Of all the problems confronting humankind during the last quarter of the twentieth century, none is more significant or urgent than the mass killing of defenseless citizens by human beings acting as agents of, or with the tolerance of, their governments.

This chapter seeks to contribute to greater understanding of this problem by comparatively analyzing two major types of state-sanctioned mass killing—genocide and total war. Since several of the other chapters in this volume address definitions, causes, and examples of genocide, the focus here is on the phenomenon of total war. Then a preliminary analysis of differences and similarities between the two types of mass killing is offered. The central thesis of this chapter is that there are important similarities between the two types. Specifically, it is suggested that ideology, bureaucracy, and technology play comparable facilitating roles in both genocide and total war. Finally, tentative lessons from this analysis of mass killing in the past and present are drawn in order to shed light on the seemingly inexorable momentum toward nuclear war.

Humankind has been afflicted by the problem of mass killing since early prehistory. Archeologists have discovered indications that lethal conflict among groups of human beings may have originated as early as a million to a half-million years ago. As an organized social institution, however, warfare is a relatively recent development. According to Arnold Toynbee, the institution of war did not emerge until approximately 5,000 years ago, in the lands of what are now Iraq and Egypt.
Since that time, the human and material costs of war have tended to increase steadily, despite some temporary respites. In his survey of warfare from the end of the fifteenth century through the early 1960s, Quincy Wright notes: "War has during the last four centuries tended to involve a larger proportion of the belligerent states' population and resources and, while less frequent, to be more intense, more extended, and more costly. It has tended to be less functional, less intentional, less directable, and less legal."3

It is perhaps not surprising, therefore, that an unflinching review of past centuries—with their mounting death tolls from wars, revolutions, massacres, as well as famine and disease resulting from human malevolence and negligence—led William James in his celebrated 1910 essay, "The Moral Equivalent of War," to conclude that "history is a bath of blood."4

However, a number of analysts have concluded that the number of human beings deliberately killed by other human beings during the twentieth century is far greater than for any other equivalent period of time in history. The "bath of blood" that James discovered in his study of many past centuries has become a veritable ocean of blood in just a few decades.

For example, Pitirim Sorokin, in his study of wars from the twelfth to the twentieth centuries (which was published in 1937, two years before World War II began), calculated war casualties in relation to the populations of the combatant nations and concluded:

If we take the relative indicators of the casualties, probably the most important criterion of war, they tell definitely and unequivocally that the curse or privilege to be the most devastating or most bloody war century belongs to the twentieth; in one quarter century, it imposed upon the population a "blood tribute" far greater than that imposed by any of the whole centuries compared.5

The most detailed and comprehensive attempt to identify those killed by their fellow human beings during the twentieth century is British sociologist Gil Elliot's Twentieth Century Book of the Dead, published in 1972. On the basis of his carefully documented review of historical sources, Elliot estimates that there have been approximately 100 million "man-made" deaths during the first three-quarters of this century. Elliot asserts: "It is possible—in my view certain—that in a future perspective this explosion of human lives will be seen as the significant 'history' of this period."6

But even more ominously, the most powerful nations on the planet are currently devoting prodigious resources to the preparations for the ultimate mass killing project—nuclear holocaust. The United States and the Soviet Union are each annually spending billions of dollars to
maintain and expand their nuclear arsenals. At present, these arsenals combined contain approximately fifty thousand nuclear warheads with a collective explosive force equivalent to more than 3.5 tons of high explosive for each of the 4.5 billion people on earth.\(^7\) Current plans for both nations call for adding thousands of new warheads to their arsenals during the next decade. While the United States and the Soviet Union are increasing their stockpiles of weapons of mass destruction, the other nuclear-armed nations, like Great Britain, France, and China, are also making additions and refinements in their nuclear arsenals, while several nations without nuclear weapons are struggling to acquire them.\(^8\)

If even a small portion of current arsenals is actually used in a nuclear war, the ensuing holocaust will dwarf the worst atrocities of history. A recent World Health Organization study, for example, concluded that a nuclear war fought with about one-half of present arsenals could result in 1 billion prompt deaths and an additional 1 billion serious injuries, most of which would eventually result in death due to lack of medical care, the effects of radiation exposure, shortages of food, and other lethal after effects of the initial carnage and destruction.

To these findings must be added those from recent studies of the possible climatic and long-term biological consequences of nuclear war. Among the most shocking is the possibility that the detonation of even a very small portion of existing arsenals (as few as 1,000 of the 50,000 warheads) could produce a so-called nuclear winter, which would entail plunging temperatures and a pall of darkness resulting from smoke and other atmospheric pollution generated by fires. This nuclear winter could spread across the entire Northern Hemisphere and last for months.\(^9\) So grave could these and other consequences of nuclear war be that the researchers concluded:

Combined with the direct casualties of over 1 billion people, the combined intermediate and long-term effects of nuclear war suggest that eventually there might be no human survivors in the Northern Hemisphere.\(\ldots\) In any large-scale nuclear exchange between the superpowers, global environmental changes sufficient to cause the extinction of a major fraction of plant and animal species on Earth are likely.\(\ldots\) In that event, the possibility of the extinction of Homo Sapiens cannot be excluded.\(^10\)

In view of the terrible toll of human lives due to governmental mass killing in the past, the present, and, very possibly, the future, one might expect that a life-affirming species would have mounted a massive effort to confront and reduce this problem. Unfortunately, such a massive effort has not yet been made. Despite the vital contributions of a number of individuals and organizations, the attention and energy devoted to understanding and preventing state-sanctioned mass killing have been negligible when compared with the scale and urgency of the problem.\(^11\)
Avoiding this disturbing topic may well assure peace of mind and contentment with the status quo over the short term. On the other hand, such avoidance may also serve to encourage the social forces favoring continued reliance on mass killing as an acceptable tool of national security and thus increase the risk that government leaders may resort to mass killing in the future. If that mass killing takes the form of nuclear war, then the final price of short-term peace of mind will be oblivion.

