

## Minimum Deterrence and Democracy

Most discussions on India's nuclear posture focus on the external dimension of national security policy. In fact, nuclear weapons also have a bearing on pivotal aspects of domestic political life. The adoption of a strategy of nuclear deterrence carries not only the security dilemma with respect to the state's external sphere, but equally serious domestic dilemmas for democracies. These dilemmas involve three major contradictions:

*The immorality of threatening indiscriminate destruction versus the moral imperative of securing the survival of the state and its citizens:* Nuclear weapons pose for democratic societies an extraordinarily difficult moral problem. How can we reconcile the moral responsibility of the state to protect its citizens from external threats and our perception of ourselves as a good society with the threat to destroy other human beings indiscriminately?

*The high degree of centralized control that nuclear weapons require versus the obligation of democracies to disperse authority:* Whereas democracy is at its core a decentralized system built on the idea that the people are the ultimate arbiters of their own fate, nuclear weapons directly contravene this axiom and tend to maximize centralized power and decision making.

*The need for secrecy that surrounds nuclear weapons versus accountability and the rule of law, which are vital pillars of democracy:* Nuclear weapons breed a secretiveness that evades accountability and which, if unchecked, allows the subversion of basic democratic norms.

As in the case of the external security dilemma, none of these domestic dilemmas can be resolved fully. They can at best be reduced to the lowest possible level by means of a strict adherence to minimum deterrence. This requires that minimum deterrence be understood in the broadest sense: that nuclear weapons are not assigned the predominant place in national security

arrangements; and that states acknowledge the ways in which nuclear weapons violate democratic norms and seek to contain as far as possible the moral and political inroads they make into the democratic good society. True minimum deterrence refuses to privilege nuclear weapons and treats them as political rather than operational instruments of security. Consequently, it keeps under control the tension between nuclear weapons and democracy. The smaller the weapons infrastructure, the less the vulnerability of democratic society to erosion by the accoutrements of deterrence.

Even a cursory reading of the history of nuclear weapons in India leaves us troubled about its propensity to undermine democracy. Nuclear India has for the most part been secretive, statist, and undemocratic in its workings.<sup>1</sup> Ironically, the much-criticized tests of 1998 did democracy a service in at least one respect. They removed the shroud of secrecy from nuclear policy and brought it into the public eye, thus creating an environment for accountability that had been lacking in the past. But the future remains unsure, for it is by no means certain that this "democratization" of nuclear policy will be sustained. It is the argument here that while the contradiction between nuclear weapons and democracy cannot be resolved so long as nuclear weapons are not eliminated—a dim prospect, as we have seen in Chapter 1—minimum deterrence offers the optimal "solution." It minimizes the domestic political costs of possessing nuclear weapons and thereby offers the best possible balance between the requirements of external security and those of democracy. This chapter examines first the troubling dilemma of targeting innocents with nuclear weapons. Then follows a discussion on the ways in which nuclear weapons detract from a cornerstone of democracy: the right of citizens to determine their own fate. Finally, the chapter focuses on the accumulation of state power under the guise of national security and the erosion of public accountability and the rule of law.

### The Moral Dimension

Indians tend often to bask in the virtues of Gandhian nonviolence. In reality, an elementary acquaintance with India's history and social-political life reveals a story similar to that of any other society, one that is replete with power and violence. Gandhi's antipathy toward nuclear weapons was strong: he found them morally repugnant and unacceptable.<sup>2</sup> But we have seen in Chapter 3 that he was ambivalent about the use of armed force against external enemies. Antinuclear activists often fail to acknowledge his ambivalence.<sup>3</sup> Nor do they concede that this ambivalence pervades Indian thinking about the ethics of war. The ancient scriptures of Hinduism, to which the great

majority of Indians adhere, reflect the ethical tension between *samanya dhama* (the common virtues), which gives primacy to *ahimsa* (nonviolence), and *visesa dhama* (particular duties), which, among other things, makes killing a duty for warriors.<sup>4</sup> Still, there was a deep-seated moral distaste attached to nuclear weapons during the early years after Independence. The need to respond to growing threats was reined in by a revulsion against the indiscriminate and apocalyptic character of nuclear weapons. Indian policy drifted in an uncertain sea. A succession of leaders felt compelled, however reluctantly, to at minimum keep the nuclear option open and simultaneously to resist the demand for the acquisition of a nuclear arsenal. Even Morarji Desai, as stubbornly hostile to nuclear weapons as Gandhi, could not bring himself to close the option. This reflects the contradiction between the political reality of the world around us and the moral sensitivities that we aspire to be true to.

Democracy is at heart an ethical system centered upon, among other things, respect for the life and liberty of one's fellow human beings and upon moral choice and the individual and collective responsibility of making it. From this perspective, nuclear weapons pose grave difficulties for democratic society. Is deterrence morally defensible? Many Indians assert that it is not.<sup>5</sup> But this is an absolute position. The real world is complex, requiring us to grapple with its contradictory elements. Appreciation of this complexity is embedded in Hindu thinking about mass destruction.<sup>6</sup> On one hand, the scriptures and epics proscribe indiscriminate killing and insist on the principle of proportionality, which demands that the use of violence be proportional to objectives. On the other, they allow for setting these moral considerations aside in exceptional circumstances and as a last resort, both of which are implicit arguments in favor of nuclear weapons.<sup>7</sup> If we regard it as a moral right to defend ourselves by the use of force, then it may be argued that nuclear deterrence is acceptable as an extension of this.

