

CHAPTER 11

From Civil Religion  
to Technological Legitimacy

AMERICA'S secular legitimating myths, not to mention the ethical problems that Niebuhr, Bellah, and others point to, present difficulties because they depend on a certain degree of supremacy in the world. The pragmatic "rich-is-right" ideology, in particular, works only if the United States can continue to dramatize its wealth and power relative to all other nations in the world community. The capacity to maintain that degree of supremacy, though stronger in some years than in others, has by all indications eroded in the decades since World War II. And with this erosion have arisen questions about the very basis of America's secular legitimating myths. To gain a more complete understanding of religion's place in the larger repertoire of such myths, we must consider the extent of this questioning and the kinds of alternative myths that may be gaining increasing acceptance.

It is difficult now to recall fully the flush of confidence that dominated American culture in the years immediately following the nation's victory in World War II.<sup>1</sup> Despite the more serious counsels of "sober serenity" (discussed in Chapter 3), periodical literature in those years sometimes projected a degree of optimism which would seem unwarranted only a decade or two later. A 1948 editorial on "America's Greatness" in *Christian Century*, for example, spoke unabashedly of America's glory: "We are a nation that boasts of bigness. We have the biggest army and navy, the biggest skyscrapers, the biggest harvests . . . even the biggest mountains and waterfalls and sunsets." The editorial went on to venture a glimpse of the nation's future:

It can be more than a Great Power; it can be the Greatest Power. Its fleets can command the seven seas, and its airforces can impose the American will on every continent. It can come closer to setting up a world empire, in the Roman sense, . . . than has any other nation in all of history. Even Russia cannot stop us—not while we have sole possession of the atom bomb.<sup>2</sup>

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Being a "Christian" editorial, the article did warn that material greatness should not be allowed to overshadow the nation's sense of spiritual purpose. But nowhere was there the kind of doubt that was to appear in the coming decades.

ISOLATIONISM AND MILD EUPHORIA

Less than a half century later, observers of America's "greatness" strike a rather different note. Gone is the confidence that the United States can shape the world in its own design. Gone too is the certainty that it can achieve everything it desires even within its own borders. And underneath these uncertainties questions have begun to be raised about the myths with which U.S. hegemony in the world has been legitimated. As one of the leading foreign policy teams concluded in a 1983 article in *World Politics*, "the country has undergone such a substantial change—from the world's preeminent superpower to one whose status has now been challenged militarily, politically, and economically—that breakdowns have occurred in the underlying value consensuses on which its unity had rested."<sup>3</sup>

Other writers note a sense of pessimism and doubt about the nature of American capitalism and its relation to the American system of government. Michael Novak points out that "a shrewd observer cannot fail to note a relatively low morale among business executives, workers, and publicists." Democratic capitalism, he fears, "seems to have lost its spirit."<sup>4</sup> *Business Week* editors in 1984 appeared to agree with Novak, noting in a gloomy cover story that in the 1950s the United States "could outproduce anybody," whereas now "the rest of the world has caught up in its ability to produce goods."<sup>5</sup>

Among the concerns that have been raised are basic questions about the viability of the U.S. free market and whether it will be able to compete effectively in the world economy without greater intervention by the state. Political scientist Robert S. Walters, for example, notes that "America's altered position in the global economy and increasing doubts in key industries regarding the market mechanism are raising anew serious questions about the proper role of the state in the economy."<sup>6</sup> Jürgen Habermas goes further, suggesting that the complexities of the debate over the proper relation of the state to the free market constitute a major "crisis of legitimation."<sup>7</sup> And Bellah suggests, perhaps with undue cynicism, that Americans in particular seem to be engaged in "a last desperate attempt to believe that unfettered free enterprise can save us."<sup>8</sup>

Stanley Hoffman, a political scientist at Harvard University, has cap-

tured the mood of the 1980s so clearly that a portion of his description seems worth quoting at length. According to Hoffman, the prevailing view in the United States of its place in the world represents a major departure from the views that have historically guided our sense of destiny and identity.

[T]his new mood fits neither of the two archetypes of American attitudes toward the outside world that prevailed in the past: the High Noon sheriff who restores order so that the good people can do their business unharmed by evil ones, and the missionary who is out to cure bodies and souls among the miserable and suffering. What is missing today are the sheriff's willingness to step in and shoot it out, and the missionary impulse itself. All that is left of both are self-righteousness and a sense of moral and material superiority. . . . The militancy of the two archetypes has given way to the complacency of happy self-contemplation. The mood is one of mild euphoria, a sort of holiday during which people want to forget about the hectic chores and the heavy headaches of ordinary days, and merely relax and enjoy themselves.<sup>9</sup>

Hoffman suggests that this mood was especially evident at the 1984 Olympic Games in Los Angeles, where we were temporarily able to forget about the problems of the world and simply focus on ourselves and our successes.

What Hoffman persuasively argues is that Americans have (perhaps for the better) lost faith in their ability to solve the world's problems. The result has not been simply an upsurge of pessimism. It has rather been a new kind of isolationism, not the confident isolationism of the nineteenth century, but a "head-in-the-sand" isolationism that revels in our own successes while failing to face up to the new complexities of the world system. This attitude allows the nation to maintain some semblance of pride in itself, but creates a lack of concern, and even a naive form of nationalism, that greatly damages our relations with the rest of the world. The result, he suggests, is a "growing resentment at America's apparent indifference to misery and injustice, and at its condescending conviction that what is good for America will trickle down and be good, ultimately, for others." Even if America succeeds in maintaining its own standard of living, therefore, it is likely to fail at maintaining the credibility of its myth about itself in the eyes of the rest of the world. For "even where the natives are friendly, or a bit envious of America's return to growth and to optimism, they are offended by the cosmic ethnocentrism that seems to come with success."<sup>10</sup>

## HEGEMONY ON A SLIPPERY SLOPE

It is not surprising that observers of American culture should note a sense of doubt about its legitimating beliefs. The objective position of the United States in the world has in fact changed markedly over the past quarter century. This change has been particularly evident in foreign policy. From the end of World War II until about 1968 the prevailing view in U.S. foreign policy was one of optimism about the nation's capacity to build a new world order and to "contain," if not "roll back," the forces of communism. That image came to a relatively abrupt end with the inability to bring the Vietnam War to a successful conclusion.<sup>11</sup> As a result, U.S. foreign policy through the decade of the 1970s was characterized by a renewed sense of the desirability of peaceful coexistence with the Soviet Union, with a greater interest in arms control talks, and with lingering unease about entering into foreign military commitments. Although that decade was imbued with some degree of optimism that detente and limited commitments could guarantee the success of American interests, these hopes soon ran up against events that cast American policy in an even less certain framework. Beginning with the loss of Iran as a trusted ally in the Middle East, followed by the hostage crisis, Soviet intervention in Afghanistan, and fears of creeping socialism in Latin America, the United States' position in world affairs steadily deteriorated through the early years of the 1980s, leading to a resurgence of efforts by conservatives to rebuild the defense budget and re-establish American military supremacy.<sup>12</sup>

As late as 1983, the number of Americans who considered the military defense system of the United States to be weaker than that of Russia outnumbered those who felt it enjoyed superiority by a margin of two to one.<sup>13</sup> Defense Department officials readily reinforced these fears, showing that Soviet outlays for military purposes had risen dramatically compared to those of the United States. According to their figures, Soviet military expenditures in 1960 were only three-quarters those of the United States, but by 1970 the Soviets had achieved parity, and by 1980 were spending approximately 50 percent more than the United States.<sup>14</sup>

Economic indicators also pointed to a period of sustained decline between the 1950s and 1980s, at least in America's position relative to other leaders in the world economy. Gross domestic product per capita in West Germany rose between 1960 and 1980 by 16 percentage points relative to that in the United States; in France, by 23 percentage points; and in Japan, by 38 percentage points.<sup>15</sup> In 1960 the United States produced 35 percent of the world's energy; by 1980 this proportion had declined to 25

percent. Over the same period, the United States' net merchandise trade balance slipped from \$4.9 billion to a deficit of \$25.3 billion.<sup>16</sup> Writing in the *Washington Post* shortly after the 1984 election, a time when many indicators actually pointed toward economic prosperity, Henry Kissinger, former national security advisor, summed up the situation as follows:

When America ended its isolation after World War II, an atomic monopoly gave America a margin of security unprecedented in history. As late as 1950 the United States produced 52 percent of all the world's goods and services. America by itself represented the global balance of power. American alliances were in effect unilateral guarantees; recognized problems could be overwhelmed with resources.

