The technology that came into being possesses certain characteristics. Because of its moral belief, it is driven by a man-centered, time and labor conscious worldview. It is human beings that matter and the time they have at their disposal is a unique chance to work towards a better world. Again, White and Noble gave me the vocabulary to execute this investigation.

This need to go into the historical phenomenon of technology stems from my professional perception as chaplain at a technological university. Technology in its own special way is submitted to post-modern taciturnity. Therefore, a third conclusion offers itself, for which I am greatly indebted to Charles Taylor and his inspiring quest for a moral ontology. By his efforts, traditional engineer's values like "service," "vocation" and "sobriety" are ready to be retrieved or reinvented. But as long as philosophers remain afraid to use those



or similar words again, they waste their critique on technology and speak to deaf ears, however sincere their worries may be. And as long as engineers remain afraid to use these same words, they will remain unconscious of their professional inner self and will remain unable to enjoy many of the existential pleasures of engineering. Most importantly, as long as both remain silent towards each other, society is at loss and our future is in danger. It is primarily in this area of word retrieval between two estranged friends that I seek to exert and to develop my profession.

And then, my fourth and last conclusion. Human presence as a force within creation has moral aspects, as Taylor showed. However, it has physical aspects as well. I realized that I needed a broader understanding of evolution. By broader I mean the influence *on* man as well as the influence *of* man. It is out of this understanding of evolution as mutual transformation that the vocabulary for some dialogue might emerge. Here Alfred Whitehead and Ilya Prigogine were my guides. They draw the picture of God as a source of creativity. Permanence is permanent change, in the direction of ever-higher complexity, which brings me back to my starting point: the theological roots of technology as co-creation.

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## THE VISION OF MAN

Elmer J. F. Arndt

*[Dr. Arndt, who died in December, 1969, was professor of historical theology and ethics at Eden Theological Seminary in St. Louis, where he also directed the continuing education program. He held the S.T.M. degree from Union Theological Seminary and the Ph.D. from Yale University. Professor Arndt, as you can tell from this essay was a profound thinker. The non-use of inclusive language was quite standard when this essay was written nearly thirty years ago. While apologizing for it, the editor did not feel it necessary to change the text.]*

The fact that man poses and continues to pose the question, What is man? indicates that the answer to the question is not self-evident. The variety of answers which have been given to the question suggests the complexity of the subject. The vastly enhanced power at man's disposal to affect his natural and social environment — indeed, to affect the historical destiny of great portions of humanity — and consequently to give a fateful significance to many decisions bestows a sense of practical urgency on the quest for an understanding of man which is in accord with the facts, provides an adequate interpretation of the drama of the self and human societies in history, and offers a guide for choice between the options on which the life or death of humanity depends.

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*Even in the West the Christian understanding of man (assuming for the moment that there is an understanding of man which can be so described) no longer occupies a dominant, and certainly not an unchallenged, position even in areas regarded but a short time ago as "Christian."*

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An understanding of the nature of man is not only a descriptive account of human nature but also, more or less implicitly or explicitly, a statement concerning human destiny. It not only describes what man has been, and is, but also is a statement of man's future. It is not only an attempt to describe man as he actually is but also an affirmation of a norm — man as he should be or man as he aspires to be or man as he hopes to be. Every understanding of man is also an expression of a vision of man, that is, a statement of human destiny whether that statement expresses an ultimate despair or an ultimate hope, an affirmation or a denial of the ultimate significance of the human drama.

If it is true, as I think it is, that the understanding of man and of his destiny is not only theoretically important for suggesting the direction of further research but also of practical importance for providing the direction guiding practical decisions, then the under-

standing of man is a subject of decisive importance.

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*The understandings of man represented by the magazine Playboy and by many of the advertisements for commercial products in mass communication media are two familiar examples of "popular" understandings which compete with other understandings.*

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Contemporary men, who agree that the understanding of man is a matter of decisive importance for themselves and for humanity, find that the question is not made easier by the fact that there is no dominant view either on a global scale or in western culture or in eastern culture. There are rival views competing for the loyalty of men. Each of the rival views must make its case for acceptance. And, in the last analysis, the individual decides to which understanding of man he will subscribe.