GENOCIDE

Although the wholesale destruction of groups of human beings has been practiced for millennia, the concept of genocide, which depicts certain forms of such destruction, has been in existence for less than fifty years. The term was coined by Raphael Lemkin, a Polish emigré to London who lost seventy members of his family to the Holocaust. In 1943, he wrote *Axis Rule in Occupied Europe*, one of the earliest and most comprehensive accounts of Nazi persecutions of the Jews and other citizens of occupied nations. It was in this book that he introduced the term "genocide," which he derived from the Greek word *genos*, meaning race or tribe, and the Latin word *cide*, meaning killing. According to Lemkin, "By 'genocide' we mean the destruction of a nation or of an ethnic group."12

Thanks in large part to Lemkin's indefatigable lobbying efforts, on December 9, 1948, the General Assembly of the United Nations unanimously adopted the Convention on the Prevention and Punishment of the Crime of Genocide. The Convention listed specific actions which constitute the crime of genocide. Article 2 states:

In the present Convention, genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:
(a) Killing members of the group;
(b) Causing serious bodily or mental harm to members of the group;
(c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
(d) Imposing measures intended to prevent births within the group;
(e) Forcibly transferring children of the group to another group.13

More recent analysts of genocide have incorporated features of the U.N. Convention in their own definition while at the same time criticizing its limitations. Leo Kuper, for example, states that "genocide ... is a crime against a collectivity, taking the form of massive slaughter, and carried out with explicit intent."14 He notes also that "genocide is pre-eminently a government crime."15 However, Kuper
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also questions the Convention for its exclusion of political groups from among those protected. Such an omission leaves out such cases as the murder of tens of millions of Soviet citizens under the Stalinist regime and the extermination of millions of their own citizens by the Khmer Rouge forces in Cambodia during the 1970s.16

Likewise, Irving Louis Horowitz defines genocide as "a special form of murder: state-sanctioned liquidation against a collective group, without regard to whether an individual has committed any specific and punishable transgression."17 Horowitz goes beyond the "standard" type of deliberate, intentional mass killing to include "one shadowy area of genocide that permits the state to take lives by indirection, for example by virtue of benign neglect, or death due to demographic causes."18

A final contemporary definition is provided by Vahakn Dadrian, who defines genocide as "the successful attempt by a dominant group, vested with formal authority and/or with preponderant access to the overall resources of power, to reduce by coercion or lethal violence the number of a minority group whose ultimate extermination is held desirable and useful and whose respective vulnerability is a major factor contributing to the decision of genocide."19 As will be discussed below, Dadrian includes a wide range of actions within his definition, including military activities that cause high casualty levels among civilians, even if the targeting of the civilians is not deliberate.20

Despite inconsistencies evident among these and other definitions of genocide, and despite disagreements among analysts regarding whether or not particular cases of mass killing constitute genocide, there does appear to be a strong consensus on several crucial features of genocidal acts.

First, genocide is undertaken by and for governments. The official ruling elite of a sovereign state either undertakes a deliberate campaign of intentional extermination; permits subnational groups to slaughter other subnational groups; or implements (or tolerates) practices that result in mass deaths among members of certain groups, even if such deaths are not the explicit policy objective.21

Second, the individual identity of the victims is in general irrelevant, as are distinctions among sex and age. What concerns the state is that the individual belongs to the group targeted for destruction. A wide range of groups has been targeted throughout history, including racial, ethnic, and religious groups; the mentally handicapped; homosexuals; citizens of enemy nations; and members of political groups. The vast majority of victims of genocide have been civilians.

Third, while the methods employed vary considerably, direct mass killing is the most characteristic form of genocidal destruction, although many additional deaths have resulted from hunger, disease, and other sequelae of direct killing and the destruction of resources necessary for survival.
Like the concept of genocide, the concept of total war encompasses a wide range of cases and subsumes a number of components. Two features of total war—a high degree of societal mobilization for war and an extremely high level of death and destruction—have been emphasized in most definitions and analyses of this type of mass killing. In considering the destructiveness of total war, most commentators note the tendency to deliberately attack noncombatant citizens of the enemy nation or group. Moreover, the direct or indirect participation of the entire nation in the war, combined with the targeting of civilians, tends to result in wars in which the very survival of one or more of the belligerents is at stake. Thus, strategist Edward Luttwak defines total war as "a war in which at least one party perceives a threat to its survival and in which all available weapons are used and the distinction between 'military' and 'civilian' targets is almost completely ignored." No recent war, even World Wars I and II, has been completely "total" in the sense that literally all of the available resources of the combatant nations have been devoted to the conflict or that the destruction of the enemy has been complete. (However, as noted above, a nuclear war could conceivably result in the latter condition, not only for the belligerents, but for uninvolved nations as well.) In practice, the concept of total war applies to conflicts in which either or both of these conditions—societal mobilization and destructiveness—exist to extreme degrees. As Frederick Sallagar notes, "What characterizes an all-out, or total, war is that it is fought for such high stakes that the belligerents are willing, or compelled, to employ, not all weapons they possess, but any weapons they consider appropriate and advantageous to them." Throughout human history, many wars have been characterized by one or both of the features now associated with the concept of total war. As J. F. C. Fuller notes in The Conduct of War, 1789-1961, "Primitive tribes are armed hordes, in which every man is a warrior, and because the entire tribe engages in war, warfare is total." The price of defeat in such conflicts was not simply the concession of territory to the victor, but the mass slaughter of the vanquished, with the possible exception of those dragged off into slavery. Religious wars have often been total wars. Edwin Corwin, noting that most people think of total war in terms of extreme degrees of ruthlessness, observes: "While the phrase itself is of recent coinage, total war in this primary sense is at least as old as recorded history and enjoys, at times, the most exalted sanction." To illustrate his point, Corwin cites a passage from the Bible, in Deuteronomy 20: "Of the cities of these people, which the Lord thy God doth give thee for an inheritance, thou shalt save nothing alive that breatheth: But thou shalt utterly destroy them." Subsequent wars of religion, including the Crusades, involved the
mass slaughter of noncombatants as a routine practice. Such total wars culminated in the Thirty Years' War (1618-1648) in which as many as 8 million civilians (as compared with "only" 350,000 combatants) were killed, and the destruction of property and crops was so pervasive that many survivors were reduced to cannibalism.28

In the aftermath of the Thirty Years' War, a trend toward more civilized, limited warfare developed, although there were many relapses and exceptions. For nearly 150 years, most European wars were fought between relatively small mercenary armies sponsored by absolute monarchs. Killing of noncombatants was significantly curtailed, and the casualty levels among soldiers were reduced, in part to keep the financial burden on the sponsoring monarchs as low as possible. Rather than ending in the annihilation of the loser, wars tended to end in settlements that left the structure of all societies largely intact.29

This respite from total war began to end at the close of the eighteenth century with the French Revolution, the rise of Napoleon, and the beginning of the era of wars waged between entire nations. Napoleon's chief contribution to the revival of total war was his utilization of huge armies of conscripted soldiers. However, while the scale and intensity of military conflicts increased precipitously with the advent of mass armies, the other practice of total war, deliberate mass killing of noncombatants, remained relatively constrained.