By the late '60s these conditions were disappearing. Nuclear parity was upon us. As Europe and Japan recovered and other nations industrialized, America's percentage of the world's gross national product was declining. By 1970 we produced about 30 percent of the world's goods and services; today the figure is around 22 percent.<sup>17</sup>

The changing position of the United States has also been reflected in its growing financial dependence on the world economy. Over the past two decades an increasing share of capital investment in the United States has come from foreign sources. In 1960 foreign direct investment in the United States amounted to only \$6.9 billion; by 1980 this figure had grown to \$68.4 billion—a nearly tenfold increase.<sup>18</sup> At the same time, domestic savings in the United States failed to keep up with the rate of domestic savings in most other industrialized countries. For example, in 1982 the savings rate in the United States was only 6 percent, compared with 11 percent in Canada, 14 percent in West Germany, and 22 percent in Japan.<sup>19</sup>

Another indication of the nation's rising dependence on the world economy is the change in its exports and imports. As recently as 1970, only 9.3 percent of American production was exported, whereas by 1980 this figure had increased to 19 percent. Similarly, in 1970, only 9.3 percent of the goods used in America were imported, whereas by 1980 this figure had increased to 22 percent.<sup>20</sup> Economist Robert Reich estimates that as of 1980, more than 70 percent of all the goods produced in the United States had to compete with foreign-made goods, up from only 8 percent in the early 1960s.<sup>21</sup> Reich also points to a number of areas in which this competition appears to be seriously eroding America's commercial advantage: declining shares of U.S. products in the world market in basic industries such as automobiles, industrial machinery, agricultural machinery, and metal-working machinery; noncompetitive labor rates; declining advantages in productive efficiency; and increasing use by for-

eign competitors of standardized production lines, the key to America's competitive edge until recently.

America's declining position in world affairs also appears to have registered itself in world opinion. According to recent polls, even in countries that remain the United States' closest allies, public opinion is deeply divided. Gallup surveys in 1982, for example, showed that in the United Kingdom 46 percent of those polled held a favorable opinion of the United States, while 44 percent expressed an unfavorable opinion; in France, the ratio was 55 percent favorable to 32 percent unfavorable; in West Germany, 73 percent favorable to 24 percent unfavorable; in Italy, 63 percent favorable to 21 percent unfavorable; and in Belgium, 49 percent favorable to 22 percent unfavorable.<sup>22</sup> The same series of surveys asked "How much confidence do you have in the U.S. to deal wisely with world problems?" No more than a small minority in any of the countries said they had a great deal of confidence: 6 percent in the United Kingdom, 4 percent in France, 16 percent in West Germany, 17 percent in Italy, and 7 percent in Belgium.

Whether America's declining world position has begun to erode confidence among its own citizens seems to be more of an open question. Some opinion polls indicate that the American people still overwhelmingly think highly of their country. A Roper poll in 1981, for example, asked, "Earlier on in American history, many people around the world thought the United States was the very best place in the world to live. Do you think it still is, or not?" Ninety percent thought it was; only 8 percent thought it was not. The same survey also asked, "Do you think the United States has a special role to play in the world today, or is it pretty much like other countries?" Eighty-one percent thought it had a special role; only 14 percent thought it was like other countries.<sup>23</sup>

Other polls, depending on the sample and the question asked, have shown more qualified confidence in the American system. In a 1982 national sample of high school seniors, 66 percent agreed with the statement, "Despite its many faults, our system of doing things is still the best in the world"—meaning that a sizable minority either disagreed or were unsure.<sup>24</sup> A 1983 Roper poll of a sample of the adult U.S. population found that only a bare majority (52 percent) were "generally optimistic" about "our system of government and how well it works," while 21 percent said they were "generally pessimistic" and 27 percent said they were uncertain. Compared with a similar poll conducted in 1977, these figures represented a 7 percentage point increase in pessimism and a corresponding decline in optimism. The 1983 survey also asked people's opinions about "the soundness of our economic system over the long run." Again,

only about half the public expressed optimism (49 percent), while 23 percent expressed pessimism, and 28 percent indicated uncertainty.<sup>25</sup>

#### PLAUSIBILITY IN QUESTION

In addition to the undercurrent of doubt expressed in such global assessments, more specific tenets of America's legitimating myth also appear to manifest signs of at least potential erosion. This is especially true of the pragmatic myth which legitimates America on the basis of its economic and military successes. As the ability to achieve these successes has eroded, doubts have inevitably arisen about the efficacy of our way of life.

Japan's success as an economic competitor has been particularly vexing. Despite the fact that many aspects of Japan's success remain unexplained, one consequence of this success has been an apparent undermining of the pride that has traditionally been associated with America's work ethic.<sup>26</sup> At a deeper level, questions have also arisen about the relations between the self-interest on which the American system is based and the common good. In Tocqueville's formulation self-interest was effective in the American case only because it was, as he put it, "rightly understood"—that is, tempered by moral virtues that channeled self-interest toward the service of the common good.<sup>27</sup> Or, as Bellah has suggested, market relations operate effectively only within the framework of a "moral ecology" that binds us to the common good and prevents the unfettered pursuit of self-interest.<sup>28</sup> The question now is whether that moral ecology still exists or whether self-interest has become purely self-serving.

On one side of the issue, apologists like Novak argue that American self-interest is indeed tempered by self-restraint, altruism, philanthropic concerns, and an adherence to moral virtue. "American economic elites," he asserts, "have been remarkable in the world for their involvement in affairs of citizenship and their involvement in affairs of morals and of culture."<sup>29</sup> On the other side, critics like Bellah fail to take comfort in such generalizations, arguing instead that the moral ecology which made the American system work historically has begun to break down. "Both romantic cultural particularism and radical secular individualism," Bellah says, "have contributed to this end."<sup>30</sup> Cultural particularism has, as in the case of the contending versions of American civil religion, been so fraught with sectarianism that it has been unable to inform public debate, especially on matters involving the state. And radical individualism has evolved into a consumerist mentality which manifests little concern for the rights of others or for higher standards of justice and equality.