But there must be limits on the means we use to achieve desirable ends. This brings us to the question of targeting. The strategy of massive retaliation declared by India involves the threat to annihilate large numbers of noncombatants. How, it may be asked, can we justify the attainment of peace by targeting innocents and threatening them with indiscriminate destruction? Paul Ramsey, who rejects countervalue targeting, argues: "It is never right to do wrong that good may come out of it. . . . Neither is it right to *intend* to do wrong that good may come out of it. If deterrence rests upon genuinely intending massive retaliation, it is clearly wrong no matter how much peace results."<sup>8</sup>

Ramsey invokes the distinction between *jus ad bellum* (just cause) and *jus in bello* (just means) in war.<sup>9</sup> The former, involving the right to make war,

differentiates between legitimate and illegitimate grounds for waging war. The latter rests on two principles: discrimination, or the minimization of harm (particularly to noncombatants), and proportionality. By the standard of just means, deterrence based on countervalue strategy, which targets cities and makes no distinction between combatants and noncombatants, appears to be morally reprehensible. In comparison, a warfighting or counterforce strategy, which targets the adversary's military forces, may be considered acceptable. But this is not a satisfactory argument, for the distinction between countervalue and counterforce strategies is notional. In practice, many so-called "counterforce" targets are located in or near large population centers: airfields, cantonments, military command centers, and so on. Thus, for instance, one study shows that total fatalities from twenty kiloton counterforce attacks on Pakistani military targets could be extremely high: 173,925 in the case of the 12 Army Corps stationed at Quetta, and 321,864 if the 11 Army Corps at Peshawar is targeted.<sup>10</sup> Ramsey's argument holds that the inadvertent "collateral damage" from counterforce warfare is acceptable, since it is unintended.<sup>11</sup> But at this level of destruction, such a moral distinction is meaningless, the more so since simulation studies enable us to anticipate what is likely to happen. Collateral damage in such cases is no more than a euphemism for an impact not qualitatively different from that caused by countervalue targeting.

There are three serious objections to counterforce strategy. First, while it is extremely difficult to contemplate the extinction of cities, a strategy of attacking the adversary's forces, because it seems less objectionable, is more doable, especially when the use of low-yield nuclear weapons is envisaged. Second, a strategy which allows the probability of collateral damage that could affect very large numbers is hard to justify as morally sound. Third, the distinction between the two strategies is not really meaningful if we take into account the problem of escalation. Given the high degree of uncertainty associated with the concept of limited nuclear war, it is not improper to argue that "the strength with which the conviction, that war will be limited, is expressed, is matched only by the weakness of the politico-strategic theory which accompanies it."<sup>12</sup> Because both strategies are just as likely to lead to large-scale nuclear conflict, they are equally immoral. The advantage of minimum deterrence is that, while undeniably immoral in an absolute sense, it accomplishes its purpose of obtaining security at minimum actual risk to innocents, and hence is relatively more acceptable from a moral as well as a practical standpoint. India's rejection of tactical weapons for nuclear warfighting and commitment to minimum deterrence is thus ethically tolerable.

Some critics are so morally outraged that they will not allow the very ex-

istence of nuclear weapons. In her passionate response to the Indian tests of 1998, the writer Arundhati Roy decries "the end of imagination" and writes of nuclear weapons: "The fact that they exist at all, their very presence in our lives, will wreak more havoc than we can begin to fathom. Nuclear weapons pervade our thinking. Control our behavior. Administer our societies. Inform our dreams. They bury themselves like meat hooks deep in the base of our brains. They are purveyors of madness."<sup>13</sup>

Similarly, Ashis Nandy is critical of the "genocidal mentality" and "psychic numbing" characteristic of what he calls "nuclearism," which "so numbs one's sensitivities that normal emotions and moral considerations cannot penetrate one any more."<sup>14</sup> These are powerful criticisms indeed. But they lack an appreciation of the security dilemma. How do we disentangle ourselves from the horror that cannot be disinvented? The central difficulty is that there is no escape from the moral dilemma which parallels the security dilemma. No one recognizes the moral dilemma better than Reinhold Niebuhr. In *Moral Man and Immoral Society*, Niebuhr explains the dialectical relationship between realism and morality.<sup>15</sup> Realist politics carries with it the seeds of its own destruction, whereas pure moralism, emphasizing love, does not recognize the contradictions of existence. There can be no absolute distinction between violence and nonviolence. Nonviolence too can be coercive, as it was in Gandhi's methods, while at times, violence may be "the servant of moral goodwill."<sup>16</sup>

A state has a moral obligation to defend the lives of its citizens. If it is faced with a security dilemma that compels it to obtain nuclear deterrence, then there is little point raising absolutist objections. Roy underscores the dreadfulness of nuclear destruction: "Our cities and our forests, our fields and villages will burn for days. Rivers will turn to poison. The air will become fire. . . . What shall we do, then, those of us who are still alive? Burned and blind and bald and ill, carrying the cancerous carcasses of our children in our arms, where shall we go?"<sup>17</sup>

The horrific portrait of civilization devastated by nuclear war cannot be wished away. The realist's dilemma is that *the same picture might be painted of a nonnuclear country subject to nuclear attack*. The undeniable historical reality—one that requires no imagination—is that of Hiroshima and Nagasaki. The realist could well ask: What might have prevented those catastrophes? A sense of moral aversion might have restrained President Truman from unleashing the atom bomb on noncombatants in his determination to obtain an unconditional surrender from Japan. But the end was allowed to justify the means, and it never occurred to Truman that "Americans owed the Japanese *people* an experiment in negotiation."<sup>18</sup> The other possibility was that if Japan had

been in possession of the bomb, U.S. restraint would have been unavoidable. The question facing an Indian citizen is: To prevent the possibility of a nuclear attack, even an unlikely one, do I rely on deterrence or on the moral compunctions of others? The answer is obvious.