Following the final defeat of Napoleon at Waterloo in 1815, a war-weary Europe entered another period of relative peacefulness. Indeed, in his survey of warfare over the centuries, Sorokin found the overall intensity of war during the nineteenth century to have been exceptionally low.30 Nations strove to prevent and limit wars through such efforts as the Vienna Congresses which, beginning in 1815, attempted to facilitate peaceful resolution of disputes, and the Rush-Bagot Agreement of 1817, in which the United States and England agreed to limit warships on the Great Lakes. Also, as Richard Preston and Sydney Wise note in their history of warfare, the nineteenth century witnessed "the restoration of the conservative military system of the eighteenth century in place of the mass nationalistic armies of the Revolutionary era."31

Unfortunately, however, such restraints on war began to weaken during the latter half of the nineteenth century, and the twentieth century was to witness the resurgence of both aspects of total war to a degree that would compress the carnage of the Thirty Years' War into little more than a decade and multiply it severalfold.

In modern total wars, mobilization of the combatant nations is accomplished in several ways, including the conscription of citizens to serve in mass armies, the widespread use of propaganda to maintain morale and support for the war, and the calculated exploitation of the national economy in the service of the war.

Conscription results in large numbers of citizens being obliged to
leave their peacetime positions, often for the duration of the war. This can have a disruptive effect on individuals and families, and on the economy as well. In the case of the *levée en masse* imposed by the French revolutionary government in 1793, it has been noted that "the forced withdrawal of such great numbers from the normal pursuits of daily life disturbed the social economy profoundly, while the task that was put upon the depleted society of supplying and equipping such numbers aggravated the disturbance." Conscription by one belligerent generally compels the others to adopt a similar system for building up comparable forces. In the American Civil War, for example, both sides initially relied on volunteers, but the high rates of attrition required first the Confederacy and then the Union to resort to conscription.

Mass conscription has affected not only the degree to which the nation is involved in war but also the nature of warfare itself. In the case of the Napoleonic wars, casualties among combatants increased considerably in comparison with the preceding 100 years. As Fuller observes, "Conscription changed the basis of warfare. Hitherto soldiers had been costly, now they were cheap; battles had been avoided; now they were sought, and however heavy the losses, they could rapidly be made good by the muster-roll." The vastly increased size of the revolutionary French army, which grew with conscription to include 750,000 soldiers, rquired changes in administration and logistics. The army was broken up into smaller, more mobile units, and long supply lines gave way to "compulsory requisition" of shelter and food, which often entailed officially sanctioned plunder of the contested territory. Similar measures were employed by the German military forces during World War II in their campaigns against Poland and the Soviet Union.

To maintain the morale of the conscripted soldiers and the support of the citizens, government propaganda tends to be widely utilized in total wars. Such propaganda, which frequently takes the form of vilifying the enemy nation, can raise passions to the point where it becomes difficult to end wars on a basis that would promote a lasting peace. In his analysis of the Napoleonic wars of the late 1700s, Fuller emphasizes how difficult it was "for a conscripted nation—that is, a nation in arms—a nation fed on violent propaganda, to make an enduring peace. The peace treaties wrung from the vanquished were generally so unreasonable that they were no more than precarious armistices; the losers only signed them through duress, and with the full intention of repudiating them at the first opportunity."

During the same period that conscription was radically altering both the impact of warfare on society and the nature of war itself, the Industrial Revolution was moving both European society and warfare in the direction of ever greater mechanization. As Hans Speier notes, this trend necessitated "a particularly close interdependency between the armed forces and the productive forces of the nation." As the size of
armies increased, and as armies became increasingly mechanized, the number of noncombatants needed to keep the army provided with equipment and supplies increased as well. Under such conditions, much of the adult population tends to be directly or indirectly involved in supporting the war effort. The coordination of the many sectors of the economy requires greater centralization of governmental authority. "Such a gearing-in," observes Wright, "of the agricultural, industrial, and professional population to the armed forces requires a military organization of the entire society."37 Or, as stated by Raymond Aron in The Century of Total War, "the army industrializes itself, industry militarizes itself; the army absorbs the nation: the nation models itself on the army."38

Such processes tend to blur the distinctions between democratic and totalitarian forms of government. Noting the centralization of authority among all the involved nations in World War II, Marjorie Farrar suggests that "as a result institutional and ideological distinctions among the belligerents were reduced and the democratic regimes increasingly resembled their totalitarian counterparts."39

Just as industrialization decisively affected the mobilization of the society for total war, it has also had a profound impact on the second basic component of total war—the extreme levels of destruction and death affecting civilian and soldier alike. Such destructiveness reflects two trends in the era of modern total war. First, the close interdependence of the military and the economic-industrial sectors of society has created a steady expansion in the types of targets considered legitimate by military forces. Second, the long-range and highly destructive nature of modern weapons has made it difficult, if not impossible, to discriminate between noncombatants and combatants, thereby resulting in high levels of civilian casualties even when traditional "military" targets are attacked. When civilians are deliberately attacked, the death tolls are of course far higher.

