Technology and the Dialectics of Apocalypse and Utopia

The Coming of the Millennium

The year 2001 is at hand, and the world as we know it is passing away. The decade we are in, the 1990s, is nothing less than the "countdown" to a new millennium. It may seem to us to be both the "best of times" and "the worst of times." Our technological genius has burst the boundaries of the earth to send a human being to the moon and relocate us in the infinitely expanded universe of Einstein, while at the same time we have split the atom and unleashed an awesome power capable of transforming our world. It is especially this splitting of the atom that gives rise to our own premillennial ambivalence. On the one hand, atomic power promises us a utopian world of abundance. Yet that very same power hangs over our heads like an apocalyptic cloud of impending doom—one that threatens the total annihilation of the human race. And if in other and more distant ages some dark and enigmatic god seemed to impose such an end on humankind, the irony in our new "secular" and technological age is that we now seem about to bring this end upon ourselves.

To deal constructively with the challenge of imagining our future as we approach the third millennium, it is important to be conscious of the fact that millennialism has played an important role in shaping the Western historical imagination.

On the last day of the year 999, according to an ancient chronicle, the old basilica of St. Peter's at Rome was thronged with a mass of weeping and trembling worshipers awaiting the end of the world. This was the dreaded eve of the millennium, the Day of Wrath when the earth would dissolve into ashes. Many of those present had given away all their possessions to the poor— lands, homes, and household goods—in order to assure for

themselves forgiveness for their trespasses at the Last Judgment and a good place in heaven near the footstool of the Almighty. Many poor sinners—and who among them was without sin?—had entered the church in sackcloth and ashes, having already spent weeks and months doing penance and mortifying the flesh. At the altar the Holy Father, Pope Sylvester II, in full papal regalia, was celebrating the midnight mass. . . . As the minutes passed and the fateful hour was about to strike, a deathly silence filled the venerable basilica.[1]

Looking back to the close of the previous millennium, the year 1000, it appears from our modern vantage point as if we human beings were still living in a dark age. We know that as the year 1000 approached, anxiety levels rose throughout Europe. In a world deeply shaped by the biblical vision of time and history, 1,000 years is a time span of profound symbolic significance. The Book of Apocalypse, the last and most enigmatic book of the Christian Bible, seems to suggest that after a messianic reign of a thousand years God would bring this world to its final judgment in an cataclysmic apocalyptic end. Nevertheless, the actual coming of that first millennium did not bring final darkness but new light. In a feudal world that had survived the collapse of Roman civilization and was still living in fear of barbarian invaders from the North, it was hard to imagine the untold wonders that lay ahead. Who could have anticipated that instead of an apocalyptic end, the millennium would bring a utopian new beginning?

The year 1001 brought a millennium not of darkness but of light and *enlightenment*. A *renaissance* of civilization, a new age of progress, science, secularization, economic and technological innovation. If the first millennium was dominated by an apocalyptic sense of doom, the millennium that followed has been dominated by a utopian euphoria. This euphoria expressed a growing conviction that the future of the earth was not so much in the sacred hands of a divine power as in the secular hands of an increasingly scientific and technologically sophisticated humanity.

If the ancient world saw time as cyclical and without a final direction, the medieval world was heir to the great cosmic vision of Augustine, who argued that, although the secular history of the "city of man" was indeed cyclical, nevertheless hidden within this history was another, more linear history that moved forward toward a final and glorious end—the "city of God." Augustine's book, *The City of God*, definitively shaped the medieval imagination of time and space. Humanity lived caught in the tension between two cities and two

histories—the one, secular, of little or no final significance, and the other, sacred, promising meaning, purpose, and a glorious destiny. Even as Augustine dismissed pagan cyclical time as an inadequate representation of human destiny so he also dismissed the more enthusiastic apocalyptic expectations of some of his fellow Christians who felt the end was near at hand. The reign of a thousand years spoken of by the Book of Revelation, he argued, refers to no final utopian age of glory and spiritual enthusiasm but rather to the reign of Christ through the church in history.[2] If Augustine's argument successfully dampened the apocalyptic enthusiasm of his peers it did so only at the cost of deferring this enthusiasm until a millennium had come to pass. Never mind that "1,000 years" was a symbolic number for Augustine, referring to an unknown and indefinite amount of time. This subtlety was lost on the average medieval individual facing the coming of the millennium.

For Augustine, the trinitarian reality of God was to be understood, in so far as God could be, by analogy with our human capacity for the word that enables us to experience self-consciousness: a consciousness in which, he argued, knowledge of self and knowledge of God are inextricably intertwined. The Trinity, one yet three, is fundamentally unimaginable (i.e., un-image-able) in a way analogous to the un-image-ableness of the human self. Through the mediation of the word, the mind comes to know itself as both one and yet three (one consciousness yet three—memory, intelligence, and will). "Trinity" was a concept that resulted from the reworking of Greek metaphysical categories in relation to self-consciousness so as to express by analogy the Hebraic notion of a God who can act in time without losing transcendence; that is, without collapsing into pure immanence or pantheism. Thus, even as the human word can proceed from the speaker to effect changes in the world without compromising the integrity of the speaker, so, even more so, God retains transcendent integrity (i.e., is not absorbed by the world) when God sends both Word and Spirit into the world. *Trinity* referred to the God who is revealed through the action of Word and Power (Spirit) in history. But not in all the events of history, only in those events that make up the history of the "city of God" (biblical and church history) hidden within the "city of man." *Trinity* affirmed the presence of God in history but it did not dictate the direction of the history of the human city. That history continued to manifest its relatively meaningless cyclical patterns of advance and decline.