Even in the West the Christian understanding of man (assuming for the moment that there is an understanding of man which can be so described) no longer occupies a dominant, and certainly not an unchallenged, position even in areas regarded but a short time ago as "Christian." It is surely too evident that the understanding of man held by most Christians is challenged by a number of "popular" understandings of man. The understandings of man represented by the magazine *Playboy* and by many of the advertisements for commercial products in mass communication media are two familiar examples of "popular" understandings which compete with other understandings. More systematically developed understandings of man, such as those developed by Karl Marx, Sigmund Freud, nontheistic humanists, and the atheistic existentialists, are rival claimants; and though there is something to be learned and assimilated (or at least so we would maintain) from at least some of these understandings the fact is that they do present themselves as alternatives to the "Christian" understanding of man.



Such an introductory setting suggests a much more ambitious and comprehensive discussion of methodological and substantial issues than can be even hinted at in this very brief essay. At best this discussion can hope to be at best but a very tiny contribution to a much more extended and much more fully developed discussion.

This essay, unashamedly, is devoted to what might aptly be termed a preliminary investigation within the context of those understandings of man which, with more or less justification, claim to be "Christian." It is an attempt to sketch in broad outlines the distinctive traits of a "Christian" understanding of man. Such an attempt foregoes, without any judgment on the merits of different positions, discussion of methodological issues which are presently — as they have been at other times as well — very live questions. It leaves to other occasions a systematic and critical discussion of the biblical-Christian understanding of man and the understanding of man associated with other faith claims.

The self-imposed limits of this essay assign it to the "elementary" level. But "elementary" is not a synonym for simple and certainly not for simplistic. On the contrary; perhaps one function of an elementary discussion of the nature of man is to underscore the fact that human nature and its destiny is a matter of some complexity. We suggest that it is the complexity — in contrast to simplicity — of human nature which makes possible the variety of understandings. Even Christian thought about man and his destiny exhibits a variety of emphases and perspectives and consequently bears its witness to the complexity of its subject matter.

Sometimes the particular emphasis or point of view is to be accounted for by a rival philosophy or theology. Thus the relatively optimistic estimate of man's actual condition by the Greek Fathers of the fourth and fifth centuries is to be partly attributed to the fact that Manichaeism, Christianity's rival, taught fatalism and the intrinsically evil nature of matter. The pessimism of the Augustinian view was perhaps accentuated in protest against the facile and extreme optimism of the Pelagians. The insistence of St. Thomas Aquinas on the freedom of the will (*cf. Contra Gentiles II, XLVIII*) occurs in a very different context from that of Martin Luther's sentence from the "Conclusion" to *The Bondage of the Will*:

For if we believe it to be true, that God fore-knows and fore-ordains all things; that he can be neither deceived nor hindered in his prescience and predestination; and that nothing can

take place but according to his will (which reason herself is compelled to confess); then, even according to the testimony of reason herself, there can be no "Free-will" — in man, in angel, — or in any creature.

Or, to take a more contemporary example, it seems plausible to me to understand Reinhold Niebuhr's insistence that "love as forgiveness is the most difficult and impossible of moral achievements" and "yet it is a possibility if the impossibility of love is recognized and the sin in the self is acknowledged" as a protest — a justified protest — against views of man and his behavior which were "oblivious to the power and persistence of self-regard in both individual and collective terms." Again, Paul Tillich's use of such a term as "estrangement" to describe man's predicament reflects a concern to find language which is comprehensible to the modern man.

There is the fact of variety — even opposed viewpoints — in emphases, perspective, and methodology to be found in the understanding of human nature in Christian thought. Such variety found both among the Fathers, their successors and contemporary Christian thinkers makes it impossible to speak simply of "the Christian understanding of man" as though there was complete unanimity on all points between Soren Kierkegaard, Reinhold Niebuhr, Teilhard de Chardin, and Karl Barth.