The dependency of the mechanized military forces on civilian industry has meant that whole nations have become targets. As Gordon Wright observes in his analysis of World War II, "the battlefield, no longer limited or defined, was everywhere; it was occupied by civilians and soldiers alike."40

Some military policymakers, recognizing that total wars are fought between entire societies, rather than between armies, have urged and engaged in deliberate attacks against enemy civilians. During the American Civil War, for example, Union General W. T. Sherman conducted a campaign of killing and destruction against the civilians of Georgia. In World War I, although most of the fighting was confined to the battlefield, toward the end of the war the Germans began using submarines to sink civilian ships. Bombing of cities, which had begun early in the war, had steadily escalated during its course, although the armistice was
signed before its full potentialities were realized. Still, the noncombatant
death tolls were relatively low. According to Gordon Wright, civilians
accounted for only one in twenty deaths during World War I.\textsuperscript{41} By
World War II, however, such practices as the scorched earth campaign
of the Nazis and the Nazi and Allied practice of firebombing population
centers contributed to far greater overall casualty rates, especially among
civilians, who, according to Elliot, accounted for two-thirds of the
approximately 60 million deaths.\textsuperscript{42}

It should be noted that many commentators have deplored the practice
of deliberate attacks on civilians as a profound moral retrogression. In
his essay "The Morality of Obliteration Bombing," John Ford argues that
many, if not most, civilians killed in bombing raids were "innocent non-
combatants," especially children and the elderly, who made no contri-
bution to the war effort and therefore could not be regarded as legitimate
targets.\textsuperscript{43} The practice of targeting civilians for mass destruction, like
the total mobilization of the society for war, tends to narrow the gap
between democratic and totalitarian forms of government. Quincy
Wright observes that "the development of the airplane by the totalitarian
states in the twentieth century first extended their empires and then com-
pelled the democracies to adopt their techniques."\textsuperscript{44} Lewis Mumford, in
his essay "The Morals of Extermination," asserts:

By taking over this method [obliteration bombing] as a cheap substitute for
conventional warfare—cheap in soldiers' lives, costly in its expenditures of
other human lives and in the irreplaceable historic accumulations of countless
lifetimes—these democratic governments sanctioned the dehumanized tech-
niques of fascism. This was Nazidom's firmest victory and democracy's
most servile surrender.\textsuperscript{45}

**GENOCIDE AND TOTAL WAR: A PRELIMINARY COMPARISON**

Genocide and total war have consumed many tens of millions of
human lives during the twentieth century and many hundreds of millions
of lives throughout history. The preparations are now being made for a
nuclear war that could destroy billions of lives and possibly extinguish
our species.

The following comparative analysis is offered in the hope of generat-
ing insights into mass killing in the past and in the hope of increasing
understanding of the momentum toward mass killing in the present and
future. It should be emphasized that this comparison is preliminary,
tentative, and necessarily brief; it attempts to discern important differ-
ences and similarities between two ostensibly distinct types of state-sanc-
tioned mass killing. It is hoped that it will stimulate others—including
those who disagree with its findings as well as those who find them plausible—to undertake further study along these lines.

Perhaps many others share with Horowitz the assumption that "it is operationally imperative to distinguish warfare from genocide."46 One of his reasons for advocating this distinction is his belief that genocide involves mass killing in an intrastate, or domestic arena, whereas warfare involves lethal conflict between two nation-states. His decision to emphasize the distinction, he states, is "warranted by the weight of current empirical research that indicates that domestic destruction and international warring are separate dimensions of struggle." In further support, he cites political scientist R. J. Rummel: "There are no common conditions or causes of domestic and foreign conflict behavior."47

Others differentiate between genocide and warfare on moral grounds. Genocide is unequivocally evil, an entirely unjustifiable atrocity perpetrated against helpless and innocent victims by cowards who face little personal risk. On the other hand, warfare can be seen as evil or heroic, depending upon one's perspective. It has been noted above that some commentators regard the practice of bombing cities as moral retrogression. Indeed, prior to their involvement in World War II, both Great Britain and the United States issued statements condemning the practice as immoral. They expressed righteous outrage when Germany bombed such cities as Warsaw, Rotterdam, and, later, London. Both nations decried the bombing of cities as a reversion to barbarism and beneath the dignity of a democratic nation. Yet, in the course of the war, both countries—first Great Britain in Europe and then the United States in Japan—engaged in firebombing of crowded population centers on a scale far greater than the Nazis. It is perhaps noteworthy that after the war, Great Britain appeared to have second thoughts about its obliteration bombing policy; the airmen who managed to survive their extremely hazardous missions were never awarded a campaign medal, and the individual most responsible for the policy, Sir Arthur Harris, slipped into an obscurity that amounted to virtual exile.48 In contrast, Curtis LeMay, the individual most responsible for the decision to shift American bombing policy in Japan from precision attacks on military targets to the deliberate creation of vast firestorms in the highly flammable, densely populated Japanese cities, was widely touted as a hero after the war and was rewarded with the command of the elite Strategic Air Command, the nation's atomic-armed military unit.49

Another basis for distinguishing between genocide and total war is the relation between goals and means. While both phenomena utilize similar means—the production of very large numbers of dead bodies—the goals are quite different. For example, Mumford suggests that, "in principle, the extermination camps where the Nazis incinerated over six million helpless Jews were no different from the urban crematoriums our air force improvised in its attacks by napalm bombs on Tokyo. . . . Our
aims were different, but our methods were those of mankind's worst enemy." The difference in aims is crucial. The Nazis, as Michael Sherry points out in "The Slide to Total Air War," would not have stopped mass killing Jews if they had won the war; in fact, they had hopes and plans of intensifying their "Final Solution" to additional areas they might have conquered. Some scholars suggest that the ability to exterminate the Jews was among the chief motives for Nazi aggression that led to World War II. So vital was genocide as a primary goal during the war that the Nazis carried on their extermination program even at the expense of their military efforts against the Soviets and Allies. In contrast, the Allies continued their mass bombing operations only until the surrender of their enemies: as soon as their primary goal was attained, they had no reason to continue employing the means.

While these and other differences between genocide and total war support the assumption that they represent two distinct phenomena, much of the literature on mass killing is more equivocal. Even Horowitz, who was cited above as an advocate of maintaining the distinction, is inconsistent. At a later point in his pioneering study, he appears to contradict himself by suggesting that "the end of an era when formal declarations of warfare were made signifies the beginning of a new era in which the line between war and genocide becomes profoundly blurred." As an example, he cites the U.S. war in Vietnam, an undeclared war which has been alleged by some critics to have had genocidal dimensions, and by others as being a case of actual genocide. After citing arguments on both sides of the issue of whether or not the war was genocidal, Horowitz states, "the distinction between internal and foreign people who are being killed helps little, since it must be confessed that all genocidal practices involve a definition by the perpetrators of mass violence of those destroyed as outsiders." Thus, he appears to be acknowledging the existence of an important process, depersonalization of victims, that occurs in state-sanctioned mass killing in both domestic and foreign conflicts.