Augustine shaped the biblical narrative into "a tale of two cities," a symbolic universe within which medieval humanity could

dwell. But the elapse of the first millennium brought a new prophet with a new vision of time and space—a Cistercian monk and abbot from southern Italy, Joachim of Fiore (1132–1202). Whereas Augustine required human beings to live in two separate narratives (i.e., two kingdoms) at the same time, Joachim offered humanity to chance to live in one. Whereas Augustine's vision demanded that one accept the relative meaninglessness of the secular order even as one embraced the meaningfulness of sacred history, now Joachim offered humanity one history in a vision that would unite both in a single narrative of spiritual and material progress. The vision of the three ages of history offered up by this eccentric monk and mystic shaped the utopian mythos that came to dominate the second millennium— the myth of progress. Joachim is to the millennium that gave birth to modernity what Augustine was to the medieval vision of the previous millennium—the great foundational architect of a new symbolic universe.

In his *Everlasting Gospel,* Joachim offered a vision that undid Augustine's. Joachim offered his own trinitarian vision that dismantled the Augustinian trinitarian symbolism of self-consciousness and applied the symbols to a three-stage vision of history. Resurrecting the very apocalyptic tradition Augustine had suppressed, he spoke of history as having three ages: the age of the Father (beginning with Abraham), which was superseded by the age of the Son (beginning with Christ), and finally he predicted the coming of a third age— that of the Spirit whose leader would appear by the year 1260. Later, the radical Franciscans identified Francis of Assisi as that leader. As with the apocalypticism of the Montanist tradition in early Christianity, in this third age the institutional church would give way to direct guidance by the Holy Spirit. This direct infusion of the Spirit would create a natural spontaneous harmony between all individuals and render all institutions superfluous. Thus this tradition was anticlerical, antiinstitutional, and anarchistic in its apocalyptic intensity. The third age would be an age of perfection, of perfect freedom and harmony, which was destined to last a thousand years.

Eric Voegelin has argued that the Joachimite symbolism of the three ages provides the fundamental mythos for the unfolding of modernity in the West. The symbolism of history as three ages captured our historical imagination (e.g., the division of Western history into ancient, medieval, and modern with its implied vision of progress). For Joachim the third age was identified with the triumph of a mystical monasticism over the institutional church. But his three ages became increasingly secularized into the myth of *history as progress.* So

we find it reappearing in Gotthold Lessing's Enlightenment vision of the three ages of the education of the human race: childhood, adolescence, and adulthood. The last or third age is identified of course with the age of Enlightenment, in which the emergence of the autonomy of reason would lead to a natural and rational harmony among human beings. The vision of three ages is also foundational to the nineteenth century, where Auguste Comte divided history into the ages of *myth, philosophy,* and *science,* with the third age again promising fulfillment. Hegel provides yet another version with his three stages of freedom in history, a vision Marx revised to culminate in his own version of the third age—the classless society. And we find the third age myth also underlying Hitler's vision of the *Third Reich,* or third kingdom, which he proclaimed would last a thousand years. The myth of the third age has incontestably fueled diverse visions of history as progress.[3]

The modern mythos is at one and the same time both apocalyptic and utopian. It is apocalyptic in that it demands a decisive break with the past, a break that in its more radical manifestations is conceived of as requiring a revolutionary apocalyptic battle between the forces of light and of darkness. It is utopian in that what is imagined to follow this radical break with the past is a new utopian order of harmony and perfection that reverses all the trials, tribulations and suffering of history. Its radical historical power comes from the fact that, unlike Augustine's myth of two cities, Joachim's vision leads to the fusing of the spiritual and material into one history in which spiritual progress is identified with material progress leading to an explosion of energy directed toward the political, scientific, and technological transformation of the earth and its societies into the various imagined visions (divine and demonic) of the utopian perfection of the third age.

Technological Utopianism á la 1965: Of Madmen, Astronauts, and the Death of God

In 1965, a human being walked in space for the first time in history. On March 18 of that year, cosmonaut Alexei Leonov stepped into space for a ten minute walk. He was followed in less than three months by the American astronaut Edward White. What is striking about the human exploration of space is that unlike all earlier pioneering efforts in human history, the whole world was able to participate, to see what was happening virtually as it happened, thanks to modern mass media. Thus on millions of TV sets around the world an image was cast up of our contemporary situation of virtually mythic

proportions. Cut loose from the earth's atmosphere, floating free at the end of a tether linking him to his space craft, the space walker symbolized the technological utopianism of an apocalyptic age. The optimism of the decade that would put a human being on the moon saw the astronaut as the symbol of our technological capacity to transcend all limits, to both create and discover new worlds without limit. Yet this symbol was not without ambiguity. Floating in space, without a clear sense of direction, the astronaut was also a reminder of the demonic normlessness of a technological civilization. This is the very normlessness predicted by Nietzsche's madman at the end of the nineteenth century.