Chiding Americans for abandoning the altruistic virtues which should normally temper self-interested pursuits, the columnist Meg Greenfield has charged that many of the affluent simply hang a "Do Not Disturb" sign on their wealth. Indeed, rather than justifying affluence by showing kindness to the poor, it has become commonplace, she believes, to use the example of the poor as an excuse for clinging ever more tightly to our possessions:

*Our well-being, not that of the poor, becomes the moral imperative. Since the days when our mothers told us to think of the starving Indians and eat our spinach, through the years of the four-course charity banquet (have a chocolate-covered kiwi for the poor), to this moment of nouveau trickle-down economics, we have been geniuses at using the plight of the poor as an excuse for having something else to eat—or drink or drive or wear or perhaps invest at 11¾ percent.<sup>31</sup>*

Novak's suggestion that self-interest in the United States continues to be tempered by a strong altruistic orientation gains support, perhaps, from such visible manifestations of altruism as the annual United Fund drive, emergency relief aid for Bangladesh or Ethiopia, media events such as "Live Aid" and "Hands Across America," and the involvement of business elites in patronizing the arts. Yet within the culture at large both popular opinion and evidence of other kinds point to a decline in charitable activities. When asked in a 1981 Roper survey if people are less willing now than 25 years ago to help their neighbors, 72 percent of those sampled said "yes." Sixty-one percent said people are also less willing to help their elderly parents, and 58 percent said there was less willingness to volunteer to help with youth activities.<sup>32</sup>

Other studies indicate that a majority of the public is cynical about the altruistic motives of business and government leaders, and suggest that the public's perceptions of unbridled, calculating self-interest among these leaders and their institutions has risen to a high level over the past several decades. A Roper poll found that 76 percent of those sampled thought business executives in large corporations tended to act mostly in their own self-interest, while only 16 percent thought these executives acted more in the public interest. The same survey showed that 50 percent of the public regarded "selfishness, people not thinking of others" as one of the major causes of problems facing the United States. This was in fact the highest percentage for any of the causes of problems asked about except for "a lerdown in moral values."<sup>33</sup>

As for trends in these attitudes, Harris surveys have shown relatively steady increases in cynicism toward those in power as well as more gen-

eral feelings of alienation. In 1971, for example, 33 percent of the public agreed that "most people with power try to take advantage of people like yourself"; by 1983 this figure had risen to 65 percent. In 1966, only 45 percent of the public felt that "the rich get richer and the poor get poorer," whereas by 1983 this proportion was 79 percent. Conversely, in 1966, 55 percent of the public expressed a great deal of confidence in the country's "major companies," but by 1982 this figure had dropped to a mere 18 percent. Overall, Harris's composite "alienation index" indicated that the proportion of Americans who felt alienated from centers of power and wealth increased from 29 percent in 1966 to 40 percent in 1971, to 57 percent in 1976, to 62 percent in 1982.<sup>34</sup>

Apart from such trends in public opinion, the legitimacy of any system thought to be based on the unbridled pursuit of self-interest is at best likely to be precarious within the context of American culture. Both in liberal democratic political theory and in the biblical tradition self-interest has always been regarded with considerable ambivalence. Despite the divisions evident in American civil religion, religious leaders (especially on the left) continue to mount criticisms of the utilitarian ethos on which some defenders of the American way rest their claims. As social ethicists Prentiss Pemberton and Daniel Finn observe:

Christianity has always denounced any attempt to base social organization on self-interest alone. Behind this stance is an appreciation of the power of human sinfulness. In its critique of every social and economic system, Christian ethics points out the way those persons with power . . . can subvert the usual checks and balances, can gain their own ends, and can legitimate this by showing how "just" it is since they are not breaking any laws.<sup>35</sup>

The biblical tradition, although at many times bent to support utilitarianism, has provided an alternative set of values against which to judge actions based on self-interest. Pemberton and Finn point out that the biblical tradition tends to associate values with collectivities which have a higher authority than that given to personal preferences. It calls for a public morality that transcends individual inclinations, and upholds such values as human dignity, social justice, and the rights of future generations over against purely market-dictated concerns for efficiency. It also persistently raises questions about the uses to which property is put, as well as the inevitable temptations of greed, both of which challenge the materialistic basis on which market decisions are made.

Put differently, the weakness of the success ethic as a legitimating creed is that it offers nothing transcending concrete achievements. Legitimacy comes to rest on the pragmatically evaluated performance of government

policies. Faced with any time of collective trial or need for the public to make sacrifices, serious questions about the legitimacy of the policies demanded would inevitably arise. Under these circumstances, the success ethic would either have to be supplemented with other values or else new seekers of power would have to convince the public to accept their proposals on purely self-interested grounds.

#### FREEDOM REVISED

In comparison with the utilitarian myth, arguments linking the American system with freedom have probably continued to enjoy much greater vitality. These arguments are neither so purely materialistic nor are they as subject to disconfirmation by the eroding position of the United States in world affairs. As long as it can be shown, if only by negative comparison, that religious freedoms are greater in the United States than in many other countries, that the right to vote is being upheld, and that individual freedoms of life style, speech, career, and personal expression are protected, then the idea of freedom continues to legitimate the American system. Yet there are also subtle ways in which the meaning of freedom has changed.

The nineteenth-century legacy of the word "freedom" in the American context closely associates it with freedom of opportunity and, in even more specific terms, with upward mobility. Freedom meant an absence of caste, aristocracy, or government restrictions which might have prevented the individual from pulling himself up by his own bootstraps. It meant the possibility of achieving the legendary climb from rags to riches. Looking back on the 1880s from the vantage point of the 1980s, Oscar Handlin could assert:

In practical terms opportunity meant social mobility, the chance for individuals to rise uninhibited by the shackles of status. Some began life with advantages others lacked—inherited wealth, favored family connections, attractive appearance. At the other extreme, poverty, broken families, and isolation handicapped others. But neither advantages nor handicaps were decisive. Many a scion, born into a wealthy home, saw a fortune slip away. Many a lad from the slums advanced to a place of distinction in business or the professions.<sup>36</sup>

The number who actually advanced to "a place of distinction" was small even then. But at least the myth of freedom as possibility for upward mobility served as a plausible legitimating argument.

Closely associated with that meaning of freedom was the image of America as a land of freedom for the immigrant. For the millions of immigrants who streamed through Ellis Island to establish residence in the

United States, and perhaps equally for those who already claimed the United States as their native land, America was good and decent and just because it saved these millions from lives of tyranny and impoverishment.

For some, this image still continues to serve as part of the legitimating myth of America. Novak, for example, takes pride in the fact that "the sound of incoming feet is still heard on our shores," and suggests that "For millions, the United States is still the land of opportunity."<sup>37</sup>

But neither the image of freedom as upward mobility nor the vision of America as a land of freedom for immigrants remains as clear as it once was. Handlin goes on to decry the ways in which government has had to intervene to help minority groups achieve any kind of upward mobility. A "vast deterioration" has occurred, he believes, in the possibility of moving up in the American system strictly on the basis of one's own hard work and personal skills. Similarly, Robert Lekachman, author of *Freedom is Not Enough: Reaganomics*, counters Novak, pointing out that "by comparison with the American past, there is much less opportunity than there used to be."<sup>38</sup> Nor has it been possible to sustain the myth of an open door for immigrants in view of the restrictive legislation that has virtually cut off immigration since the 1920s, and even less so when only scattered church groups, whose leaders face constant legal intimidation, seem willing to grant political refugees asylum from terrorism and death squads.