Likewise, Kuper, while emphasizing that the sovereign state is the main arena for genocide, refers to both conventional and atomic bombings as genocidal when he notes that:

the changing nature of warfare, with a movement to total warfare, and the technological means for instantaneous annihilation of large populations, creates a situation conducive to genocidal conflict. This potential was realized in the Second World War, when Germany employed genocide in its war for domination; but I think the term must also be applied to the atomic bombing of the Japanese cities of Hiroshima and Nagasaki by the U.S.A. and to the pattern bombing by the Allies of such cities as Hamburg and Dresden.

Finally, it has been noted that Dadrian, in developing his conceptual
Just as careful analysts of genocide have implicitly or explicitly included certain operations of total warfare within their definitions of genocide, some definitions of war have included situations that have been regarded as genocidal. For example, in "The Social Types of War," Hans Speier develops the concept of "absolute war," which has many of the same characteristics as genocide. Absolute war, according to Speier, "is not waged in order to conclude peace with the vanquished foe. Peace terminating an absolute war is established without the enemy. The opponent is an existential enemy. Absolute war is waged in order to annihilate him." Such wars feature a lack of moral restraint; one or both of the belligerents regard the other as subhuman or even as an animal. As examples of absolute wars, Speier mentions the wars of the ancient Greeks against the barbarians and the wars between Christians and Muslims during the Middle Ages. In the latter case, weapons and techniques that were prohibited in conflicts with other Christians were freely employed against the Mohammedans. Speier also includes clashes between heavily armed colonizers and poorly armed indigenous peoples in this category, which would appear to move it within the realm of genocide.

Thus, there does appear to be some overlap between the definitions of genocide and total war. In terms of actual practice, several common features are evident, three of which are particularly salient for this analysis.

First, both genocide and total war involve mass killing of human beings, the majority of whom are civilians. The mass nature of the killing reflects the fact that large numbers of people are killed more or less simultaneously and as anonymous members of a targeted group or inhabitants of designated areas. Second, in both cases mass killing tends to be done in a deliberate, planned, premeditated fashion. The goal of the perpetrators or implementors is clearly to kill large numbers of people, either as an end in itself, or else as a means to a different end. Finally, in both genocide and total war, mass killing is undertaken by the state as a national security measure. Both are organized and administered, or at least facilitated, by officials of the government for the ostensible purpose of assuring the well-being and security of the majority of citizens.

Another approach to comparison involves examining the role of three factors—ideology, bureaucracy, and technology—that have been cited by several analysts as significant elements in both genocide and total war.

If ideology is defined as a system of psychological and political rationalizations for adopting a particular policy or engaging in a particular practice, then it is evident that the twentieth century has featured abundant ideological incentives to participate in mass killing projects. In this respect the twentieth is no different from past centuries: there have always been ideological justifications for mass killing. One of the most
potent of these has been religion, which has inspired some of the most savage cases of organized mass slaughter.

In the modern world, however, religious ideologies have often been replaced by political ideologies, particularly the "religion of nationalism," to use Toynbee's phrase. This powerful ideology has been used to justify some of the most atrocious mass killing projects of the century. "Intense nationalism," notes Horowitz, "is itself an essential characteristic of the genocidal society. It instills not only a sense of difference between those who belong and those who do not, but also the inhumanity of those who do not belong, and thereby the rights of the social order to purge itself of alien influence." Nationalistic ideologies have inspired wars of increasing scale and intensity. Toynbee states that "the increasing fanaticism of nationalism has exacted an increasing oblation of military human sacrifice." When the advocates of mass killing are able to justify their policies on the basis of national security, they increase the likelihood of cooperation by citizens, both in the role of direct perpetrator/implementor and in that of compliant bystander. In some cases, the official claim of a threat to national security is clearly specious, as has been the case with recent genocides. For example, the Jews in Nazi Germany certainly did not pose a real threat to the German state. But to the extent that Nazi propagandists were able to convince German citizens that the Jews were to blame for Germany's many grave problems, they were able to secure active complicity and passive compliance with respect to the "Final Solution." In other cases, especially total wars like World War II, the threat to national survival posed by the enemy is real. But in both cases, specious and real, the ideology of nationalism and the authority of government is used by leaders to promote citizen cooperation in state-sanctioned mass killing projects.

When the authority of national government is invoked, many individuals are willing to subdue any moral reservations they might have about a particular policy or practice in order to continue service to their nation. This was the defense of many of the war criminals on trial at Nuremberg; however, the Tribunal consistently refused to respect their claims of having had to obey "superior orders." As the infamous "Obedience to Authority" experiments conducted by Stanley Milgram disclosed, normal individuals are willing to inflict severe pain on other people when induced by a convincing authority figure. If the government begins to fear waning support for its policies, it can employ propaganda or outright deception. During World War II, there is evidence to suggest that bomber crews were given briefings that intentionally exaggerated the military significance of such targets as Dresden. The British government attempted to restrict information about the Dresden raids from the general public to avoid "jeopardizing public support for the war."
In addition to capitalizing on the tendency of both civilians and soldiers to defer personal scruples in favor of conforming to authority, the invocation of national security can create a "kill or be killed" mentality. The targets of the government killing project, whether members of a despised minority group or citizens of an enemy nation, must be eliminated in order for the vitality of one's own group or nation to be preserved. In his study of Nazi doctors, "Medicalized Killing in Auschwitz," Lifton notes that "killing was done in the name of healing. It is not too much to say that every action an SS doctor took was connected to some kind of perversion or reversal of healing and killing. For the SS doctor, involvement in the killing process became equated with healing." Likewise, Charny states, "Incredible as it may seem, virtually every genocide is defined by its doers as being on behalf of the larger purpose of bettering human life." In his article, "American Military Ethics in World War II: The Bombing of German Civilians," Ronald Schaeffer cites excerpts from a wartime memo by U.S. Army Air Forces commander Henry H. Arnold in which Arnold stated that the bomber, "when used with the proper degree of understanding . . . becomes, in effect, the most humane of all weapons." Schaeffer comments:

These sentiments appear to conflict with Arnold's willingness to burn down cities, his desire to see robot bombers fall indiscriminately among the German people. . . . Yet they are more than lip service or words for the historical record. They represent a moral attitude inherent in air power theory, a position that goes back to World War I—the idea that the bomber is a way of preserving lives by ending wars quickly and by providing a substitute for the kind of ground warfare that had killed so many soldiers a quarter century earlier.