Modern human beings, Nietzsche suggested, had committed a deed of world-historical import. And yet they remained ignorant of its reality because they had not yet experienced its earth-shaking consequences. As Nietzsche tells it, a madman entered the public square crying "I seek God, I seek God." Many who did not believe in God began to chide him—"Did he lose his way? . . . Is he hiding? . . . Has he gone on a voyage?"

The madman jumped into their midst and pierced them with his glances. "Whither is God" he cried. "I shall tell you. We have killed him—you and I. All of us are his murderers. But how have we done this? How were we able to drink up the sea? Who gave us the sponge to wipe away the entire horizon? What did we do when we unchained this earth from its sun? Whither is it moving now? Whither are we moving now? Away from all suns? Are we not plunging continually? Backward, sideward, forward, in all directions? Is there any up or down left? Are we not straying as through an infinite nothing? Do we not feel the breath of empty space? Has it not become colder? Is not night and more night coming on all the while? Must not lanterns be lit in the morning? Do we not hear anything yet of the noise of the gravediggers who are burying God? Do we not smell anything yet of God's decomposition? Gods too decompose. God is dead. God remains dead. And we have killed him. How shall we, the murderers of all murderers, comfort ourselves? What was holiest and most powerful of all that the world has yet owned has bled to death under our knives. Who will wipe this blood off us?

What water is there for us to clean ourselves? What festivals of atonement, what sacred games shall we have to invent? Is not the greatness of this deed too great for us? Must not we

ourselves become gods simply to seem worthy of it? There has never been a greater deed; and whoever will be born after us— for the sake of this deed he will be part of a higher history than all history hitherto."

Here the madman fell silent and looked again at his listeners; and they too were silent and stared at him in astonishment. At last he threw his lantern on the ground, and it broke and went out. "I come too early," he said then; "my time has not come yet. This tremendous event is still on its way, still wandering—it has not yet reached the ears of man. Lightning and thunder require time, the light of the stars requires time, deeds require time even after they are done, before they can be seen and heard. This deed is still more distant from them than the most distant stars—*and yet they have done it themselves.*"[4]

What is astonishing about the imagery of this passage, originally published in 1882, is how uncannily it corresponds to the image of our space walker in 1965. It is as if Nietzsche's prophecy of the deed that was yet light years away from being acknowledged had now finally entered human consciousness. It is as if, in some uncanny way, Nietzsche had seen our astronaut floating in space and had grasped with utter lucidity the implication of that experience. "Who gave us the sponge to wipe away the entire horizon? Whither are we moving now? Away from all suns? Are we not plunging continually? Backward, sideward, forward, in all directions? Is there any up or down left?" It is as if he could foresee that the modern secular, scientific, and technological civilization which was coming to birth in his time would lead inevitably to the death of God; that is, to a normless world "cut loose from its sun," cut loose from the bonds of gravity, adrift in deep space—floating and tumbling, without a sense of direction, suffering the consequences of the disappearance of the horizon as one breaks free of the earth.

Auschwitz and Apocalyptic Madness: From the Death of God to Genocide

Scarcely more than half a century after Nietzsche's madman had unleashed his prophecy the Nazis came along to embrace his vision of a normless *will to power*. Nietzsche had offered a vision of a new type of individual who would have to take charge of human history after the death of God; namely, the *Übermensch* or self-transcending person. Such individuals would have the courage to "transvalue all values"

and remake the world in their own image. Nietzsche, of course, had a somewhat aristocratic vision of these new individuals. But his vision was easily usurped by the Nazis who imagined themselves, the pure Aryan race, as the natural embodiment of this superior human being who would recreate the world through a *will to power*. The Nazi program of attempted genocide of the Jews is a logical outcome of this new normless situation expressed in Nietzsche's parable of "the Death of God." In a world where power is the final arbiter of values and *might makes right*, deicide is inexorably followed by genocide.

It is not the will to power itself which is unique to the modern situation. The will to power has been present in every age and every culture. What is unique is the presence of the will to power in a culture without counterbalancing norms to hold it in check. In traditional or premodern societies religion played a central and public role in influencing the social order. What all traditional societies have in common is the belief that the order of society is part of a normative order of nature as structured by the sacred ancestors, gods or God. Because the order of society was considered part of the order of nature as divinely established, such societies were conservatively ordered. Society, like nature, was viewed as fixed and given and not an object to be manipulated and changed.