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*. . . the Christian language concerning man created in the image of God expresses the necessary condition for the right relation which man should have to God (as well as the possibility of man's self-alienation from God) and for the fulfillment of human destiny.*

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Nevertheless, the variety and differences should not obliterate the unity in the variety. There are basic motifs which are common to the understandings of man in the several periods of Christian theology and to the great exponents of Christian anthropology.

One of the characteristics of the Christian doctrine of man is that man is understood in relational terms. His origin, his nature, his predicament, and his destiny are stated in Christian thought in language which express relationships. Preeminent among the relationships which describe human beings are the relationships between God and man. But men stand in relationships to each other; and human beings also have relationships to the non-human natural world.



Consider the language employed to describe the relationships between God and man. God is man's Creator (as well as the Creator of everything other than himself which exists), and consequently, man is a creature. Thus, like all creatures, man is dependent on God who posits him in existence and sustains his existence. Like the whole of the created world, of which he is a part, the existence of man is an expression of God's goodness who confers the good of existence on beings.

Further, the God-man relationship is expressed in the teaching that man is created in the "image of God." This is not the place to enter into a discussion concerning what characteristic or capacity is to be identified with the image of God. Interesting as it may be to pursue the arguments which have led many to identify reason with the image of God and others human freedom, the fact on which we wish to concentrate is that the language of the "image of God" is basically relational. An image is a reflection of an original. The image participates in the original, without being a part of the original or identical with it. If I understand rightly, the Christian language concerning man created in the image of God expresses the necessary condition for the right relation which man should have to God (as well as the possibility of man's self-alienation from God) and for the fulfillment of human destiny.

It is hardly necessary to mention each of the pairs of terms which express the rightful relation of God to man and man to God which occur so frequently in the Scriptures and in Christian worship and prayer. They are expressive of relationship: Father son; Lord-servant; Redeemer-redeemed; Sanctifier-sanctified; and the like. The covenant language is obviously relational.

The same is the case when Christian thought expresses man's predicament. Man is a "sinner," that is, a creature who has used freedom to be disobedient, to turn away from, to assert a false independence of God. The rightful relationship which should obtain has been replaced by a wrong relationship. Moreover, this wrong relationship is not necessitated by any defect of nature (that is, of man's limitations — his finitude — or his natural constitution). The disruption of man's rightful relation to God is occasioned by an act of will, a voluntary choice of independence, of inordinate self-assertion. The consequence is that man is in the predicament of living a dis-orientated life, in conflict with God, his fellowman, and himself. Whether man's predicament is described in terms of the image of man as maker or man as legislator or another image, the language employed is relational.

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*There is self-sacrifice for one's own nation and hateful hostility to a nation or people which threatens — actually or supposedly — one's own.*

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The destiny of man redeemed is also expressed in relational terms. Whether the emphasis is intellectualist — the vision of God — or voluntaristic — the love of God — or some other, man's destiny is not only a life whose quality is in contrast to the weakness, frustration and disorientation of his actual historical existence but also fulfills the new relationships to God, his fellowmen, and himself which is the present gift of God to faith. The consummation, Christians have taught, is the fulfillment of God's purpose, a universal harmony of Creator and his redeemed creatures, in unqualified devotion to universal good.

The Christian understanding of man and his destiny has included not only the relationships of God to man and of man to God but man's relationships to his fellow man and to the non-human natural world as well. Thus Christian thought has affirmed the corporate unity of mankind. The individual is organically related to the totality of humanity. The individualism — something different from the value of the individual — of the modern western world is hardly compatible with the biblical (and classical Christian) emphasis on human solidarity and the redemptive work of God constituting a people to whom he entrusts a mission to all men.

The basic law of life governing the relations between men is the "law" of love. Christian love stops at no boundaries of class, nationality, race, ideological loyalty or any other partial value constituting a human society. Human destiny, so far as man's relations to his fellow man are concerned, is a unity which is neither a collection of unrelated individuals nor a collectivity which destroys the individual.