Opinion polls suggest that the image of America as a land of opportunity is by no means dead, but these studies also reveal that a large minority of Americans doubts its validity, and that many others believe it is less applicable now than it was in the past. In 1981 a CBS poll asked respondents, "Do you think it's possible nowadays for someone in this country to start out poor, and become rich by working hard?" Sixty-nine percent thought it was possible, compared with only 29 percent who thought it was not. A similar question in a 1982 ABC poll asked, "Is it true that if you work hard, eventually you will get ahead?" Fifty-eight percent said it was; 42 percent said it was not. These responses perhaps demonstrate that a belief in the possibility that at least some people can experience upward mobility is by no means dead. But other polls reveal a widespread impression that these opportunities are becoming more limited. For example, a 1981 Roper poll posed the question, "Compared to twenty-five years ago in this country, do you think it is easier or harder for an individual to get ahead financially?" Only 19 percent said "easier"; 74 percent said "harder."<sup>39</sup>

Americans may continue to reflect nostalgically about the time when immigrant masses "yearning to be free" were welcomed to this country. But if polls are to be believed, contemporary attitudes deny the validity of this image too. When asked in 1982 whether they would like to see the

number of immigrants allowed to enter the country decreased or increased, a national sample of the American public overwhelmingly said "decreased": 66 percent versus 4 percent. The same survey found that recent immigrants were much more likely to be perceived as a bad influence on the country than as a good influence. For example, by a margin of 59 percent to 9 percent Cubans were perceived as a bad influence; Puerto Ricans were similarly perceived by a margin of 43 percent to 17 percent; Haitians, by a margin of 39 percent to 10 percent; and Vietnamese, by a margin of 38 percent to 20 percent.<sup>40</sup> Had polls been conducted a century ago about Irish or Italian immigrants, much the same kinds of prejudice would likely have been registered. Nevertheless, such attitudes today do little to augment the image of America as a land of freedom.

Many observers consider that these traditional images of freedom are being replaced by a new connotation which equates freedom chiefly with "freedom of choice." In a sense, the modern supermarket with its myriad consumer products from which to choose has come to be the symbol of freedom, perhaps even more so than the traditional flag-waving Fourth of July parade. Freedom means the opportunity to choose from a variety of products, to select a full complement of goods that meet our individual needs and desires. It means having the financial resources with which to purchase any gadget of seeming use in our quest for personal development and self-expression.

But this meaning of freedom comes perilously close to being dependent, like the utilitarian myth, on the success of the economy in producing ever more gadgets and an ample income with which to purchase these gadgets. In broader terms, it also appears to be dangerously narrow, selfish, and materialistic.<sup>41</sup> As one observer remarks, "Too often when we Americans speak of freedom, we sound as if freedom meant having access to the hedonism of the consumer market, or as if freedom were synonymous with license."<sup>42</sup>

While the concept of freedom may still suggest a cherished ideal, therefore, its meaning may have become compromised by the materialistic ethos of American success to the point that it no longer associates the nation with an untarnished virtue. Especially in countries where the standard of living is only a fraction of that in the United States, America's freedom may seem less than worthy because of the excesses sanctioned in its name. Some years ago, in one of his poems about America, Robinson Jeffers warned:

The states of the next age will no doubt remember you,  
and edge their love of freedom with contempt of  
luxury.<sup>43</sup>

The problem Americans face in attempting to legitimate their system strictly on the basis of freedom does not appear, as European observers have often supposed, to be one of reconciling freedom with increasingly complex social institutions, such as the bureaucratic state. Habermas's concern for the conflict between free-market ideology and state intervention in the economy, for example, seems not to be shared by many at the popular level. Debate surfaces with some degree of regularity about the extent and desirability of state intervention. But this debate seldom acknowledges any conflict between the expansion of the interventionist state and a basic commitment to freedom in politics, economics, or other spheres. Indeed, state intervention is often portrayed as a legitimate means of advancing free enterprise and free choice.

The problem is rather one of legitimating particular collective choices on the basis of freedom alone. In the extreme, the value of freedom functions to define the outer limits of acceptable social practice, thus legitimating defense budgets to protect the society from conquest by totalitarian regimes and establishing legal guarantees against coercive infringements of basic civil rights. But within the sphere defined by the absence of such extreme violations, the value of freedom says virtually nothing about the kinds of choices that should be made or the criteria for arriving at collective decisions.

The moral imperative defined by the value of freedom is to make a choice. But freedom is by and large neutral as to what that choice should be. As a result, two kinds of cultural tendencies are reinforced. One is an extreme relativism which places freedom itself on such a high pedestal that no other value considerations can be entertained. By this logic, the act of choosing—or being in a position of detachment so that one can choose—becomes valued more highly than the substance of the choice itself. The other tendency is for norms of expediency or material enhancement, in the absence of any explicit consideration of values, to become the determining principles of social life. Either alternative can militate against public discourse about socially transcendent values, particularly discourse aimed at arriving at a collective consensus which might necessitate some sacrifice of individual choices, and leads easily to the kind of hedonism against which Jefferson and others have repeatedly warned.

#### JEREMIADS AND THE APOCALYPSE

The relative decline of America and its changing myths of legitimacy have also figured prominently in the restructuring of its civil religion. The bifurcation that has taken place between conservative and liberal interpretations of American civil religion has at once been propelled and con-

tained by these broader developments. Two effects stand out in particular.

The first has been a tendency for the two versions of American civil religion to respond differently to the perception of the nation's decline. The conservative response has been typical of the pronouncements of religious leaders during previous times of national trial. It translates indicators of the nation's decline into symptoms of evil which are heaping God's wrath on America—or at least preventing the nation from realizing the fullness of God's rewards. An episode such as the hostage crisis in Iran, for example, evokes jeremiads about the nation's moral decline, the lack of godly commitment among its leaders, and liberals' blindness to such evils as homosexuality and abortion. Such arguments have often been voiced by evangelists and revivalists to inspire greater commitment to religion at a personal level. In recent years they have also played a role in legitimating collective action on the part of conservative political coalitions such as the New Right. In his introduction to Richard Viguerie's book *The New Right: We're Ready to Lead*, Jerry Falwell, for example, stated clearly his conviction that America was in decline: "At this present hour, there can be no questioning the retrogression of America's stability as a free and healthy nation." The problem, he went on to say, was equally clear: "Americans have literally stood by and watched as godless, spineless leaders have brought our nation floundering to the brink of death."<sup>44</sup>

The liberal response to America's changing world position has generally taken this change as a sign of the need for a new realism in economic and military policy. If America was unable to have its way in Vietnam, for example, the problem was not one of moral turpitude but simply an outcome which vindicated the liberal view that it had no right to be there in the first place. No longer able to shoot it out with the bad guys, to use Hoffman's metaphor, America should work through diplomacy and negotiation for a lasting peace. Rather than try to reassert its economic or military superiority, it should take a more modest place in the community of nations, engaging in compromise in the broader interests of humanity. Indeed, the danger most clearly envisioned is that conservative fanatics, perceiving America's decline, will attempt to rebound through an aggressive arms race that could lead the world directly into the apocalypse.

The differing responses to America's decline have in one sense, then, heightened the division between conservative and liberal interpretations of American civil religion. Reacting to a perception of real or impending crisis, both sides have intensified their pleas for a redirection of American values. Yet at the same time, other features of American culture have worked to prevent this division from turning into an even more extreme type of conflict.

The creedal dogma which champions freedom of choice has probably played a dampening role in the division between the two versions of American civil religion. Although both sides have sought to identify themselves as the true proponents of freedom, the broader effect of this value has probably been to deter either side from gaining broader support for its claims in the public sphere. The reason is that the ethos of choice, especially radically relativized choice, turns moral discourse into a mere discussion of personal preferences. Not only is the legitimating capacity of each side weakened by the explicit delegitimizing counterclaims of the other, but both sides are also weakened by having their claims treated—by many public leaders and much of the media—as nothing more than personal taste.