Modern society differs fundamentally from all traditional societies in that in the modern world we now understand society as artificial rather than natural. We now see society as a construct, shaped by human decisions, rather than as an extension of nature. The essence of technological civilization is not the transformation of nature, nor is it the proliferation of machines. It is, rather, the awareness of self and society as human constructs that can be shaped and changed. Neither astronomy nor chemistry nor even physics has produced the revolution in self-understanding in which we are caught up. These sciences were revolutionary for an industrial society. The revolutionary sciences for a technological civilization are the human sciences—especially history, sociology, and anthropology. It was the new comparative sociohistorical consciousness accompanying the emergence of the social sciences in the nineteenth century that gave birth to a consciousness of society as a human product rather than an extension of nature. Society, so understood, is the expression of modern technological consciousness. Industrial society, which attempted to shape and change nature, has been superseded by a technological civilization that seeks to shape and change not only nature but the human self and society.

The problem is that the very process by which human beings

have come to think of society as capable of being shaped and changed is a secularizing or desacralizing process. The public order of traditional societies was stabilized by the firm belief that this order was part of a value-laden natural order determined by the gods and ancestors. Each society saw its social order through the lens of a sacred myth or story, what Peter Berger calls a *sacred canopy,* which made its social order appear to be a direct expression of the natural order. But with the emergence of sociohistorical consciousness in the nineteenth century, the variety of cultures strung out through time and across cultural boundaries came to be compared. As a result the natural order of each society came to be seen as an artificial construct and all cultural values came to be thought of as relative. These values no longer appeared, as they had from within each society, as firmly fixed in a cosmic order. Now they appeared as subjective, culturally relative, human options.

This is the point at which the fundamental crisis of modern society appears. Because human values in premodern societies were typically embedded in normative myths of natural order, their demythologization, which made it possible to think of changing society at the same time undermined the very norms by which such decisions could be made. Precisely at that point at which human beings became conscious of their ability to shape and change society they lost access to the norms needed to make those decisions. It is this situation, which Nietzsche addresses with his parable of the *death of God,* that unchained the earth from its sun so that we now drift aimlessly in space without any sense of up or down. We have lost our sense of moral direction.

The world we have made for ourselves seems to be the embodiment of Babel—a confusing pluralism of voices and values. We live, it seems, in a sea of cultural and ethical relativism in which all ethical choice is reduced to arbitrary personal preference. With no rational way to adjudicate moral disputes such disagreements are reduced to ideological struggles based on the will to power. It is the tragic paradox of our time that the increase of our power over nature and society has been in inverse proportion to our capacity to discover a normative consensus by which to govern the exercise of this power.

We are faced now with what I believe to be the most serious and pressing problem of our time: the discovery and articulation of the philosophical and theological foundations of a normative social ethic whereby culture itself can be critiqued and hence shaped and changed through those public policies and personal commitments that truly promote the human good.

From Auschwitz to Hiroshima: A Prophetic Warning
of Global Apocalypse

Our modern technological civilization offers us seemingly infinite utopian opportunities to recreate ourselves (e.g., genetic engineering, behavioral engineering) and our societies (social engineering) and our world (chemical engineering, atomic engineering). But having transcended all limits and all norms, we seem bereft of a normative vision to govern the use of our utopian techniques. This normlessness threatens us with demonic self-destruction. It is this dark side of technical civilization that was revealed to us not only at Auschwitz and but also at Hiroshima.

Auschwitz represents a severe challenge to the religious traditions of the West: to Christians, because of the complicity of Christianity in the anti-Judaic path that led to Auschwitz renders its theological categories ethically suspect; to Jews, because their victim status presses faith in the God of history and in humanity to the breaking point. But the path to Auschwitz, and from Auschwitz to Hiroshima, represents a challenge, equally severe, for the scientific and technical, secular culture of the Enlightenment. We do not seem to have fared any better under a secular ethic than we did under a religious one. Indeed we have fared worse. Genocide it seems is a unique product of the modern secular world and its technically competent barbarians.

Auschwitz stands for a demonic period in modern Western civilization in which the religious, political and technological developments converged to create a society whose primary purpose was the most efficient organization of that entire society for the purpose of exterminating all persons who were regarded as aliens and strangers—especially the Jews. The Nazi vision of the pure Aryan society represents a utopian vision of demonic proportions—a vision that inspired an apocalyptic revolutionary program of genocide. It reveals at once both a time of "The Death of God" in the Nietzschean sense and yet the resurgence of religion, that is, a demonic religiosity that creates a new public order in which all pluralism is eliminated from the public square and in which virtually nothing is sacred—not even human life. The period of the Holocaust stands as prophetic warning to a technological civilization that has no other norm than the *will to power*.