Moreover, man belongs to the natural world which is good as well as transcends it. His destiny is not escape from the world of nature. He is bound to the world of nature by his body and his redemption is not escape from his body. In opposition to the body-mind dualism of classical culture, Christians affirmed, "I believe the resurrection of the flesh." From the earliest times, the majority of Christians thought of redemption in cosmic terms, not, in the fashion of the Gnostics, of a release of spiritual particles unfortunately now embedded and imprisoned in corporeal stuff.

The approach followed above was chosen in order to set in bold relief the relational character of Christian language concerning human nature and its destiny.



Perhaps enough has been said to make that case. If that is so, it must also be admitted that the account fails to convey the traditional Christian recounting of the human drama: The setting of the human drama in the great contest between God and Satan and the redemptive work of God in Christ, beginning with the incarnation and continuing through victory over Satan and the powers of sin and death and culminating in the mission of the Holy Spirit who creates the Church of Jesus Christ.

In spite of its incompleteness, the emphasis on the understanding of man in terms of relations does point to a vision of man which underscores an understanding of man in terms of being acted upon and acting and engaged in interaction. Instead of the images of man as a maker or as a legislator it sees man as a responsive and a responsible being. God acts upon man and man responds to God's action in faith or unfaith, in obedience or disobedience, in ungrudging gratitude or ungrateful hostility, in acknowledged dependence or prideful self-assertion. His fellow men act upon him and so does the world of nature.

Man acts as well as suffers action upon himself. He responds to the divine action upon him. He responds to his mother's loving care or indifference or hostility and to his father's authority depending on how it is exercised. He participates in human societies which act upon him and to which he re-acts. He chooses his loyalties and commitments which in no small measure determine how he will estimate the actions of other men and societies upon him and his re-actions to such actions upon him.

The actions of men, as individuals and as societies, on the individual and the reactions of individuals to actions upon them is an exceedingly complex interaction. There is both cooperation and conflict; there is both devotion to the common good and loyalty to a partial good instead of loyalty to a universal good. There is both the more or less ruthless quest for power over others and acts of self-sacrificial love for the well-being of another. There is self-sacrifice for one's own nation and hateful hostility to a nation or people which threatens — actually or supposedly — one's own.

Man is responsive; he is also accountable for his responses. Thus man understands himself not merely as responsive but as responsible as well. He chooses the values or an organization of values to which he is more or less loyal and he knows that he is accountable for his fundamental choice. He makes particular decisions and knows he is accountable for his fundamental choice. He makes particular decisions and

knows he is accountable for those decisions. He enters into implicit or explicit agreements with others and acknowledges his accountability for his fidelity or betrayal of his commitments.

The Christian understanding of man has always insisted on man's accountability for his responses to actions upon him and his interactions; more, it has emphasized man's accountability for the self he actually is and the self he aspires to become. He is accountable for his diseased and corrupted condition as a sinful creature. He is accountable for his acceptance or rejection of the grace of God offered in the gospel of Jesus Christ. He must give account of his life at the Last Judgment.

Man is accountable because he is endowed with volition. Who he is and who he becomes is not wholly determined by physical, chemical, biological, psychological, or sociological processes. He transcends the natural order; he is an actor, a maker of decisions and not merely a passive entity acted upon by internal drives and the external environment. Man is a self and selfhood involves a degree of transcendence, of self-determination, of freedom from complete domination by the order of causation.

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*But the requirement of a vision of man includes more than an understanding of human nature which synthesizes the understandings of man as he is in his predicament and his potentialities, the structures and processes which condition his existence in history and the role man plays in the drama of history. The vision of man includes not only the past and present but the future as well, who he is and who he may become.*

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This element of transcendence, in the Christian understanding of man, is fundamental. But the element of transcendence should not be understood to mean that man is exempt from various conditions. He transcends but he is not exempt from physical and chemical and genetic conditions. He is conditioned by sociological and psychic structures and processes. The Christian understanding of man's transcendence must be understood in relation to, not in disregard of, man's creatureliness and his finiteness. For example, the Christian understanding of man should be open to the facts discovered by the life sciences, social studies, and studies in personality dynamics.