Coupled with the hedonistic success ethic, radical freedom of choice further erodes the mobilizing potential of either version of American civil religion by championing privacy in opposition to public involvement. The difficulty with either kind of civil religion is that it demands sacrifices: in the form of public restraints on private morality, or as demands on personal time and resources to become involved in causes of peace and justice. Neither is likely to mobilize a high degree of commitment—as did, for example, a Timothy Dwight or Abraham Lincoln—because the demands of privacy make stronger claims. As Richard Neuhaus observes in reviewing a number of public controversies, “Much of the course of public reasoning in America can be read from the fact that our highest appeal is no longer to Providence but to privacy.”<sup>45</sup>

#### TECHNOLOGY AS MYTH

If many of the traditional legitimating myths have begun to show some signs of erosion, either from a declining infrastructure or from subtle shifts in their meaning, there is, nevertheless, a new myth to which many give unquestioned allegiance—technology. Though scarcely a religion, it presents itself with religious force, combining seemingly inevitable developments in the social infrastructure with belief in the unassailable sanctity of these developments.

Technology is particularly well qualified to serve as a basis for legitimating myths. Rather than being a mere philosophy or free-floating ideology that has to be maintained primarily by the powers of belief and persuasion, it is a vast institution. Even to call it an institution is somewhat misleading, because it is generally not recognized as such, but is regarded simply as a basic feature of modern life. Much like the medieval church, or in a later period, the all-pervasive “market,” it organizes and influences virtually every aspect of society. It commands vast resources,

is a major concern of the modern state, affects the power of nations in the international arena, and generates its own culture.

Peter Berger has observed that a good way of legitimating something is to make it seem so natural, so much a part of the taken-for-granted “nature of things,” that it is never questioned.<sup>46</sup> In short, achieve legitimation through reification. This has been a common way of legitimating social arrangements in the past. Karl Polanyi has shown how the “marketplace,” for example, became reified in the nineteenth century.<sup>47</sup> Its specific historical manifestation was equated with the entire generic phenomenon of “economy.” Thus, since all societies had had economies, it was argued that the market system must be inevitable.

In a similar fashion, a tendency now exists for technology in its peculiar twentieth-century manifestation to be confused with technology as a broader generic phenomenon. In the latter sense of the word, technology can be defined as “that form of cultural activity devoted to the production or transformation of material objects, or the creation of procedural systems, in order to expand the realm of practical human possibility.”<sup>48</sup> But that sense, which can be applied equally to the wheel or the space program, is often equated with semiconductors and lasers and all that is new in American technology.<sup>49</sup> Consequently, it seems only natural that we should have technology and that we should attach great importance to its development. Technology becomes legitimate—something so much a part of the nature of things that we do not question it. To extend this legitimacy to the nation, or to its political and economic system, all that has to be done is to show that the nation does a decent job of fostering technology. Like legitimating a regime as “defender of the faith,” America gains legitimacy from technology by proving itself a worthy supporter of what must by all indications be sacred.

In the past, dominant modes of societal legitimation have never existed simply as belief systems. They have consisted of vast networks of organizations, resources, and power relations. The doctrine of religious universalism in the Middle Ages, for example, made sense when it was used to legitimate dynastic claims and great monarchies because it was firmly grounded in the very fiber of community life, from the rituals governing peasant production, to the status hierarchies imposed on the production of culture. The marketing mind of the nineteenth century may have been compelling, if Polanyi’s thesis is correct, by virtue of the subtle fallacy of logic on which it was based. But it was also rooted in trading empires and foreign relations and the very system of creating wealth. So it is today with technology.

Scientific technology is increasingly produced, diffused, and administered through complex networks of organizations that function as technical systems. These webs of interlocking organizations, oriented toward

such technical problems as cancer research or chemical warfare, employ thousands of persons with advanced technical educations, consume millions of dollars of public and private funds, and necessarily involve the state in a close alliance with industry and universities.<sup>50</sup> As such, they provide a natural bridge between perceptions of technology and images of the modern state. Science historian Langdon Winner writes, "It is no surprise . . . that technical systems of various kinds are deeply interwoven in the conditions of modern politics. The physical arrangements of industrial production, warfare, communications, and the like have fundamentally changed the exercise of power and the experience of citizenship."<sup>51</sup>

For advanced industrial societies, technology is of course increasingly recognized as a key determinant of their position in the world economy. Leaders of these countries, meeting for summit talks in Versailles in 1982, for example, agreed on the necessity of greater expenditures for science and technology for the welfare of all industrialized nations.<sup>52</sup> In 1984 alone France mounted a massive program to remain competitive in such potentially lucrative fields as biotechnology and telecommunications; Britain launched a program to increase its labor force's capacity "to cope with, and use effectively, the new technologies which pervade all branches of economic activity"; Quebec announced a major new technological thrust that would increase levels of funding for programs in engineering; and Japan declared as official government policy its intention of shifting from a "trade-oriented state" to a "technology-oriented state."<sup>53</sup>

Responding to these initiatives, educators in Europe and Japan, as well as in the United States, have increasingly called for a renewed emphasis on teaching science and technology, often at the expense of programs in the humanities and at the cost of introducing a new element of utilitarianism into the educational system as a whole.<sup>54</sup> What distinguishes these proposals is not their interest in science as such, but the new sense of practical economic urgency with which they are advanced. Kenneth Prewitz of the Social Science Research Council has observed, "In an earlier era, discussions of scientific literacy focused more often than not on whether nonscientists could achieve an aesthetic appreciation of the complexity, beauty, order, and ever-deepening mystery of science." But now, he suggests, "the major issue in the current clamor . . . is about the technical skill-level of U.S. workers."<sup>55</sup>

Along with other industrialized nations, the United States has come to depend heavily on high technology for its competitive edge in the world economy. The reality of this dependence was underscored by President Reagan in a 1982 memo to members of Congress:

Science and technology are essential to the accomplishment of the goals of this Administration and the needs of the American people for jobs, enhanced national security, increased international competitiveness, and better health and quality of life. The continued advancement of both theoretical and applied scientific knowledge is of vital importance to continued human progress and the resolution of the complex problems facing the world in the years ahead.<sup>56</sup>

By the following spring, more than 200 bills aimed at encouraging technological growth were pending before Congress.<sup>57</sup>

In international trade the rising U.S. dependence on technology has been signaled by the fact that between 1960 and 1980 the U.S. trade balance in products requiring intensive R & D rose from a surplus of \$5.9 billion to a surplus of \$52.4 billion. Over the same period, trade in other manufactured products slipped from a net deficit of \$0.2 billion to a deficit of \$33.5 billion. As of 1980, U.S. exports of high-technology goods exceeded imports by a ratio of two to one.<sup>58</sup> Robert Reich notes that the United States will have to move yet further into high-technology areas in the future in order to maintain its competitive advantage. Precision castings, specialty steel, special chemicals, sensing devices, fiber-optic cable, fine ceramics, lasers, large-scale integrated circuits, and advanced aircraft engines represent, in his view, the major industries that can make use of America's lead in precision engineering and that can be counted on to remain secure against low-wage competition from developing countries.<sup>59</sup>