If Auschwitz embodies the demonic use of technology against targeted populations to commit genocide, Hiroshima and Nagasaki represent the last such use of technology. For with the coming of Nuclear warfare, technology has outstripped human intentionality so that if the bomb is ever used again, genocide will be transformed into

collective suicide or *omnicide*—the destruction of all life. Having ene-
mies is a luxury no community on the face of the earth can any longer
afford. If there is a next time, it will not matter who is right and who is
wrong, we shall all perish in the flames. Auschwitz and Hiroshima
suggest that the millennium which brought us the utopian age of
progress threatens to bring itself to an abrupt apocalyptic conclusion.
The age of the bomb seems to have shattered and restructured the
millennial myth. No longer can we imagine that apocalypse will be
followed by utopia. The myth of unfolding stages seems to have
broken apart into an absolute Either-Or: either Apocalypse or Utopia.
Not wishing to face the terror of the first option we enthusiastically
(although uneasily) embrace the second. Through a somewhat forced
utopian euphoria we try to repress the prophetic warnings of Ausch-
witz and Hiroshima which remind us that a normless world will
inevitably end in apocalyptic self-destruction.

The Visions of Two Madmen: Apocalypse or Utopia?

> When he [the Lamb] opened the sixth seal, I looked, and there came a
> great earthquake. The sky vanished like a scroll rolling itself up
> and every mountain and island was removed from its place.
>
> (The Book of Revelation 6:12–14)

The mythic and metaphorical complexity of our situation, cap-
tured in our TV image of the spacewalker and in Nietzsche's parable
of the death of God, is further complicated by the fact that the visions
of apocalypse and utopia are rooted in the biblical tradition. There is a
relationship between Nietzsche's madman, our space walker, and
John of Patmos, the visionary author of the *Apocalypse* (i.e., The Book
of Revelation). The former two are dependent on the later. John, too,
is a kind of madman who in his own way has an extraterrestrial
vision. He envisions the disappearance of the horizon as the sky is
rolled up like a scroll and the normal order of things is brought to an
end. John's vision is also both apocalyptic and utopian. The apocalyp-
tic disappearance of the earthly horizon presages the coming of a new
horizon, the horizon of a new city—a New Jerusalem. Like our mod-
ern technological world, it too, is a kind of secular city, for there is no
temple in this city (Rev. 21:22). Yet it is marked not by the absence of
God but rather a universal presence in which God is both "nowhere"
and "everywhere," being "all in all." The paradox of John's apocalyp-
tic vision is that, although he too experiences the loss of horizons, he
does not experience the normless vertigo of our Nietzschean space
walker. On the contrary, the loss of horizons is for him a sign of hope

because it presages the destruction of the demonic that subverts the utopianism of creation by promoting a literal and nonutopian apocalyptic destiny for the earth.

The narrative of mythic proportions that dominates our technological civilization is the Janus-faced myth of *apocalypse and utopia*. This narrative is ethically paralyzing. Convinced that technology is the ultimate power governing our destiny we have surrendered ourselves into its hands, and having made this decision we vacillate between moments of utopian euphoria, when all seems so promising that we wish to change nothing, and apocalyptic despair, when all seems so threatening that we do not believe we can change anything. The paradox is that it is our utopian euphoria that sends us careening toward an apocalyptic final solution. As a result, a kind of autonomous techno-logic takes hold whose demonic face was disclosed at Auschwitz and again at Hiroshima. Technology has replaced nature as that realm of power that has become our fate.

While technological utopianism seems to transform all new beginnings into tragic and demonic endings, the ancient seer of the Apocalypse, whose vision still remains with us, dreamt of a normative utopian world, a world of new beginnings and new creation delivered from all demonic powers. Our narratives of *apocalypse* and *utopia* are complex and ambiguous. At the popular level of our technological culture the human imagination is lured into embracing the infinite utopian possibilities of our civilization as symbolized by our astronaut breaking free of the earth. Yet our psyches unconsciously nag us daily with apocalyptic images of technological self-destruction. At some level we are all mad, aware that the technological powers we hope will deliver us are the very ones that may destroy us. And yet another possibility is hinted at in the apocalyptic vision of this other madman, John of Patmos. If our technological utopianism seems inherently apocalyptic, still perhaps in our history is yet another kind of apocalypticism, which is inherently utopian. If the demonic normlessness of the former would lead us down the path to oblivion, it may be possible that the iconoclasm of the demonic in the latter may yet offer genuinely utopian possibilities.

Language, Technique, and the Utopianism of the Body

In spite of our attempts to sustain our utopian optimism by repressing the memories of Auschwitz and Hiroshima, our hope now seems to have become the victim of its own inner contradictions—a world of plenty becomes a world of pollution, a world made secure by

"Star Wars" becomes the most insecure world of all. We are attracted by the utopian possibilities of technology only to find ourselves faced with an apocalyptic future. The more we seek the first the closer we come to the second. Our hope paradoxically seems to create a hopeless situation. It is becoming apparent that we are indeed the victims of the technological, Janus-faced mythos of Apocalypse and Utopia.