Among the most important forms of ideological justification for mass killing is the dehumanization of the victims. "Dehumanization," according to Kuper, "might be conceived as the relegation of the victims to the level of animals or objects or to a purely instrumental role." Herbert Kelman suggests that dehumanization entails the removal of two fundamental qualities from the victims, identity and community; the individual identity of each victim is submerged in the group to which he or she belongs, and the group as a whole is considered as subhuman or non-human. In Helen Fein's terms, the victims are placed "outside the sanctified universe of obligation—that circle of people with reciprocal obligations to protect each other whose bonds arose from their relation to a deity or sacred source of authority." If the invocation of national security and official authority provide initial inducement for both participants and bystanders to accept the necessity of harsh measures against a targeted group, dehumanization of that group further erodes any moral or empathic restraints on the willingness to perpetrate massive and indiscriminate violence. As Kelman notes: "Thus when a group of people is
defined entirely in terms of a category to which they belong, and when this category is excluded from the human family, then the moral restraints against killing them are more readily overcome.\textsuperscript{73}

Both total war and genocide are characterized by the dehumanization of victims. When the victims are members of a different religion or race, dehumanization is greatly facilitated. For example, when the United States shifted its bombing policy in Japan from "precision" attacks against military targets to deliberate efforts to create huge firestorms in urban areas, accounts of the raids in the popular media were replete with images suggesting that the Japanese were more similar to insects than people and that the bombing campaign was closer to pest extermination than a traditional military operation. The image of pest extermination was also frequently used by Nazis who were involved in the attempt to exterminate the Jews.

A final element in the ideological justification of mass killing to be considered in this preliminary analysis is the role of the academic and scientific communities. In the case of the Holocaust, the entire campaign against the Jews—from the earliest official persecutions in 1933 through the implementation of the "Final Solution"—was intellectually rationalized by members of the German academic and scientific community. The medical profession, for example, as has been documented by Lifton, played very important roles, both by contributing to such legal measures against the Jews as the Nuremberg Laws of 1935, which made it illegal for Jews and non-Jews to be married or have sexual relations (on the assumption that interbreeding with Jews would pollute and weaken the German-Aryan "blood"), and by direct participation in the mass killing operations.\textsuperscript{74} Scientific authority was also invoked to justify the shift from precision to area bombing by the British during World War II. The military and political leaders who favored such a shift in targeting policy eagerly seized on the fact that certain prestigious scientists had purportedly found evidence indicating that such a policy would significantly help the war effort. Other scientists, who reached a contradictory conclusion—that "de-housing" the German workers was less efficient than continuing to attack specific industrial targets—found far less receptivity among the policymakers.\textsuperscript{75}

A second contributing factor emphasized by analysts of contemporary mass killing is the pervasiveness of bureaucratic political and social organization. According to Richard Rubenstein in his study \textit{The Cunning of History: The Holocaust and the American Future}:

Usually the progress in death-dealing capacity in the twentieth century has been described in terms of technological advances in weaponry. Too little attention has been given to the advances in social organization that allowed for the effective use of the new weapons. In order to understand how the moral barrier was crossed that made massacre in the millions possible, it is neces-
Sociologist Randall Collins sees bureaucracy as a reason for the "ferocious" face to face cruelty of the past to have been replaced by a new kind of cruelty: callousness, or "cruelty without passion." While he notes that callous cruelty has existed throughout history, he suggests that it is "especially characteristic of large-scale, bureaucratic organization," and that "the structural organization of bureaucracy seems uniquely suited for the perpetration of callous violence."  

Ongoing mass killing projects—like the operation of killing centers or the undertaking of a sustained incendiary bombing campaign against densely populated cities—require a complex and efficient organization. For every individual who is directly involved with the mass killing (e.g., operating the gas chamber or serving as crew on the bomber), there are many others who must decide and promulgate the policy; design, build, and service the necessary machinery; coordinate the logistics of transport and supply; generate, distribute, and file paperwork; monitor and evaluate.

Several features of bureaucratic organizations serve to promote the overall efficiency of mass killing projects as well as to enable individual participants to carry out their tasks with a minimum of questioning or doubt. Insofar as the positions within a bureaucracy are arranged in a formally hierarchical structure, individuals at the lower levels tend to have a reduced sense of personal responsibility for either the policy they are helping to implement or its final outcome. They are, after all, only "following orders" that have descended through all the levels of the organization above their own. This is particularly true of the military with its strongly indoctrinated tradition of unquestioning loyalty to authority. Another feature of bureaucracy, division of labor, breaks down complex tasks into compartmentalized sub-tasks. "Microdivision of labor," according to sociologist Don Martindale, "has made the goal of activity invisible, depriving it of meaning for the individual." For example, the distinguished physicist and U.S. defense consultant Freeman Dyson, reflecting on his involvement as a scientific analyst in Bomber Command, the organization responsible for British strategic bombing during World War II, notes:

Bomber Command was an early example of the new evil that science and technology have added to the old evils of soldiering. Technology has made evil anonymous. Through science and technology, evil is organized bureaucratically so that no individual is responsible for what happens.

A further diminishment of personal responsibility results from the formal separation of the individual from the position which he or she occupies
within the organization. According to Collins, this separation is "the fundamental principle of bureaucracy." The assigned task is performed during working hours, after which the individual is free to pursue other activities and interests.

Bureaucracy facilitates the crossing of the "moral barrier" to which Rubenstein referred by its deliberate effort to render humane considerations irrelevant with respect to the performance of the task at hand. As Max Weber noted, a bureaucratic organization, "develops the more perfectly the more the bureaucracy is 'dehumanized,' the more completely it succeeds in eliminating from official business love, hatred, and all purely personal, irrational, and emotional elements which escape calculation. This is the specific nature of bureaucracy and it is appraised as its special virtue."

Such amoral rationality augments the effects of the other features to help create technically proficient functionaries who perform their specialized assignments with a minimized tendency to concern themselves with the fundamental nature of the overall project or its ultimate goals and results. As Fein observes, "Bureaucracy is not itself a cause of the choice of destructive ends, but it facilitates their accomplishment by routinizing the obedience of many agents, each trained to perform his role without questioning the ends of action."

Technology is the third factor that has contributed decisively to the unprecedented death tolls of the twentieth century. It has made this contribution by providing killers with weapons of ever-increasing lethality and by creating a physical and emotional distance between killers and victims.