The reality of existence qualifies our notions of morality. For this reason, the International Court of Justice, while opining on the legitimacy of nuclear weapons, has held that "the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in the extreme circumstance of self-defence, in which the very survival of a State would be at stake."<sup>19</sup> The judgment captures the essence of the moral dilemma associated with nuclear weapons: they are terrible things, but we may need them. The fundamental contradiction between the realist logic of an anarchic world and the sense of goodness and justice that underlie human morality appears impossible to resolve. As Geoffrey Goodwin points out, moral outrage is not good enough. "A responsible attitude is not helped by indulging in idealistic prescriptions which ignore the realities of power in simplistic notions of international right and wrong. . . . In short, what is needed is a concern not only with what states *ought* to do, but also for what they *can* do."<sup>20</sup>

Ultimately, the preservation of society requires us to take recourse to "immoral" means. There is no way out of the moral dilemma. This may be rejected as a consequentialist position which undervalues people as human beings. John Finnis and his colleagues argue that the killing of innocents is not justified because "the dignity of human persons is protected by moral absolutes," one of which "forbids choices to destroy human lives."<sup>21</sup> There are two objections to this. First, the choice involved in deterrence is not one of killing innocents for some political end, but rather that of targeting them in order, paradoxically, to protect their lives by avoiding war. Second, surely it is at least as immoral to not use deterrence to protect one's own citizens from the prospect of mass destruction. The human rights argument fails to acknowledge that while it is perfectly legitimate to speak of people in universal terms, the reality is that they are divided into communities organized into states. If the state has to choose between one immorality and another—between targeting the people of adversary states and not defending its own citizens from those who would target them—the former choice is morally troubling, but one that is still legitimate.

Is existential or virtual deterrence a way out? It might be argued that the mere possession of nuclear weapons or even capability alone is moral, for it achieves the effect of deterrence without directly threatening an adversary. Not quite, for this would be no more than ethical sleight of hand, a pretence still based on "moral approval of the function of deterrence."<sup>22</sup> The only via-

ble way of limiting—but not eliminating—one's moral culpability is to minimize the possibility of the potential outcome: the decimation of millions in a nuclear war. For that, a minimum deterrence posture based on defensive realism and a predominantly political conception of nuclear weapons is desirable. In every respect, therefore, the democratic principles on which society is built must underpin the way we think about nuclear weapons and the way we organize them toward our collective ends.

Reducing to a minimum the possibility of war also entails an abiding commitment to arms control, whether tacit or formal. Fortunately, as we have seen in Chapter 3, Indian strategic culture with respect to nuclear weapons is imbued with a strong predisposition toward arms control. Contrary to the widespread perception that India's nuclearization is reflective of a new aggressiveness, interest in arms control has remained strong. The initiative that led to the Lahore Declaration in 1999 was in conformity with the preference for arms control exhibited in the pre-1998 period through a series of agreements and confidence-building measures (CBMs) signed with China and Pakistan.<sup>23</sup> Despite the high tension of the 2001–2 crisis, India and Pakistan continued to observe the 1988 agreement not to attack each other's nuclear facilities and to exchange lists of their respective facilities. There is scope for more, but conditions may be more favorable for tacit rather than formal arms control. Aspects of this will be discussed in the concluding chapter.

### Nuclear Weapons, State Power, and the Citizen

The argument of this book is that minimum deterrence is a rational strategic response to the security dilemma of states confronted by a threat to their survival. In practice, strategic rationality may become intertwined with a symbolic communitarian agenda concerned with national identity. The relationship between state power and the citizen has been problematic for all societies, and for developing countries in particular. After Independence, India adopted a constitutional framework that was underlined by a respect for democratic controls over executive action. But it was also recognized that the state had to be the locus of enormous power in order to foster economic growth, protect the country from external threats, and tackle fissiparous movements that had the potential to unravel the fragile fabric of national identity. Over the half century and more of its history, independent India's legitimacy has been challenged by numerous secessionist movements as well as radical class-based movements. Periodically, the Indian state has sought to redefine itself in response. Jawaharlal Nehru regarded the liberal democratic

state as the dominant focal point of the economic and political life of the new India. During her first tenure as prime minister (1966–77), Indira Gandhi attempted first to give it a populist face, then to rule under a constitutional dictatorship (1973–75). The failed effort to foster political stability and state-led economic growth led ultimately to the Bharatiya Janata Party's (BJP) attempt to redefine Indian society and the state through the concept of *Hindutva*, or "Hindu-ness" (for want of a better word).<sup>24</sup>

Critics often assert that the BJP's communitarian extremism is the driving force behind India's nuclearization. There is certainly a good case for the view that the political Hinduism of the BJP and its allies has married the concept of *Hindutva* with state power, and by extension, nuclear weapons.<sup>25</sup> However, it would be simplistic to equate the party's ideology directly with India's acquisition of nuclear weapons. As the overview of India's nuclear history in Chapter 3 shows, diverse groups and personalities contributed to the nuclearization process. Indeed, the bomb was built long before the BJP assumed power. For the same reason, it is not an entirely acceptable claim that the 1998 tests were a symbolic act of national redefinition.<sup>26</sup> All the same, it is not without significance that, in conducting the tests, the BJP should have dared to tread where others did not wish to or perhaps quite have the gumption to. The tests may not in themselves have represented the BJP's ideology, but they were certainly in congruence with the party's attempt to refashion a national identity being buffeted by the intrusion of globalization processes from "above" and by the intensifying rejection of the nation—the Punjab, Kashmir, and other insurrections—from "below." Whether intentionally or not, the BJP has associated nuclear weapons with its conception of a centralized and "Hinduized" state.<sup>27</sup> Its readiness, moreover, to engage in the kind of risk-taking discussed in Chapter 4 indicates an instrumental view of nuclear weapons that goes well beyond the parameters of minimum deterrence. In both its external and internal facets, the party's nuclear politics have tended to undermine security.