It is not a matter of one single coherent myth but rather of diverse fragments that, each in its own way, reinforces the sacral experience of technical power. It is only necessary to recall the diverse myths of the gods of nature in ancient Greece or ancient India to realize that myth is inherently pluralistic and fragmentary. Nor will you necessarily find the words *apocalypse* and *utopia* explicitly expressed in these diverse narrative fragments. Rather, these words name fundamental attitudes expressing countless hopes and fears in an endless variety of imagined scenarios found in the mass media (news, advertising, drama, etc.) and in our private dreams and fantasies. At some level, conscious or unconscious, we are awed by the power of technology and this awe expresses itself in the ambivalence of the *awesome* and the *awful*, the ambivalent fascination with a technological world that promises utopian abundance yet threatens an abrupt apocalyptic end to the human race. This mythos enchants us with its bright side, the visible and alluring face of utopia, while its dark apocalyptic side remains largely out of sight. The dark side lurks in the half conscious fears that sporadically raid the borders of our consciousness or attack us through the subterranean passages of our dark dreams, occasionally erupting with a paralyzing force into full consciousness. It is our enchantment by this mythos that is ethically paralyzing. It renders us unable to act, for when we are in a utopian mood we do not wish to change and when we are in an apocalyptic mood we do not believe we can.

In the light of Auschwitz and Hiroshima and of our contemporary circumstances, the first step of our ethical task is to discover how we might conceive of the relationship between our humanity and technology so as to render technology the servant of human freedom. What we are seeking is a philosophical anthropology that is able to locate the common denominator between our humanity and technology so that it suggests a course of action effective in subordinating technology to human freedom.

We might begin by suggesting, as Jacques Ellul has, that the essential characteristic of technology is not the machine, but rather technique. As the ideal of efficient management overtakes every hu-

man activity, it produces a social transformation in which society as a whole becomes the object of efficient management. Such a society, Herbert Richardson suggests, is governed by "sociotechnics—that new knowledge whereby man exercises technical control not only over nature, but also over all the specific institutions that make up society."[5] Society is integrated into a single rational system, a totally artificial environment. If the classical Greek term *techné* suggested an art or technique that followed or idealized nature, modern technique reverses this order. Now nature must follow art; reality is subordinated to the transforming activity of imagination.[6]

Technology may represent a triumph of human freedom over nature, but nature has only yielded to a law equally harsh—that of efficiency. In a technological society personal preference inevitably must yield to the criterion of efficiency, the rational calculation of the best means to be used to achieve the maximum results with a minimum of cost and effort. Such means render obsolete all those techniques that are less efficient. Actions that do not conform to the requirements of efficiency simply cannot compete.

If we recognize that technology is essentially technique, then the horizon of our considerations is defined not so much by the encounter between human beings and machines but is more intimately associated with our humanity, with what Gabriel Vahanian aptly calls the "techniques of the human."[7] Technique is, after all, simply method; the means or ensemble of means selected for the realization of a given end. But the raising of the question of means and ends is a uniquely human ability given with our capacity for speech. If our humanity was once defined by the capacity for "reason" (*homo sapiens*), today it is more typically defined by the capacity for toolmaking and tool using (*homo faber*). But toolmaking hardly renders "reasoning" superfluous in defining the human. Rather both are rooted in our capacity for speech.

The capacity for speech is the capacity to symbolize and conceptualize. It is the capacity to experience a moment of hesitation between what we have been and what we shall be. This capacity is created by the ability to abstract from the immediate rush of experience and represent to ourselves not only what is but also what might have been. Language enables us to represent to ourselves the felt contrast in our experience between actuality and possibility.

This capacity of language, then, introduces the essential ambiguity that uniquely characterizes our humanity, namely, the freedom that emerges with the capacity to envision possibilities yet to be realized. As Sartre would say, *we are what we are not and are not what we are.*

The human alone is defined by the capacity to become what it is not. Insofar as our humanity is characterized by the capacity for language, we can say that the human is essentially technique; that is, the human person as a linguistic animal is essentially his or her own "means" for realizing "ends." Language, as the capacity of the human, is the metatechnique of which every specific technique is but a specialized instance. Every technology is a specialized language or technique for the realization of human possibilities.

When Thomas More coined the word *utopia*, he cleverly drew upon the meanings of two possible Greek prefixes attached to the word for "place" (i.e., *topos*). In transliteration, the choices would appear as *ou-topos*, meaning "no place" and *eu-topos* meaning "good place." Certainly both meanings apply. Utopia is the vector of human hope for a better world, a "good place." But utopia must never be definitively identified with any particular place. To do so would be a premature closure of history. In a sense, then, utopia must always remain "no place."[8]

Ordinarily *utopia* should not be used as a noun, but, more correctly, as an adjective. Its valid application is as a description of the human condition in its linguistic, or more precisely, its verbal condition as possibility ever to be realized.[9] The human occurs through the realization of new possibilities, in the creation of new worlds. Human beings are utopian in so far as they move along the vector of their hopes to create a new world; and they remain utopian only in so far as they are able, ever and again, to transcend the given horizon of the present world to imagine a new one. Therein lies the ultimate freedom that makes us human. It is the freedom to define a world rather than be defined by and confined to one.