The United States can rightly be regarded as a world leader in the production of science and technology, not only for economic purposes, but also for symbolic purposes. According to the 1983 report of the National Science Board, the United States had more scientists and engineers relative to the total labor force than any other industrialized country. Given the total size of its labor force, this meant that the nation had by far the largest pool of scientists and engineers in the world—more than double the size of its nearest competitor (Japan). The same report also indicated that the United States spent more money on R & D than any of its allies, devoted one of the highest percentages of its GNP to R & D, derived one of the largest shares of R & D funds from taxes, devoted one of the largest percentages of business domestic product to industrial R & D, and alone produced more than one-third of all scientific and technical articles in the world. Since World War II, the United States has been the recipient of more than 100 Nobel prizes in science, three times as many as its nearest competitor (the United Kingdom), and more than a dozen times as many

as the Soviet Union.<sup>60</sup> Indeed, the United States has led other countries in nearly all categories of scientific and technological output.<sup>61</sup>

#### MORE OBJECTIVE THAN GOD

In view of these accomplishments it is not surprising that much of America's myth about itself and about its position in the world has come to involve science and technology. Sociologist Robert Nisbet writes, "Technology for many Americans is not simply a good thing; it is in its way millennialist, offering happiness beyond earlier dreams to the world, and with America leading the way."<sup>62</sup>

Technological accomplishments reaffirm our sense that we are a special people and that we have something special to offer the world. As contributors to these accomplishments, we convince ourselves that civilization is progressing and that we are leaders in creating this progress. Science and technology provide us with a sense of destiny and give us, in political scientist Sheldon Wolin's words, "objective proof for the existence of progress"—proof which in his opinion is "certainly more objective than Anselm was able to give for the existence of God."<sup>63</sup>

There is, indeed, a kind of mythic quality about science to which we link ourselves as a nation when we view such "advances" as space launches, mechanical heart transplants, and the latest generation of American-produced home computers. Science mythologically connects us, not with the past as mythology has done traditionally, but with the future. It is through science and technology that we see ourselves drawn toward some inevitable, yet mysterious, future. The advance of technology seems to us predetermined, relentlessly leading us toward some goal that it, not we, has established. As historian Daniel Boorstin points out, "We feel the surprises, the discoveries themselves, are somehow the work not of men and women but of the machines."<sup>64</sup>

Opinion polls uniformly demonstrate that the public's faith in science and technology is incomparably strong. To many people, technology seems to be the key to America's greatness. A 1979 Harris survey asked, "What will make a major contribution to America's greatness in the next 25 years?" Leading the list of responses were "scientific research" (mentioned by 89 percent of the respondents) and "technological genius" (73 percent). In comparison, only 57 percent selected "deep religious beliefs," 31 percent mentioned "government spending for social programs," and 24 percent listed "welcoming refugees from the world."<sup>65</sup> Another national survey in 1979 asked people to mention two factors "that contribute the most to U.S. influence in the world." At the top of the list was "our technological know-how" (46 percent); another 22 percent men-

tioned "our scientific creativity"; whereas, by comparison, only 15 percent mentioned the nation's "religious heritage."<sup>66</sup>

The same survey asked people whether they thought the "benefits of scientific research outweigh its harms" or whether the harms outweighed the benefits. By a margin of 70 percent to 11 percent, respondents opted for the benefits outweighing the harms (this percentage rose to 87 percent among college graduates). A slightly different wording of the question in another survey a year before also demonstrated overwhelming faith in science and technology: 60 percent thought science and technology had done more good than harm for the country, 28 percent thought the good and harm were about equal, while only 5 percent thought the harm was greater than the good.<sup>67</sup> This question was repeated in 1980 and 1982, again showing about two-thirds of the public with favorable attitudes toward technology versus fewer than 5 percent with negative attitudes.<sup>68</sup> Americans' confidence in scientific technology, indeed, seems to be more widespread than in any other Western industrialized country. In a 1981 cross-national study of 13 western European countries, for example, respondents were about 1.6 times more likely to say that scientific advances were helping rather than harming mankind; in the United States, respondents were about 3.6 times more likely to give this answer.<sup>69</sup> Another type of question also illustrated the high degree of faith attached to technology by the American public. Asked in annual Roper polls since 1973 to select the leading causes of problems in America, fewer than one in ten persons in any of the surveys selected "too much technology." Indeed, this response always ranked at the bottom of the 12 causes included in the list.<sup>70</sup> In contrast, a different survey asked people to indicate what was helping the nation's economy grow: here, leading the list of 13 items, was "the current state of American technology, know-how, and innovation."<sup>71</sup>

One of the interesting features of the American faith in technology is that this faith seems to be virtually immune to criticism or to doubts that might arise from the risks accompanying technology. For example, the accident in 1979 at the nuclear reactor located on Three Mile Island near Harrisburg, Pennsylvania, seems to have had little impact on the public's attitudes toward technology. Relatively stable responses to questions about technology, such as those just cited, were reported both before and after the incident. Indeed, even attitudes toward nuclear power were little affected, despite massive changes in government policy which greatly restricted the growth of the nuclear power industry. One year before the Three Mile Island incident a Harris survey found that 55 percent of the public favored building more nuclear power plants in the United States; an identical survey conducted a month after the incident showed that this figure had declined only to 52 percent.<sup>72</sup>

Technology also seems to play a valuable role in legitimating American business. Despite the cynicism many people express toward business leaders, particularly with reference to problems of selfishness, corruption, and dishonesty, they nevertheless willingly justify high profits in business on the grounds that such profits are necessary in order to keep technology moving forward. For example, 50 percent of the public in a 1978 survey, when asked what would happen if businesses failed to make high profits, agreed that "the American economy will lose its place as a technological leader in the world."<sup>73</sup>

Again, the international dimension figures importantly in Americans' assessments of their technology. At a time when it no longer remains as clear that Americans work harder than people in other countries, and when there is nagging doubt about the nature of the American economy, Americans still take comfort in the fact that they are "number one" in technology.<sup>74</sup> In a 1982 survey respondents were asked to indicate which of five countries—the United States, France, West Germany, England, or Japan—ranked highest on a number of dimensions. The one dimension on which Americans ranked their own country highest was "the most advanced technology." By comparison, America was ranked inferior, especially to Japan, on every other dimension, such as having "the hardest working employees," "workers having the most pride in their work," and "the highest quality products."<sup>75</sup>

With attitudes like these among the general public, it is not surprising to find public leaders drawing frequently on the technological myth to legitimate America and its way of life. This seems to be a favorite theme in patriotic speeches by national leaders. For example, Admiral James Watkins concluded an address in 1983 by asserting, "America has always prided itself in its ability to research, develop and effectively employ new concepts, being in the forefront of applied scientific advancement. This has been a national strength and has helped maintain us as leader of the western world and defender of freedom."<sup>76</sup> Employing similar rhetoric, U.S. Air Force Chief of Staff Charles Gabriel remarked in a public address, "We depend on the high quality of our people and on superior training, tactics, and technology to give us the critical edge in combat. We will hold onto this edge . . . through the dedication of our people, and through our determination to exploit technological change to its fullest."<sup>77</sup>

Such rhetoric appears to play an especially prominent role when American leaders find themselves addressing international audiences. In a 1982 address to the General Assembly of the United Nations, Secretary of State George Shultz proclaimed:

Historians in the future will surely marvel over the accomplishments achieved by human beings in the last half of this century. We have expanded the frontiers of thought—in science, biology, and engineering; in painting, music, and mathematics; in technology and architecture—far beyond the point anyone could have dared predict, much less hoped for. We know much today about the oceans and forests and the geological strata that lock in the story of our past. We know more about a baby—or the brain—than was accumulated in 10 millennia before our time. We are learning to produce food for all of us; we are no longer helpless before the threat of disease; we explore our universe as a matter of course. We are confronting the nature of nature itself.<sup>78</sup>

For Shultz, the editorial "we" only dimly masked the message that it was the United States, not the community of nations as a whole, that was responsible for these feats. As he pointed out, the fact that Americans were "a practical and pragmatic people" was chiefly responsible for their great strides in technology.