There are signs that, under the BJP, nuclear weapons have become an integral component of the apparatus of a "national security state." One should not underestimate the threat. The crystallization of the national security state into a rigid and oppressive instrument with which to beat the citizenry into submission is a well-known phenomenon.<sup>28</sup> The condemnation of those opposed to nuclear policy as "unpatriotic" reveals how easily the values placed on nuclear weapons can become antidemocratic.<sup>29</sup> The harassment of T. K. Jayaraman, a scientist at the Indian Institute of Mathematical Sciences, Chennai, which is funded by the Department of Atomic Energy, is a case in point.<sup>30</sup> Such sentiment manifests itself in other unpleasant ways, such as



ensorship. The film *War and Peace*, directed by Anand Patwardhan, was subjected to extensive cuts by the Indian Censor Board because of its explicit criticism of the Indian nuclear tests and policy.<sup>31</sup> The image of unquestionable power attached to nuclear policy thus undercuts the basic value of freedom of expression in democracy. If not restrained, the national security state that possesses nuclear weapons may become one in which "a permanent state of war, not by the nature of political will or the character of international antagonisms, but as a structural reflection of the nature of modern weaponry, casts a dark shadow across the very possibility of a democratic polity."<sup>32</sup> In this context, the emergence of a "peace constituency" critical of India's nuclearization is a welcome corrective development.<sup>33</sup>

A deeper understanding of deterrence should also include the awareness that nuclear weapons inescapably detract from democratic decision making by privileging centralization over decentralization. Where do nuclear weapons stand in the relationship between state and society? There is a tension between the need for control over the weapons (centralization) and the imperative of democracy (decentralization). Recall from Chapter 2 Harknett's point that nuclear weapons are unique: their combination of speed and massive destruction does not allow us to respond to their use in any way that is meaningful. This necessitates tight control over them so as to reduce the possibility of an erroneous or renegade decision to initiate nuclear use. Against this, it is axiomatic that, in a democratic social order, decisions about the future of society should eventually lie with the people. The more a society allows its fate out of the hands of its people, the less democratic it is. With nuclear weapons, this is carried to the extreme: the individual with his or her finger on the nuclear button can in a few moments inflict incalculable devastation on an adversary, and in so doing invite a like outcome for his or her own people. As Richard Falk so aptly puts it, "authority and power to inflict such results by a single process of decision suggest the extent to which the citizenry is inevitably and permanently excluded from determinations that decisively shape societal destiny."<sup>34</sup> From the perspective of the average Indian, nuclear weapons disempower the citizen. The risk-taking that occurred during Operation Parakram was a manifestation of the public's loss of control over "societal destiny." While the public may in such instances be largely unconscious of this, it is undeniable that the end result is a permanent and deeply troubling one: the threat posed by nuclear weapons becomes "the context of our lives, a shadow that persistently intrudes upon our mental ecology."<sup>35</sup>

Who, indeed, does have some control over nuclear India's collective fate? Once an operational system is in place, the meaning of choice may be so

eroded as to make informed decision making practically impossible. In managerial terms, there is a command and control system in place, with the prime minister heading the Nuclear Command Authority. A two-key system prevents unauthorized launch.<sup>36</sup> But in the India-Pakistan case, the time available for response to a perceived threat is very short. On what basis can a decision be made in the event of an alarm indicating an incoming nuclear missile? Or if a war breaks out, and there is a warning that the other side has decided to escalate to the use of nuclear weapons, how will the executive decision be made? In the words of an American Defense Department official, a president's "decision" to launch nuclear weapons during the Cold War would have had to be made with very little scope for informed choice: "It is no use to give him a room full of status boards and say, 'Here it is, boss, make a decision.' It has to be boiled down to a scale—for example, green, yellow and red."<sup>37</sup>

We cannot expect the situation to be different in the Indian context. While it may be true that in principle there is no need for a nuclear response to be immediate, in practice it would be difficult to prevent a rapid reaction, for instance if the command and control system is thrown out of gear, or if a local commander is too quick to make the wrong decision. During the Cuban Missile Crisis, despite express orders not to fire unless directly attacked, local Soviet commanders—after failing to contact their superiors—shot down an unarmed U.S. U-2 surveillance aircraft. At that point, believing this to be a premeditated act with authorization from the top, U.S. decision makers came to believe that war was inevitable. That it did not actually happen was fortuitous.<sup>38</sup> Minimum deterrence, with weapons systems undeployed, reduces the urgency of this problem, though it does not eliminate it.

Democracy requires the citizen's participation in society's political processes. In practice, since the citizen has neither the time nor the competence for actual participation in day-to-day policy making and governance, power is delegated. In the case of many subjects, and especially technically complex subjects like nuclear weapons and strategy, decisions are made by experts. Whether explicitly or otherwise, these experts act as "guardians" in the Platonic sense of specialists best qualified to make social decisions. Robert Dahl's discussion of the contradiction between democracy and guardianship draws our attention to a central problem associated with nuclear weapons.<sup>39</sup> More than anything else, they seem to permit—indeed, necessitate—guardianship: the idea of "a well-qualified minority, who rule over the rest, governing in the best interests of all, fully respecting the principle of equal consideration, indeed perhaps upholding it far better than would the people if they were to govern themselves."<sup>40</sup> Yet, as Dahl observes, there are several reasons why the claims of experts to exercise guardianship may be questioned.

First, while a decision to go to war must perforce be a centralized decision, the policies guiding such a decision need not and should not be, for the basic choices are moral choices. Questions about targeting and about the circumstances under which nuclear weapons may be used, and indeed, whether nuclear deterrence is acceptable or not, are moral questions. There is "not the slightest reason for supposing that the small circle of policy makers who have established our nuclear policies are particularly well qualified in their moral understanding."<sup>41</sup> Second, specialists are inherently incapable of a holistic instrumental understanding of nuclear weapons because specialization by definition gives each only partial knowledge. Third, experts do not necessarily have the capacity to make judgments relating to risks, uncertainty, and trade-offs, all of which are so much a part of nuclear strategy. An additional problem is that specialists, by the very nature of their expertise, are hard to contradict, which makes it possible for them to advocate policies that benefit their own sectional interests rather than the national interest.<sup>42</sup>

As Dahl recognizes, we are ultimately left with a crucial dilemma. On the one hand, instrumental elites do not possess the moral capacity to claim exclusive control over nuclear weapons. On the other, ordinary people lack the instrumental capacity to exercise meaningful control.<sup>43</sup> How do we overcome this basic difficulty? The obvious answer is that the citizen must be more competent and better able to exercise control over policy. Dahl himself is not satisfied with general exhortations in this respect. He argues instead for the wide availability of information, the provision of facilities for interactive dialogue between citizen and state, and the creation of institutions of professionals that can act as bridges between the people and decision makers. Finally, Dahl recommends the creation of the *minipopulus*, a body of responsible citizens with both an interest in and knowledge of a specialized subject such as nuclear weapons.<sup>44</sup> Spread across the land, such bodies could invigorate democratic life by bringing the ultimate power of decision making closer to those who are also the holders of ultimate authority: the people.