The human occurs wherever nature gives voice to its utopian possibilities. It is "through language," says Gabriel Vahanian, "that man transcends the mute horizon of his body."[10] The body is that place where nature ceases to be mute and by some miracle is delivered into the condition of speech. That the human occurs as a bodily condition means that the body is our most intimate and immediate experience of nature. Our primary experience of nature is not that of "something out there," but of the body as the condition that makes the "self" possible. "The human body," says Alfred North Whitehead, "is that region of the world which is the primary field of human expression."[11] Through the techniques of language the body gives birth to "self"; that is, the utopian capacity to become what it is not. We are those beings who are able to imagine a world before it exists and then devise the means for its realization. Through our humanity,

nature is transformed into culture, the natural into the artificial, and the earth is humanized.

The Technological City as the Utopian Horizon of the Body-Self

The human occurs on the boundary line between the natural and the artificial. It occurs where nature transcends itself and gives voice to its utopian possibilities. Where nature is delivered from its muteness through the act of speech, there you have in one and the same moment the appearance of community and individuality. Indeed our individuatlity presupposes community. This is true first of all because our humanity occurs through the body, and every body exists in a condition of ecological interdependence with its environment. In this sense the whole universe is one body, a community of becoming characterized by unity in diversity. Second, our humanity occurs only through language—the communal reality out of which the uniquely human dimension of individuality emerges. In this respect Merleau-Ponty has observed, "we begin reading a philosopher by giving the words he makes use of 'common meaning' and, little by little, through what is at first imperceptible reversal, his speech comes to dominate language, and it is his use of words which ends up assigning them a new and characteristic signification."[12] Language as the common human reality inherited from the past is the medium through which the individual experiences himself or herself, first as communal and then through the creative addition of his or her own living speech, as uniquely individual in contributing to the common linguistic condition.

There is no such thing as a private language. How could a language understood only by the speaker be a language? Would we not say that the individual simply babbles, that he or she has not yet learned to speak? Because language is the utopian technique of our humanity, the utopian imagination always manifests itself in a vision of a new community. The human city is the symbol of the linguistic condition of the body-self. Even as the body can be individual only through an ecological interdependence, the body-self in its individuality can only occur through a dialectical interdependence with the ecology of his or her cultural-linguistic universe, which is the city.

The city is essentially a utopian phenomenon because through it, nature becomes what it is not, that is cultural or artificial. The city as the communal condition of the human is the midwife of all techniques of the human. Civilization is said to begin with the city pre-

cisely because in the city the languages (i.e., techniques) of the human are liberated from their ethnocentric tribal roots to converge to create a common human future that transcends all "natural" differences.

It is in the cities that the various technologies, that is, techniques of the human, proliferate and gradually find themselves coordinated into a technological system in which every technical specialization heightens the condition of ecological interdependence through which the utopian possibilities for a common future are realized. Every technology is a specialized language for questioning nature in the hope that it might yield its utopian possibilities. Every technology is rooted, first of all, in the scientific question, "What is the structure of matter, of life, of mind, of society?" This question is then followed by the technological question, "What are the techniques for the appropriation of these structures for human purposes?"[13] So the human realizes itself, for example, in a movement from physics to engineering, from biology to medicine, from psychology to psychiatry, from sociology to politics, etc. Wherever the human occurs, nature puts itself in question to transcend itself toward its utopian possibilities. Wherever the human occurs, the natural gives way to the artificial, and human beings transform themselves through the transformation of their utopian horizon—the city.

When the engineering mentality, with its commitment to the appropriation of the structures of nature to manipulate and transform nature according to human purposes, is combined with sociological consciousness of the malleability of self and society, the result is the technological city as the first consciously utopian city. Now the city is systematically and self-consciously organized to apply the most efficient techniques for the transformation of human beings and society toward the realization of that which it is not, toward the realization of its utopian future.

It is no accident that in a technological society the meaning of the human undergoes its most radical challenge. On every front nature is forced to give way to the artificial. No longer are such claims as "men are naturally superior to women" or "whites are naturally superior to blacks" or "heterosexuals are naturally superior to homosexuals" consonant with the experience of the human. The emergence of the technological society is radically utopian precisely because it demythologizes human self-understanding as a construct of nature. We no longer experience our humanity as a fixed order of nature, but as radically technological, as utopian, as that which is human precisely

because it is able to transcend the horizon of the given to realize a new self and a new society.

As historical and sociological consciousness came to clear expression in the nineteenth century, this utopian understanding of the self was definitively articulated by Friedrich Nietzsche through his vision of the *Übermensch*. In Nietzsche's *Übermensch* we find conjoined the Dionysian freedom of the will and the Apollonian orderliness of reason. That is to say, the *Übermensch* is characterized by the "inexorable solar will."

By combining into one unitary principle the narrative identities of Dionysus (the god of the ecstatic and tranformative will) and Apollo (the sun god or god of rational order), Nietzsche symbolizes the newly emerging utopian self, the technological self, whose reality consists in overcoming, going beyond; that is, in continually creating ever new rational orders through an act of will that transvalues all values. Although Nietzsche's *Übermensch* has been variously translated as "overman" and "superman," his meaning is probably made clearer by translating it as "the self-transcending self." The key to this self-transcending self for Nietzsche is "style," which is the art or skill (*techné* or technique) of creating one's own rational order through self-creation. "One thing is needful. *'Giving style' to one's character*—a great and rare art! It is exercised by those who see all the strengths and weaknesses of their own nature, and then comprehend them in an artistic plan until everything appears as art and reason and even weakness delights the eye."[14] The self is an artificial reality, a self-transcending reality, which reworks and redefines nature until even weakness becomes strength. For Nietzsche, the human occurs in the self-transcending overcoming of "human nature," in the utopian freedom to create an artificial self, a new and unique creation that exists only in the realizing of its self-transcending freedom.