If public leaders have been quick to exploit America's technological leadership for symbolic advantage, leaders of business have been no less eager to demonstrate their place in this symbolic universe. Through advertising and slogans, as well as public addresses, businesses utilize the technological myth to legitimate their nation, the American economic system as a whole, and their specific role in the American system. From slogans like "Technology is creating tomorrow. You can invest in tomorrow . . . today" (a mutual fund advertisement), to "Geel No, GREI" (a slogan for an advanced technology firm), or the familiar, if dated, "Better living through chemistry," Americans are taught that technology is good, and that American business is good because it is the source of technology. Nothing, it seems, sells quite as well as science and technology—automobile tires are marketed as "high-tech" radials; even toothpaste is "scientifically formulated." As one corporate executive admitted, "Happily, the majority of Americans eventually board the technology train, either as passengers enjoying the convenience of the ride or as informed travelers who have some notion of where the train is headed."<sup>79</sup>

Increasingly, technology is presented in commercial advertising both as the source of a good life and as the solution to the nation's economic problems. "Like a talisman," remarked a *Business Week* editorial, "high tech is being called on to spawn new industries to meet ever stiffening foreign competition, revitalize decaying smokestack industries, and put . . . workers back on the job."<sup>80</sup>

The distinction that frequently becomes blurred in public rhetoric

about technology is the distinction between ethos (a norm or means) and worldview (an end in itself). As ethos, technology may be regarded as a mere methodology or necessary means for achieving other desired ends; as worldview, technology becomes a set of limiting assumptions which shapes the choice of ends itself. The reason this distinction becomes blurred in public discourse is that higher values are almost always given tacit recognition as justifications for the advancement of technology—to achieve world peace, promote national security, make life easier, discover more about the nature of nature, etc. But the reasons for selecting precisely these values are generally left unspecified, as are the exact connections between particular technological proposals and their implicit objectives. Consequently, it is seldom clear that the more general values were not selected only because they seemed compatible with available technologies; nor is it possible to know whether full consideration was given to alternative means.

The mythologization of technology, therefore, comes at the point when a full range of public values cannot be seriously debated because technical considerations have already ruled some of them out. The problem is not inherent in the nature of technology itself, nor in the expanded role which technology has come to play in modern societies. Technology becomes increasingly prominent as a legitimating myth because the expansion of the technological infrastructure makes it more difficult for public discourse to remain truly open to a full range of intrinsic values.

Apart from the purely logical problem of confusing ethos and worldview, technology is also amenable to ideological exploitation because it corresponds so well with the nature of the modern bureaucratic state. To the degree that the bureaucratic state needs to be reconciled with the ideal of a free market economy in order to enjoy legitimacy, this reconciliation is quite commonly achieved by pointing to the state's activities in the realm of science and technology. Promoting research and development can be deemed a legitimate activity of the bureaucratic state since such projects frequently require expenditures on too large a scale to be accomplished through private investment, and since many R & D programs fall into the category of "collective goods" from which the entire public presumably benefits (e.g., defense, medicine, space, communication). Yet the benefits of R & D programs are also widely regarded as having broadly positive effects, as knowledge is disseminated, for the private sector as well. Programs that might otherwise be met with skepticism, therefore, can be sold—and in turn heralded as signals of proper governmental responsibility—by locating them within the category of "technological advancement."

What gives technology much of its legitimating power, in addition to the fact that each new discovery seems to dramatize its worth, is that its

development is portrayed as being inevitable. We cannot go back. Technology has become our destiny. "The door . . . has been opened and it could no more be slammed shut than could the doors opened by Gutenberg's printing press, Galileo's telescope, Fulton's steam engine or the Wright Brothers' first flight," says a NASA administrator.<sup>81</sup> "The clock cannot be turned back," echoes the chairman of one of the nation's largest banks.<sup>82</sup> Or, as one historian of technology warns, writing from a more analytical perspective, "Technological development has come to be viewed as an autonomous thing, beyond politics and society, with a destiny of its own which must become our destiny too."<sup>83</sup>

The relationship presumed to exist between technology and science further tends to reinforce the belief that technological development is inevitable. Our approach to technology is different from our approach to the arts, philosophy, or even religion. The determining factor in these other areas seems increasingly to be personal preference—the arbitrary expression of taste, choice, and the particular values to which one has been socialized. Technology, in contrast, seems to depend on the laws of nature uncovered by science.<sup>84</sup> It is these discoveries that make technology possible, we convince ourselves; and then, by a curious feat of logic, we conclude that knowledge discovered must inevitably lead to new technology.<sup>85</sup> Even technology which on the surface seems foolish or undesirable must be developed because "if we don't, someone else will."

Frequently, the inevitability of technology becomes a self-legitimating ideology which, as Habermas has cautioned, creates a kind of "technical reason" which limits our ability to think about social problems except in the terms set by technology.<sup>86</sup> Does technology cause pollution, safety hazards, health risks, and other side effects? If so, "only technology itself," responds the president of another large corporation, "can save us from the undesirable side effects."<sup>87</sup> This logic is what critics of technology have termed the technological fix: "an attempt to answer a social or human problem using technological devices or systems without any attempt to modify or alter the underlying social or human problem."<sup>88</sup> Is there economic injustice? Then use technology to expand the availability of goods rather than attempting to redistribute wealth. Is there conflict among nations? Then develop ever more destructive weapons so that their very destructiveness will (we hope) serve as a deterrent.

The technological fix appears to be fairly much a part of public policy and public opinion. Policy makers frequently appear to rely on technological solutions to redress social ills, rather than engaging in serious debate about deeper values of peace, justice, equity, and well-being. What they perhaps realize intuitively is that public confidence in scientists and scientific research can nearly always be counted on for support.<sup>89</sup> Policy makers' decisions, in turn, educate the public to look first, if not only, to

In a subtle, but perhaps important, way technology has, therefore, become linked with that most fundamental value—freedom—on which Americans rely to legitimate their way of life. If the marketplace gradually redefined freedom to mean freedom of choice, technology now begins to replace the marketplace as the main source of that kind of freedom. Not simply the modern supermarket, with its panoply of choices, but the Electronic Candy Store, filled with word processors and software, becomes the symbol of our expanded freedom to choose.