The idea is attractive, though it is a moot point whether many citizens might be sufficiently familiar with as well as interested in the arcane world of nuclear strategy to become active in this respect. If the *minipopulus* is as yet a distant achievement, there is undoubtedly movement in the right direction. From the 1990s, there has been a significant increase in the public debate in India on nuclear issues, some portions of which have been alluded to in these pages. Newspapers and popular magazines pay considerable attention to issues of nuclear strategy and arms control. Think tanks engaged in the diffusion of information and policy advocacy are far more active today than a couple of decades ago. A peace movement has emerged to educate Indians on its side of

the nuclear debate. These are welcome developments. It is worth bearing in mind that in a democracy, when the citizen feels helpless and unable to influence the course of his or her life, or to shape the social environment, it is a short step to the abdication of responsibility in order to escape the heavy burden of freedom.<sup>45</sup>

For democratic society, the security dilemma carries a moral ancillary. On one hand, nuclear weapons take away from us our capacity to shape our future and that of our children. On the other, we cannot ignore the threats that cause us to possess nuclear weapons in the first place. The only reasonably satisfactory solution lies in minimum deterrence based on the principles delineated in Chapter 2. The more defensive the posture, the less likely the prospect of crisis and, possibly, war. The more prudent the behavior, especially in showing awareness of the risks related to escalation, the less likely that the weapons, by their innate characteristics, will become the arbiters of societal destiny. Society's loss of control may be offset by the gain from deterrence, but unless the associated risks are minimized by means of informed public participation and control, the benefits of deterrence may prove to be ephemeral.

Minimum deterrence is also relevant to economic development. A common objection is that nuclear weapons entail immense waste, and that the funds might better be used for economic growth and welfare.<sup>46</sup> But it is not particularly useful to present to one's interlocutors a straightforward choice between guns and butter, as it were. A society must have both. The meaningful question is how much relative weight it should give to the two. With regard to the cost of nuclear weapons, it is hard to assess costs in one sense: we do not know the possible costs that might be incurred if a nuclear attack were to take place. They would undoubtedly be extraordinarily high. Critics often lament the costs of possessing nuclear weapons without paying any attention to the costs of not having them.<sup>47</sup> The cost of deterrence is a form of societal investment: large though it may be, it is small considering the value of the loss that is envisaged if the investment is not made. It is not helpful to assert that a nuclear attack will not happen. There is no guarantee that it will not.

That having been said, the relevant question appears to be: How much is enough? But in terms of the requirements of minimum deterrence, the appropriate question is: How *little* is enough? For if the cost of deterrence can be kept to a minimum, the guns-butter tradeoff can be made less painful. It is far from clear how accurate most estimates for India are, since most discussions are very general in nature.<sup>48</sup> One detailed study of the United States—an "atomic audit" for the period 1940–96—shows the cost can be extraordi-

narily high.<sup>49</sup> The relevant finding is not the aggregate cost of the U.S. nuclear weapons program, since India's will be far smaller, but the high relative cost: at \$5.481 billion, it is the third-highest amount spent in a list of nineteen categories of expenditure.<sup>50</sup> Moreover, U.S. spending on nuclear weapons accounts for as much as 29 percent of all military spending, and 11 percent of all government expenditures.<sup>51</sup> The price paid by society for such levels of spending can be high. Estimates for a full-fledged Indian arsenal vary from \$5 billion to \$15 billion.<sup>52</sup> From another perspective, taking defense expenditure at 3 percent of gross domestic product and an annual rate of economic growth of 7 percent, the cost of the arsenal would decline steadily over a thirty-year period from 3 percent of defense spending today to 0.03 percent in the year 2030.<sup>53</sup>

But there are other less direct costs. Though it is often said that military expenditure brings valuable benefits (stimulating demand, providing jobs, and so on), the apparent economic advantages of government spending on nuclear infrastructure are deceptive.<sup>54</sup> Unlike civilian economic investment, much military investment is not self-generating: it does not create a significant number of additional or second-level goods or jobs. Second, nuclear facilities are often established in relatively isolated, low-wage areas. The wage scale at nuclear facilities tends to be relatively high, with the result that non-nuclear firms are driven out of the area, resulting in job loss. On the whole, nondefense spending produces more jobs than defense spending. Third, nuclear research and development (R&D) tends to consume a disproportionately high level of resources. Studies also show that, contrary to commonly made claims, defense R&D does not generate valuable spin-offs. This is not an argument against the possession of a nuclear arsenal. It is only an argument against unrealistic expectations about the advantages of building one and against spending too much in the process. On the face of it, a nuclear posture of minimum deterrence should by definition be relatively inexpensive, since it does not regard nuclear weapons as a central pillar of national security. Nonetheless, given the potential for an uncritical operational view of nuclear weapons (see Chapter 3), we should not lose sight of the possibility of spiraling expenditures. Excess spending on the nuclear infrastructure is a denial of social spending to a society that is acutely short of resources. A democratic society must ensure that minimum deterrence is truly kept to a minimum.