Throughout history, technology has always had a powerful impact on warfare. In his analysis of the historical development of weaponry from preliterate peoples through the 1950s, Francis Allen concludes that technology is "the clearcut, outstanding variable of importance" in determining the nature of war. This conclusion is shared by Quincy Wright, who states that "the outstanding characteristic in which modern war has differed from all earlier forms of war has been in the degree of mechanization."

The lethality of weapons has increased tremendously during the modern era. In his classic study of the increasing rate of social change, sociologist Hornell Hart has documented several dimensions of the "accelerating power to kill and destroy." These include the range over which weapons can be projected and, as a function of this range, their "killing area." Hart notes that from 1 million B.C. until approximately A.D. 1450, the maximum range of available weapons remained under one-third of a mile and the killing area under one square mile. The only weapons developed during this entire period capable of attaining these results were the catapult and the ballista (a giant crossbow). Between 1453, with the invention of cannons, and 1912, with the development of
coastal artillery, the range increased from 1 mile to 11.4 miles and the killing area from 3 square miles to 408 square miles. However, between 1915, with the first Zeppelin raid on London during World War I, and 1954, with strategic bombers and in-flight refueling, the range grew from 200 miles to 12,500 miles and the killing area from 126,000 square miles to 200 million square miles. This killing area exceeded the total surface area of the earth, approximately 10 million square miles.85

Hart also traced the increase in the killing power of the explosives that can be delivered over the above ranges. One measure that he uses is deaths per ton of explosive. During the German bombing raids on London during World War I, for example, about 3 people were killed for each ton of TNT bombs dropped. By World War II, the rate had risen precipitously; in the American incendiary bombing raid on Tokyo on March 9, 1945, deaths per ton was 50. By the end of the war, the invention of the atomic bomb had raised the death toll per ton of explosive even higher, up to "about 10,000 persons killed per ton of normal bomb load for the B-29 that made the raid."86 Hart concludes his analysis of increased killing power by noting that "the five centuries from 1346 to 1875 saw several times as much increase in explosive power as had been achieved in the previous million years. The 70 years from 1875 to March, 1945, saw several times as much increase in explosive power as the previous five centuries."87 With the development during the war of atomic weapons, and after the war of thermonuclear weapons, destructive capabilities have climbed even higher.

The combination of long-range delivery capability and high levels of destructiveness has made modern weapons indiscriminate. During World War II, even efforts to precisely target key industries frequently created large death tolls among civilians living in the vicinity, as the result of either errant bombs or conflagrations that started in the designated target areas and then spread to surrounding residential areas.

Warfare is not the only type of mass killing that has been vitally affected by technological developments. As Horowitz notes, "What makes genocide a particularly malevolent practice in this century, with wide-ranging consequences, is the role of modern technology in the systematic destruction of large numbers of innocents."88 In the case of the Holocaust, technology played a crucial role in at least two ways. First, existing technology was utilized by the killers to facilitate their tasks. For example, communications technology enabled them to coordinate a killing project that involved millions of intended victims scattered throughout Europe, and transportation technology was exploited to ship the Jews and other victims from their far-flung homes to the killing centers. Second, new technologies of killing and corpse disposal were developed in order to increase the "output." This included gas chambers with a capacity of 2,000 people at one time, huge ventilation systems designed to evacuate the poisoned air from the gas chambers, and
crematoria capable of disposing of thousands of corpses per day. While
none of this technology was particularly sophisticated or esoteric, its
efficient exploitation definitely helped the perpetrators to attain higher
"body counts" than would have been the case had they continued to re-
sort to more "primitive" methods like shooting, drowning, and burying
victims alive.

In addition to affecting contemporary mass killing by increasing the
destructiveness of the tools used by the killers, technology has also
decisively affected the mass killing process by imposing physical and
emotional distance between killers and their victims. Not only can killers
annihilate great numbers of people in short periods of time, but they can
do this often without even seeing their victims. As Allen notes, "The in-
creasing tendency is to wage war at a distance.... Modern scientific
war thus becomes depersonalized." For example, during World War
I, the crews of heavy artillery pieces fired across no man's land into the
area of enemy trenches rather than at individually sighted enemy sol-
diers. During World War II, many of the bombing raids were obscured
by cloud cover or by smoke rising from fires started by earlier strikes.
In the Holocaust, the heavy psychological toll on the Einsatzgruppen
killers engaging in the face-to-face mass shooting of men, women, and
children was greatly reduced when the killing methodology shifted to the
large gas chambers into which technicians would pour gas crystals
through openings on the roof, without having to watch the victims die.

An important effect of technologically imposed distance between kil-
lers and victims is an increased tendency to dehumanize the victim.91 "In general," notes sociologist Lewis Coser, "the perception of the
humanness of the 'other' decreases with the increase in distance between
perceiver and perceived."92 Such dehumanization further erodes any
moral restraints that might intrude upon the effective performance of
function by the killer. A case in point is provided by the strategic
bombing campaigns of World War II. Kennett observes:

The escalation of the air war was made easier by the fact that those who
directed the bombing offensives and those who carried them out remained
curiously insulated and detached from the consequences of their work. Pho-
tographs taken at thirty thousand feet gave no clue to the human effects of a
raid, nor did other sources. In this vacuum, imagination and extrapolation
could picture the population of an enemy town deprived of its homes but not
of life and limb.... Anodyne, antiseptic phrases such as "dual target" and
"area attack" further served to mask the fact that human lives were being
destroyed.93
SUMMARY AND CONCLUSIONS

Despite apparent differences between genocide and total war as forms of state-sanctioned mass killing, this preliminary comparison has disclosed several significant similarities and parallels.

Both genocide and total war are undertaken by the nation-state as national security measures. Democracies as well as totalitarian governments have perpetrated genocides and engaged in total wars. Indeed, participation in a total war tends to narrow the gap between the two forms of government by centralizing authority and encouraging governmental propaganda and secrecy.

Ideological elements such as dehumanization of the targets of violence are common to both genocide and total war, as is the conviction that the vitality of one's own group or nation can be preserved only by willingness to destroy masses of people in a different group or nation. The invocation of a threat to national security, and governmental authorization for measures that would ordinarily be considered atrocious, facilitate the suppression of moral and empathic restraints among citizens who participate directly in the mass killing, as well as those who tacitly support it as "good citizens."

In the modern era, both genocide and total war tend to be bureaucratically organized. This form of social organization results in a diminished sense of personal responsibility for those who are directly or indirectly involved in the mass killing project. It also routinizes the performance of specialized tasks that are removed from the reality of the end results, but which collectively and cumulatively contribute to those results.