"Style," says Whitehead, "is an aesthetic sense, based on admiration for the direct attainment of a foreseen end, simply and without waste."[15] Style is the essence of technique, the "exclusive privilege of the expert." Indeed, "with style you attain your end and nothing but your end. With style the effect of your activity is calculable, and foresight is the last gift of gods to men. With style your power is increased, for your mind is not distracted with irrelevancies, and you are more likely to attain your object."[16] Style is the essence of modern technology. It is the efficient use of means to realize the new and artificial. With style the dual meanings of *techné* as *art* and *skill* are joined in the utopian task of realizing a new self through the creation

of a new society. Style is what characterizes the technological city as a self-consciously utopian reality.

The Apocalyptic Deformation of Utopianism: Procrustean and Protean Distortions

If the utopianism of modern technology is rooted in our linguistic capacity for self-creation through the recreation of our world, why is it that technology is so widely experienced today as our fate—an autonomous power out of control? The answer, Manfred Stanley suggests, has to do with the technological nature of language.[17] Language is a "form of consciousness, (and false consciousness), and . . . an instrument of world creation, destruction, corruption, and control."[18] The first, primary and metatechnological feat of the human, we might say, is the creation of a symbolic universe, a cultural world through which the human realizes itself. What causes the linguistic reality of the technological society to become our fate is the deformation of the utopianism of "technique" into the linguistically opaque condition of "technicism."

Technicism is the linguistic "mystification" of the human world that obscures the "free and responsible nature of human action" through "metaphorical misapplication" of scientific and technical imagery.[19] It is a form of the Procrustean myth that seeks to truncate reality to fit one's a priori categories. It is the creation of a symbolic world of discourse dominated by the theoretical explanations of "experts" who characterize the world as a universe of global forces, processes and transformations entirely unrelated to human agency. "The person as agent" is "made to disappear almost entirely from theoretical attention when moral preoccupation with collective survival and social engineering induces the humanistic disciplines to be unduly influenced by models drawn from physical sciences."[20] When the explicit connections between human agency and our cultural universe are not clearly articulated within this symbolic universe, the ethical imagination is deprived of the means of arriving at those insights by which human action could be effectively guided to intervene in the processes of our world to define it rather than be defined by it.

The technicist objectification of the world results in the atrophy of our ethical imagination and the abdication of our utopian self-transcending freedom before an apparently autonomous technological phenomenon. The technological world is reduced to a "natural phenomenon" understood on the basis of models drawn from the

physical sciences. These models still interpret reality through a Cartesian (mechanical) view of nature that separates mind (self) and body and thereafter can find no connection between them and hence no place for the self within the world that science describes. There is no hint, in such models, of our humanity as the linguistic-utopian technique or expression of nature. When nature is no longer understood as capable of giving birth to the human, it loses its utopian capacity and becomes our fate. It is at this point, as Karl Mannheim's work suggests, that the utopian becomes ideological, and that which masquerades itself as an instrument of new creation becomes, in fact, guarantor of the "status quo."[21] When the utopian becomes ideological, technology becomes a fate beyond human control headed toward some literally apocalyptic destiny.

The ideological mystification of technique does not by itself explain the power that technicism exercises over human beings. Insofar as every person exercises a linguistic capacity, each and every person must be induced to participate in the linguistic game of technicism and thereby legitimize it. To explain this further power of technicism over human beings, Stanley, finds it necessary to appeal to the religious function of technique. The power of technicism comes from its appeal to profound human needs and hopes. In so doing it becomes more than an objectification and mystification of the experienced human world. It becomes a full-scale mythology, a utopian representation of human destiny that satisfies the human needs and hopes for security, abundance, and meaning. Stanley, in fact, suggests that the inducement for acquiescence in the linguistic game of technicism is the millennial hope it holds out; namely, that technology will make possible the conquest of scarcity and all the uncertainties of life, thus creating a paradise of abundance capable of fulfilling all desires. In this respect technicism becomes "a myth of the fullest eschatological stature." As such it is nothing less than a "reconstitution of a world metaphor . . . a supremely religious, as well as social phenomenon."[22]

Technicism is a reduction of our humanity to a fixed and autonomous order of nature in a Cartesian mode. As Jacques Ellul has suggested, the technological or technicist society has come to serve the role nature once did in human experience. Even as nature once was, so now the technicist society is experienced as that all-encompassing environment which provides human beings with life and abundance and also threatens them with the possibility of capricious annihilation and death. The technicist society, like nature, is experienced as the object of both fascination and dread, Rudolf Otto's classical descrip-