Minimum deterrence is also relevant to civil-military relations, which are a major concern in discussions on the organization of nuclear weapons.<sup>55</sup> In Chapter 3, we have seen that the military in India has not been as cut off from nuclear policy as is sometimes believed. However, it is also true that the involvement of the military in the operationalization of India's nuclear capa-

bility has been a slow and carefully regulated process. The late General Krishnaswamy Sundarji, who played a prominent role in encouraging Indians, and military personnel in particular, to think about nuclear weapons, was so exercised over the Indian political leadership's reluctance to translate technology into practical capability that he wrote a thinly disguised critique of official policy in the form of a novel.<sup>56</sup> At the present juncture, as India's operational nuclear capability is being streamlined, it is essential that political control be carefully maintained. This is not to say that India's armed forces are a threat to the government. Far from it. But the loss of political control of a different kind is still possible. Lack of strong political leadership may allow the military an unnecessarily prominent role in the making of nuclear strategy.

As the Indian deterrent develops, those who control its instruments will demand increasing attention. At present, they do not control the weapons entirely, since warheads are in civilian custody. But they do control the delivery vehicles, which drive the readiness posture to a significant degree. They also have a voice in the organization of the command and control system.<sup>57</sup> The armed forces will seek to shape the development of the arsenal, and their perspective will be operational. In their quest for more, they will have ready support from the scientific bureaucracy, which has a built-in interest in developing new weapon systems. The expansion of the "strategic enclave" by the incorporation of the armed forces would make it potentially very powerful. Policy makers need to have a clear understanding of the true requirements of minimum deterrence. They must ensure that operational considerations do not override political ones in shaping nuclear strategy. That would undermine democracy.

### Nuclear Secrecy, Accountability, and the Rule of Law

A doctrine of minimum deterrence must recognize the need for a balance between the secrecy requirements of nuclear weapons and democratic openness. By placing a premium on secrecy, nuclear weapons pose a grave threat to democracy, which in turn erodes public accountability and the rule of law. From the beginning, India's entire nuclear program was characterized by concealment. In part, this was inevitable because of the dual-use character of nuclear energy. Touted for its civilian benefits, it was curtailed from public view because of its covertly developed military application. Besides, like any bureaucracy, the scientific establishment found secrecy a useful device to insulate itself from criticism and public accountability.<sup>58</sup> In the 1950s, Meghnad Saha, a nuclear physicist who had been elected to Parliament, attempted to make the Indian nuclear program more accountable to the public. But the

Atomic Energy Commission, led by Homi Bhabha, and backed by Jawaharlal Nehru, succeeded in shielding nuclear policy from public criticism. As a result, the nuclear establishment was able to build a powerful technocratic empire largely unaccountable to the public.<sup>59</sup>

This secrecy and concentration of power in the hands of a small number of individuals have undermined Indian democracy in important ways. The case of B. Subbarao, a naval scientist falsely accused of spying, shows how secrecy and the stamp of "national security" can easily be harnessed by vested interests to violate the rule of law and subvert democracy.<sup>60</sup> As an independent expert, Subbarao had thrice pointed out major flaws in designs developed by the Bhabha Atomic Research Centre (BARC) for an indigenous nuclear-powered submarine. Subsequently, he was himself asked to prepare a design. The design was rejected by BARC without giving reasons. Subsequently, Subbarao's work was accepted by the Indian Institute of Technology in Bombay for the award of a doctoral degree. In 1988, at Prime Minister Rajiv Gandhi's behest, he was asked to take over the nuclear submarine project. At this juncture, on the verge of a professional trip abroad, he was arrested on charges of espionage and violation of the Official Secrets Act. Though accused of carrying classified material, Subbarao in fact had with him only publicly available material, including his doctoral thesis. A review of the case reveals a story of manipulation and falsehoods perpetrated by the police and by prosecutors in what can only be called sustained abuse of the due process of law. The judiciary too came under a cloud. As a former justice of the Supreme Court pointed out, the trial and prosecution of Subbarao was reminiscent of the infamous Dreyfus case. Only three of the numerous judges who heard the case even tried to ascertain whether the "evidence" was genuine.<sup>61</sup> The trial of Subbarao took place over a period of five years, despite the complete absence of any evidence, until he was eventually acquitted by the Supreme Court on technical grounds.

The Subbarao case illustrates the ease with which a democratic system can be subverted on grounds of national security. While this may occur in respect of any aspect of security, nuclear policy, owing to its highly secretive and sensitive nature, is particularly susceptible to this kind of abuse.<sup>62</sup> The fallout from such events can be harmful in other ways. Subbarao's painful example may well deter others, whether inside the system or outside it, from challenging authority and drawing attention to the failings of the establishment. This in turn opens up the possibility of entrenched insiders wasting immense resources and foisting substandard products upon the country's security apparatus. One can scarcely imagine the enormous wastage that would have ensued had Subbarao not rejected BARC's flawed designs. It is also impossi-

ble to estimate the loss to the exchequer from the rejection of his own design and the resultant delay of the nuclear submarine project. The misuse of "national security" may thus contribute to the very real impairment of national security. In contrast, an open and properly functioning democratic system, in which the nuclear establishment is held accountable to the public, will contribute more effectively to the nation's security.