This is not to suggest that technology can operate effectively without the market. But increasingly it is not the market as such, but technology, that is recognized as the dynamo driving the American economic system. According to former science policy advisor Harvey Brooks, "Technology is not demanded by the market. The market really does not demand anything that does not exist, and so the market really only begins to act after the technology exists."<sup>93</sup> Or as one corporation chairman predicts, "The victories which we have to win in the marketplace of the 1980s and beyond are victories which will be won in the laboratories and testing grounds of American science and technology."<sup>94</sup>

Finally, as if to complete the picture, technology has like other legitimating institutions in the past begun to create its own version of the self—"technological man"—who finds his way of life legitimate because his very identity has been shaped by that way of life. In his book *Technological Man*, Victor Ferkiss argues that it is high time we simply made peace with technology and consciously adopted this new identity. Our concept of self should, he suggests, incorporate a new naturalism, a new holism, and a new immanentism. With the new naturalism we become part of the natural world, equal with it and its technological creations. With the new holism we become more aware of our dependence on nature and technology. Conceived of as parts of a natural process or system, our lives take on meaning only as parts of that system. With the new immanentism we come to believe that life is ultimately not governed by some creator-god outside the natural world, but by forces within the system of nature itself. "Technological man," he says, "must so internalize these ideas and make them so much a part of his instinctive world view that they inform his personal, political and cultural life."<sup>95</sup>

Ferkiss's notion of what it will take to reconcile ourselves fully with technology may seem extreme. Yet it in part represents the kind of self-identity that other writers have suggested is already characteristic of many in the technological society. Scientists N. Bruce Hannay and Robert McGinn observe that "modern technology has increasingly become an important source of personal identity and self-esteem." In their opinion, "religion, race, class, sex, and nationality [have] become progressively less able to serve that function in achievement-oriented, post-traditional

technological options.<sup>90</sup> Judging from a 1982 poll of high school seniors, nearly two of every three young persons now believes that "when things get tough enough, we'll put our minds to it and find a technological solution." This proportion represented an increase from only a bare majority who felt this way in the mid-1970s.<sup>91</sup>

#### THE AVENUE TO FREEDOM

Somewhat ironically, given its apparent inevitability, technology is also widely portrayed as the avenue to enhanced freedom, acting both directly and indirectly. Directly, it creates new choices, new possibilities that previously seemed unthinkable—new gadgets, new amusements, new defense systems, new health possibilities, new industries, and new kinds of jobs. We have only to make decisions among the many opportunities set before us. Technology also seems to enhance freedom because it requires, as well as contributes to, knowledge—one of the bases classically thought necessary for true freedom. By this logic, America's technological contributions mean that it is apparently a society which is free and therefore fosters knowledge and creativity. Indirectly, technology enhances freedom, if by default, because it seems so utterly indifferent or neutral to the kinds of freedoms that the individual enjoys. "He can listen to the music he likes," writes social philosopher Jacques Ellul, "dress as he likes, take on completely aberrant religious beliefs or moral attitudes; none of these things challenge the technological system."<sup>92</sup> In other words, technology does not limit our freedom; its development is not contingent on certain life styles or choices—or so it seems.

Once the meaning of freedom has become restricted to the idea of choice, then technology becomes the obvious means of maintaining and expanding our freedom. The images of freedom portrayed on television and reported in the newspapers invariably imply that freedom is ours because we have been given new options by technology: freedom to communicate warmth to loved ones—via the wonders of ITT long-distance fiber optic technology; freedom to range the open countryside where all cares fade into a glorious sunset—in a new Datsun ZX Turbo; freedom to enjoy life longer despite heart disease—just around the corner due to the generosity of Humana's mechanical heart research program; freedom now to give every woman the "right to choose"—by supporting access to abortion technologies; freedom at last from the terrible fear of nuclear holocaust—by spending \$24 billion on "star wars" research. Like the historic connections once seen between "liberty" and the American and French revolutions, now freedom is symbolized by the computer revolution, the information revolution, the medical technology revolution, and the video revolution.

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society." Consequently, "the items of technology an individual possesses and in which he or she is reflected have, along with work, become increasingly important sources of identity."<sup>96</sup> More critically, another writer concludes, "It is not facetious to call our system of technologically stimulated production and consumption a religion. An economic process defines for millions of Americans what it is to be truly human, what the meaning of life is, how to avoid guilt."<sup>97</sup>

#### ETERNAL PASSION AND ETERNAL CRIME

How effective technology will be in legitimating America to the world obviously remains to be seen. Certainly it is a legitimating myth that differs substantially in content from traditional civil religion, or from the pragmatism and emphasis on freedom in America's secular ideology of the past. But like those earlier myths it contains a sense of continuity with the past, a link with destiny and freedom, and a sense of pride in America's position in the world that seem to be potentially persuasive.

The economic importance of technology to the American way of life seems already to be an established fact. What a greater acceptance of the technological myth may accomplish is, as Ferkiss suggests, more willing acceptance of that reality. Once technology comes fully to be accepted not only as an economic fact, but also as a desirable state of affairs, we may be in a better position to make the sacrifices it will inevitably require of us—to become better technicians, to spend our leisure time enjoying the particular pleasures it provides, to devote our surplus income to purchasing its products, to reshape our educational institutions in a way that keeps us ahead of foreign competition in the technological race, and to mold our children to become better at math and engineering and to enjoy the aesthetics of a well-constructed bridge more than a classical work of art.

Still, the suspicion cannot be entirely avoided that our freedom as a people may ultimately depend more on maintaining a critical perspective toward technology than on accepting it completely as our guiding myth. At the Amsterdam World Assembly of Churches, held in the immediate aftermath of World War II to consider how churches of all denominations could cooperate in rebuilding a stable world order, technology was identified as one of the most likely sources of social *disorder* in the years ahead. The assembled delegates acknowledged technology's potential for alleviating poverty and creating a better infrastructure for communication among the nations. But they also cautioned of the dangers implicit in accepting it too uncritically: "There is no inescapable necessity for society to succumb to undirected developments of technology, and the Christian

church has an urgent responsibility today to help men achieve fuller personal life within the technical society."<sup>98</sup>

Critics, even in high places in the political and scientific establishments, have continued to sound the alarm that America may be sacrificing its birthright of freedom and integrity for a mess of technological pottage. Senior White House advisor John McLaughry, for example, has cautioned that "a narrow scientific vision that ignores the holism of human life, the considerations of ecology, and matters not susceptible to empirical measurement is a limiting and potentially destructive way to approach economic and technological questions."<sup>99</sup> Similarly, David F. Noble, curator of the Smithsonian Institution and historian of American technology, has suggested that the view which regards technology as the only means of achieving progress is in reality "a bizarre and relatively recent Western notion invented to disarm critics of capitalism."<sup>100</sup>

But such voices represent only a minority and appear to have grown fainter as time has gone by. At the dawn of the industrial era, workers optimistically joined the ranks of Luddite machine-wreckers in hopes of regaining some control over the world they had lost.<sup>101</sup> Today, Luddites exist only in the imagination of their novelist creators, appealing to the modern ambivalence toward technology in a way that roams safely within the bounds of fantasy. Like Edward Abbey's "monkey-wrench gang," they win symbolic victories in fanciful acts of high-tech vandalism, but ultimately fail to stand in the way of technological change.<sup>102</sup> At a fundamental level, the ability to offer critical opposition to technology is similarly impaired because, as Noble points out, the opposition "suffers from a fatalistic and futuristic confusion about the nature of technological development." Moreover, he suggests, this confusion "is rooted in, and reinforced by, the political and ideological subordination of people at the point of production, the locus of technological development."<sup>103</sup>

The tendency to legitimate America—to seek ideological security in an increasingly complex and uncertain world—by avowing the urgency of technology and exaggerating the importance of America's lead in its development promises only to deepen its mythological effects. The ambivalence that is perhaps an inevitable consequence of a force as powerful as technology can lead, under favorable conditions, to a balance between love and hatred, between adulation and fear. It can temper material dependence on technology with a cultural distance which preserves the capacity to raise critical questions about its uses and direction. But the ideological exploitation of technology to justify economic programs and to regain a sense of euphoria about the nation's supremacy in the world threatens radically to undermine that critical balance. Given thoughtful guidance, technology can serve as a valuable tool; given license for its own excesses, it can become an awesome master.