In principle, such a program obviously implies a rejection of the position that the Christian understanding of man is to be derived exclusively from the Scrip-



tures. It implies rather a synthesis of the biblical understanding with the understandings contributed by empirical studies.

But the requirement of a vision of man includes more than an understanding of human nature which synthesizes the understandings of man as he is in his predicament and his potentialities, the structures and processes which condition his existence in history and the role man plays in the drama of history. The vision of man includes not only the past and present but the future as well, who he is and who he may become. It includes the question whether the whole human adventure has meaning or whether man's best aspirations are doomed to final defeat or whether they are destined to fulfillment.

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*Man's profoundest yearning is for a cure for his despair, his sickness unto death. The good news proclaimed by the Christian community is that there is a remedy for despair — the transforming and renewing grace of God in Christ grounded in the very nature of God himself.*

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The inescapable question of man's destiny, of ultimate despair or ultimate meaning turns on the question whether there are resources available beyond those which man can engender and control; in Christian language, whether there is grace available to man.

The Christian society — the Church — has affirmed the availability of grace — of a resource beyond the control of man. On the one hand, Christian understanding has understood the human predicament in radical terms. That predicament consists not in the loss of man's volition but in a misdirected will. The good that I would do, I do not; and what I would not do, that I do. This conflict — a conflict within the self, this impotence to choose effectively the good and to be loyal to a universal loyalty, this inability to be unfailingly faithful to the good acknowledged, this loss of integrity — is the human predicament from which man cannot extricate himself.

Man's profoundest yearning is for a cure for his despair, his sickness unto death. The good news proclaimed by the Christian community is that there is a remedy for despair — the transforming and renewing grace of God in Christ grounded in the very nature of God himself. That grace cannot in the strict sense of the word be demonstrated. But the availability of that promised grace is validated by lives transformed, by the lives of persons who have been freed from the intolerable burden of guilt, by lives freed from the

tyranny of destructive anxieties, by lives demonstrating their power to love, by lives lived with serenity, thankful faithfulness and courage in the service of their fellow men.

The gospel of God brings to men a new vision of what history might be and of what man might be. The New Testament prophet who "saw a new heaven and a new earth, for the first heaven and the first earth were passed away" had no illusions concerning the depths of despair and suffering and frustration of "the first heaven and the first earth"; but he affirmed the possibility — indeed, the promise — of a new beginning, of a recreation of a creation distorted and in agony. His hope was in the creative power and goodness of God whose purpose would be victorious over all opposition.

The vision of man's destiny as affirming rather than denying the meaningfulness of human life may be given a variety of content in detail and depicted with varying emphases by Christian theologians and philosophers. The description of that destiny may be expressed in terms which address the aspirations of men in this or that culture and their perception of the conditions or powers which frustrate those aspirations. Christian theology has subjected man's aspiration to critical scrutiny in the light of its own understanding of God's purpose for man. But such critical examination has been carried on not in order to deny the fulfillment of man's existence but rather to offer a vision of man which is truly human.

The vision of human life fulfilled according to the mind of Christ, whose life and teachings portray what it means to be truly human, has been and is grounded on the conviction of the faithfulness of God to man even when men are unfaithful to God and the assured confidence of his faithfulness in the future sustain the conviction that the human drama is neither controlled by a mindless fate nor an ultimately meaningless episode in the history of an indifferent or hostile universe. Rather, the conviction of the faithfulness of God who raised the crucified Jesus from the dead and exalted him and who summons men to trust and loyalty to his redemptive mission, is the ultimate ground for the vision of man transformed according to the pattern of Jesus, the Christ of God.

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*The good news proclaimed by the Christian community is that there is a remedy for despair — the transforming and renewing grace of God in Christ grounded in the very nature of God himself.*

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**IN MEMORIAM**

His Eminence John Joseph Carberry  
Dr. Virginia Harrison

These are longtime, faithful members of ITEST. We also ask your prayers for ITEST members who are ill. May they feel the restoring hand of the Lord.