In a similar case, six persons, including two scientists of the Indian Space Research Organization (ISRO), which is linked to the nuclear program, were arrested in 1994 on charges of espionage. In 1996, the case was dismissed after the investigating agency, the Central Bureau of Investigation (CBI) assessed the case not merely to be lacking in evidence, but to be "false." There was nevertheless an attempt by the government of the state of Kerala (where the ISRO is headquartered) to revive prosecution, until the Supreme Court intervened in April 1998 and quashed the case, holding the order to revive it a "*mala fide* exercise of power" that "does not comport with the known pattern of a responsible government bound by a rule of law."<sup>63</sup> At least two of the accused, a senior ISRO scientist, S. Nambinarayan, and a citizen of the Maldives, Mariam Rasheeda, were subject to physical and mental torture. In March 2001, the National Human Rights Commission ordered the Kerala government to pay Nambinarayan compensation to the value of one million rupees (approximately \$20,000) for the gross infringement of his human rights.<sup>64</sup>

These egregious violations of the rule of law raise troublesome questions about the nature of the state, the conception of national security, and the roots of democratic processes. Certainly, there are similar cases to be found in other countries.<sup>65</sup> But that is hardly consolation for those who suffer from the use of "national security" to club the innocent into submission. As a senior Indian newspaper editor has observed, it is alarmingly easy to subvert democracy on national security grounds, for few dare to question such accusations, and even worse, the perpetrators of such injustices are almost never brought to book, which means there is little risk attached to the deliberate miscarriage of justice.<sup>66</sup> Unfortunately, there is little sign that the state is seriously concerned about its erosion as a democratic entity as a result of such cases. The problem has serious potential in the era of terrorism. Because of the constant terrorist threat that has prevailed in parts of the country since Independence and in large areas since the early 1980s, the rule of law has always been under pressure. Law enforcement by police, paramilitaries, and the army has tended frequently to deteriorate into virtual civil war, in which the "enemy" is disposed off by the quickest method available: fake armed "encounters." The law itself is rewritten in repressive format to override due process.



The most recent manifestation of this in the aftermath of the December 2001 attack on India's Parliament was the Prevention of Terrorism Act (2002). The law curtailed the rights of accused persons in numerous ways, notably by overriding the presumption of innocence and making bail difficult to obtain. Its initial introduction as a presidential ordinance was denounced as "draconian" by the National Human Rights Commission, but the law was nevertheless retained with some amendments in January 2002.<sup>67</sup> The government's position was disturbing. Union Minister for Rural Development M. Venkaiah Naidu maintained that only "human beings," not terrorists, were entitled to human rights.<sup>68</sup> For critics, however, the government was agglomerating power in a way that gave it the characteristics of a police state.<sup>69</sup> The act was repealed in December 2004, only to be replaced by another draconian law. In the present context, the nuclear-armed state subject to nuclear-terrorist threats is even more susceptible to the violation of democratic norms and the erosion of human rights. The overall environment—the prevailing high-level terrorist threat, the singularly apocalyptic nature of the threat to the nuclear infrastructure, the pervasive secrecy and lack of accountability of the nuclear establishment, and the antidemocratic bent of the state and its agencies in matters of security—all combine to create a troubling potential for abuse of power and the steam-rolling of democracy should the threat be realized in some dramatic and painful way, say in a manner comparable to the December 13 attack on Parliament. In particular, a nuclear-terrorist incident is likely to have adverse effects in the extreme.

Once again, the democratic dilemma is present here. There is no denying the threat to democracy posed by the linkage between terrorism and nuclear weapons and facilities. Equally, the sensitive and dangerous character of nuclear technology makes a high level of secrecy and tight, centralized control inevitable. It has to be acknowledged that if we are always to keep in sight the state's ultimate responsibility toward its citizens, which is, after all, their security, then some latitude has to be allowed the state in its efforts to fulfill this task. But there should be a constant awareness of the state's need to balance its responsibility for the public's security with its responsibility to protect the democratic rights and way of life of the selfsame public. If this balance is to be ensured, the accountability of agencies of the state is essential. This applies at once to security agencies and to agencies which constitute the nuclear infrastructure. In respect of both, it is vital that there be adequate independent oversight. In both cases, the picture is not encouraging.

The position regarding the law and its enforcement has been discussed above. The monitoring of India's nuclear infrastructure is equally problem-

atic.<sup>70</sup> The Atomic Energy Regulatory Board (AERB), which is charged with regulating the nuclear establishment, comes under the supervision of the Atomic Energy Commission (AEC), whose chairman is also the secretary of the Department of Atomic Energy (DAE), which the AERB is supposed to supervise. The AERB is overwhelmingly staffed by personnel drawn from the DAE, and hence lacks real autonomy.<sup>71</sup> Furthermore, on grounds of maintaining a higher level of secrecy for security purposes, the AERB has been divested of some of its power—that relating to the military application of nuclear power—which has reverted to BARC's internal review mechanism. In comparison, the Defense Nuclear Facilities Safety Board (DNFSB), which regulates the defense facilities of the Department of Energy (DOE) in the United States, has a majority of independent experts who are not part of the nuclear establishment. Furthermore, the DNFSB holds a number of public hearings and makes many of its activities open to public appraisal via the Internet. In contrast, BARC's "Internal Safety Committee Structure" has no independent experts and is sheltered from the public eye. Thus, the emphasis on secrecy for the sake of "national security," by not allowing for a system of autonomous oversight, tends actually to undercut security by retaining a regulatory mechanism that is inherently faulty.

Also a matter of grave concern is the internal security of the nuclear infrastructure with respect to personnel reliability. In the United States, the DOE has a well-organized Personnel Assurance Program designed to ensure that all personnel are regularly certified in order to meet standards relating to mental and physical stability. These standards may be inadequately met, for instance because of drug or alcohol abuse, or psychiatric problems, or simply the assessment that an individual does not measure up to the high standards required by the job. The demands of work are particularly severe for military personnel under whom weapons are placed. These individuals have to remain on high alert at all times, are often subject to high levels of stress because of the nature of their work, and frequently suffer from physical and psychological complaints.<sup>72</sup> Personnel reliability is conceptually designed to ensure that all those who are connected with nuclear weapons are competent, alert, and dependable. Yet, as reports show, the system does not always work very well.<sup>73</sup> For instance, in 1981, a U.S. navy jet crashed into the flight deck of the nuclear-powered aircraft carrier, *Nimitz*, killing fourteen men. It was found that six of the men were habitual marijuana users, that at least three of them had smoked the drug heavily that day or just before the crash, and that the pilot of the jet had consumed antihistamines six to eleven times above the recommended level.<sup>74</sup> Without doubt, the sensitivity of nuclear weapons is so

great as to necessitate a high level of centralized control and intrusive monitoring of personnel. The individual's right to privacy will inevitably be far more restricted than in most other occupations, even security-related ones.