Technology plays an extremely important role in both forms of mass killing in at least two ways. First, it makes the task of killing large numbers of people easier and more efficient, and second, it eases any potential mental burden on the killers by interposing physical distance between them and their victims. This distancing reinforces the effects of dehumanizing ideology noted above.

The result of all three facilitating factors is to create a momentum that tends to increase levels of destructiveness until the goal has been reached or an outside force prevents continuation of the policy.

This comparative analysis has been admittedly preliminary and brief. The roles of such facilitating factors as ideology, bureaucracy, and technology need to be explored in greater detail, and other differences and similarities need to be identified and analyzed.

On the basis of this initial effort, however, it does appear that the line between genocide and total war has become very blurred in many cases. Warfare in the twentieth century has become increasingly genocidal, and
several genocides—with the German genocide against the Jews as the exemplary case—resemble military campaigns and utilize military forces in the killing process. 94

The lessons of this study for the problem of the nuclear threat are very ominous. The same facilitating factors that expedite genocide and total war also characterize the preparations for nuclear war. The build-up of nuclear arsenals and the willingness to use them are justified on the grounds of national security. Elaborate ideological rationalizations are used to convince citizens of the need for more and better nuclear weapons. In both the United States and the Soviet Union, government propaganda and secrecy surround the making of nuclear policy and the plans for nuclear combat. Those who are closest to the policies and the weapons see them as being absolutely essential for the preservation of their nations, even to the point of being willing to risk destruction of those nations. The leaders and citizens of each "side" are vilified and dehumanized by official rhetoric and propaganda on the other side. The Soviets are demonized as "Godless monsters" dwelling in an "evil empire," while citizens of the United States are caricatured as "evil imperialists" and "heartless capitalists."

The preparations for nuclear war take place in vast bureaucracies in which many thousands of patriotic individuals make their livings by performing compartmentalized tasks that contribute to the readiness to engage in nuclear holocaust. The destructive capacity of nuclear weapons technology is beyond the comprehension of most, if not all, potential victims of nuclear war, which decreases their ability to recognize and confront the risk that such technology poses. The weapons themselves will be launched by young men and women buried in underground missile silos, submerged beneath the ocean in submarines, or flying high above the ground in airplanes. Most of those who will be responsible for actually using the weapons do not even know their precise destination.

These and many other features of the nuclear threat make it very difficult for human beings to comprehend and confront it. Yet, if they fail to even try, then factors that contribute to the growing likelihood will be allowed to grow stronger, and the efforts of the minority of the people who have dedicated themselves to trying to prevent the holocaust will be in vain. The problem of state-sanctioned mass killing—in the past, present, and future—must be elevated to the highest level of our priorities as citizens, scholars, and parents. We must confront the ugly issue of mass killing in order to avoid becoming victims ourselves.

Although the following words of Bruno Bettelheim were originally addressed to the question of why the Jews became ensnared in the unimaginable madness of the Holocaust, they have much to say to us in an era of genocide, total war, and the preparations for nuclear holocaust:
When a world goes to pieces and inhumanity reigns supreme, man cannot go on living his private life as he was wont to do, and would like to do; he cannot—as the loving head of a family, keep the family living together peacefully, undisturbed by the surrounding world; nor can he continue to take pride in his profession or possessions, when either will deprive him of his humanity, if not also of his life. In such times, one must radically reevaluate all that one has done, believed in, and stood for in order to know how to act. In short, one has to take a stand on the new reality—a firm stand, not one of retirement into an even more private world.95

NOTES

8. See, for example, Lewis A. Dunn, *Controlling the Bomb: Nuclear Proliferation in the 1980s* (New Haven: Yale University Press, 1982).
11. For example, Robert Jay Lifton, a psychiatrist who has undertaken pioneering studies of such holocausts as the atomic bombings of Japan and the Nazi attempt to exterminate the Jews of Europe, notes that, until recently, Western society was reticent on the subject of death itself, let alone mass death and mass killing. "Next it became permissible to speak about individual death and dying," observes Lifton, "but not holocaust. Now holocaust is increasingly discussed, but mainly in terms of the past, not in relationship to future holocausts or to our own capacity for mass murder." Robert Jay Lifton, "Witnessing Survival," *Society* 15 (March/April 1978), p. 41. Like-
wise, Israel Charny, on the basis of his detailed study of the psychosocial dimensions of genocide, concludes: "At this point in its evolution, mankind is deeply limited in its readiness to experience and take action in response to genocidal disasters. Most events of genocide are marked by massive indifference, silence, and inactivity." Israel Charny, *How Can We Commit the Unthinkable? Genocide: The Human Cancer* (Boulder, Colo.: Westview Press, 1982), p. 284.


15. Ibid., p. 113.


18. Ibid., p. 34.


20. Ibid., p. 206.


27. Ibid.


29. Ibid., p. 15-25.


33. Fuller, *The Conduct of War*, p. 35.
34. Ibid.
35. Ibid., p. 36.
41. Ibid., p. 264.
47. Ibid.
54. Ibid. For further analysis of the genocidal dimensions of the Vietnam War, see also Richard Falk, Gabriel Kolko, and Robert Jay Lifton, eds., *Crimes of War* (New York: Random House, 1967); and Hugo Adam Bedau, "Genocide in Vietnam?" and Richard Falk, "Ecocide, Genocide, and the


60. For several valuable discussions of the meaning of ideology and its role in national security policy, see George Schwab, ed., *Ideology and Foreign Policy* (New York: Cyrco Press, 1978).


69. Ibid.

70. Kuper, *Genocide*, p. 86.


74. Lifton, "Medicalized Killing in Auschwitz."


82. Fein, *Accounting for Genocide*, p. 22.
86. Ibid., pp. 41-43.
87. Ibid., p. 43.
89. Allen, "Influence of Technology on War," p. 381.
90. Robert Jay Lifton, in his recent study of Nazi doctors and the role of the German medical profession in the Holocaust, reports on an interview with a German physician who treated a number of soldiers attached to *Einsatzgruppen* who were incapacitated by various forms of psychological stress. Lifton's book is entitled *The Nazi Doctors: Medical Killing and the Psychology of Genocide* (New York: Basic Books, 1986). For a preliminary report on his approach and findings, see "Medicalized Killing in Auschwitz," referred to above.