A related problem is that of accidents associated with nuclear materials and weapons. This affects sophisticated systems with high levels of technology and risk management too. In the United States, for example, one report shows that between 1950 and 1968, as many as 1,250 nuclear weapon accidents of varying degrees of severity took place, of which 272 (approximately 22 percent) involved severe impacts, some resulting in the detonation of surrounding conventional explosives. Of the total, 39 percent were bombs or rockets dropped during storage, assembly, or loading, 18 percent warheads mated to missiles or reentry vehicles at the time of being dropped, 15 percent occurred aboard aircraft that crashed, 10 percent were bombs in containers involved in accidents during storage, assembly, or loading, 9 percent were accidentally lost from aboard ships and aircraft, 8 percent were involved in ground transportation crashes, and 1.5 percent were accidentally crushed or punctured.<sup>75</sup> Such accidents, reflecting the organizational problem of "normal accidents" discussed earlier, are a vital public concern. The establishment of adequate mechanisms of supervision is an imperative that no democratic society can afford to neglect.

In India, accidents have been a periodic feature in matters relating to hazardous materials, most notably the great Bhopal gas disaster of 1984. India's AEC Chairman, R. Chidambaram, claimed in 2000 that, with 150 reactor years of safe operation, "there is no possibility of any nuclear accident in the near or distant future in India." But, as M. V. Ramana has pointed out, at the time of the Chernobyl accident, the Soviet Union had had over one thousand years of reactor experience.<sup>76</sup> Besides, India *has* experienced numerous major accidents in its nuclear plants, though none so far has gone out of control.<sup>77</sup> The armed forces too have seen their share of major calamities. Between April 1991 and March 1997, the Indian Air Force (IAF) lost as many as 147 aircraft and 63 pilots in accidents.<sup>78</sup> In February 2003, Defence Minister George Fernandes told Parliament that thirty-one IAF pilots had been killed and sixty-eight aircraft lost in air crashes during the preceding three years.<sup>79</sup> In February 2004, an underwater rocket exploded on a naval warship off the Mumbai coast.<sup>80</sup> In a serious accident at the Bharat Dynamics Limited premises in Kanchanbagh in the state of Andhra Pradesh in January 2001, the accidental launch of an antitank missile killed one person.<sup>81</sup> The nuclear establishment has not been immune to accidents. In February 2004, a major explosion at ISRO's Solid Propellant Booster Plant on Sriharikota Island off India's east coast killed six people.<sup>82</sup> Numerous other security failures

have been mentioned earlier in the chapter on nuclear terrorism. The prospect of nuclear accidents raises concerns about the organizational responsibilities of a democracy. These responsibilities cannot be ignored.

In all of the above discussion, there is an underlying thread. Nuclear policy is not only concerned with securing the nation from external threats, but equally with ensuring societal safety and security from internal threats. These threats are in part directly the result of the physical existence of nuclear materials and weapons and their vulnerability to accidents and to the malign intentions of the disaffected. They are also an indirect outcome of the aura of secrecy and unquestioned authority and power that surrounds nuclear matters, thereby enabling vested interests to commandeer them for their own purposes. There is, to be sure, a tension between the need for secrecy in the interests of security and the need to establish public control and accountability, also in the interests of security. While maintaining a balance between the two will always be difficult, a minimum deterrence posture based on the principles discussed earlier will make it less problematic in three ways. First, it will reduce the exposure of the infrastructure to mishap by accident or design. The smaller the network, the less the points of vulnerability. Second, it will constrain external tension and hence ensure a smaller degree of threat and tension between India and its adversaries. In doing so, it will minimize domestic tensions and restrain the common tendency of state power and organizational interests to resist public control under the banner of national security. Third, the combination of the first two will make it that much easier for democratic political life to function normally and hence for the citizen to have that vague but indispensable sense of being in control of his or her destiny which is so important for the vitality of a democratic society.

## Conclusion

The relationship between nuclear weapons and democracy is a complex one. It is often forgotten by critics that nuclear weapons are—to most of us, at any rate—defensive weapons, and, therefore, considered to be unusable for any purpose other than deterrence of threats to national survival. In an inherently insecure world, nuclear weapons have some role to play in defending democracy. Ideally, they should be done away with altogether. Short of that, prudence may require their possession. For if some who come to possess them have no compunctions about using them for political ends, the one thing certain to prevent them from carrying out their designs will be the threat of punishment at the hands of nuclear weapons possessed by others. Nuclear weapons are closely linked to the preservation of society and de-

mocracy, for it is the moral obligation of the state to be accountable to the people for their security, and nuclear weapons may be a necessary means for fulfilling that obligation. Against this, possession of these weapons does present an inescapable moral dilemma. Threatening the extinction of countless lives is not a comfortable ethical position. Minimum deterrence cannot provide a way out of the dilemma, but can keep it to a tolerable level.

The question of morality also has a bearing on the state and its legitimacy. The security dilemma requires the state to navigate a hazardous course between the Scylla of nuclear abstinence and the Charybdis of nuclear possession. The moral dilemma is no less problematic. Even as it struggles with the security dilemma and the moral paradox of nuclear weapons, the state must be aware of the difficult balance it must try to maintain between the morality of deterring war and the immorality of increasing its probability by its own lack of discipline, accountability, or recklessness. If the state violates its responsibility to secure the citizen from mass annihilation, whether by eschewing nuclear weapons or by acquiring them, it risks losing the allegiance of the citizen.<sup>35</sup> It is thus incumbent on the state in any democratic conception of political organization to ensure that its people are the beneficiaries of prudent protection. This is an irrefutable argument for making minimum deterrence the cornerstone of nuclear security in a democratic society.