CHAPTER 7

WEAPONS OF MASS DESTRUCTION

Michael Britton

In this chapter, I will examine weapons of mass destruction from a psychological perspective. Thanks to modern science, very large numbers of people can be killed with just one of these (nuclear, chemical, or biological) weapons. I will consider psychological dynamics common to many people, focusing on two questions: Why was the buildup of nuclear weapons so massive in the Cold War that they became central to that era? What can we expect in the future? To answer those questions, I will use concepts from clinical psychology, a field that has had to confront violence and the triumph of rage and hate over empathy, concern, and love for self and others.

A BRIEF HISTORY

Biological weapons have not actually been used so far (B. H. Rosenberg, personal communication, November 15, 1998). Chemical weapons (gas) have been used sporadically, in World War I, in the 1980s Iraq–Iran War, again by Iraq in killing Kurdish civilians (A. Smithson, personal communication, November 15, 1998), and by a religious sect leader in a Tokyo subway (Lifton, 1997). Nuclear bombs were used by the United States to destroy two Japanese cities near the end

of World War II. In short, the actual use of weapons of mass destruction has been limited. But tens of thousands of nuclear weapons were built during the Cold War. Their destructive power is staggering: The first thermonuclear bomb had a force equivalent to twenty billion pounds of TNT (Rhodes, 1995). The four countries involved, the United States, Britain, and France on one side and the Soviet Union on the other, targeted those bombs on each other's industry, mining, communications, transportation, political, and military sites. Many such targets were located in or near cities, so that war plans in effect targeted cities (Arkin & Fieldhouse, 1985; Herken, 1985, 1992). It was not just cities that were targeted to disappear, however, but whole countries. Each side's nuclear war plans were designed to end the other's functional existence; the nuclear arsenals were known as "nation killers" (Rhodes, 1995). The two sides created a situation termed "Mutually Assured Destruction," meaning a nuclear attack by either guaranteed a nuclear coun- terattack by the other. The arsenals would have acted in concert to destroy the countries that made up Western civilization, from the United States and Canada in the west, across Europe to the far reaches of the Soviet Union in the east.

How did these countries come to make those weapons a central feature of their relations with one another? The answer involves looking at three principles: (1) Understanding behavior in a social system requires looking at the system as a whole; (2) behavior is not driven by reality, but by our interpretations of reality; and (3) violence reinforces the belief that the world belongs to the strong.

Systems

A system is a set of social groups (countries, classes, etc.) with so much ongoing interaction that you can't understand the behavior of any one party without looking at the interactions among

them all. Those interactions are the context within which each decides what to do next. The parties approach each other with particular expectations/beliefs; once a pattern of interaction fits with everyone's expectations, interactions tend to stabilize. The parties try to maintain what is working for them, a process called homeostasis. Each then appears to have its own role in the collective "drama" in which the system is engaged. Systemic dramas tend to have overarching themes, such as "Empire Building" or "Globalization."

The Cold War was the overarching drama of the second half of the twentieth century. Understanding how that came to be requires looking at Western civilization as a single social system. The people in the Cold War had a very hard time doing that. To them "The West" and "The Communist Bloc" were separate worlds. But, in fact, the countries involved had a history of extensive interaction and exposure to each other's ways of thinking; they really were a single civilization at "war" within itself.

Beliefs Create Behavior

What was it that led the parties to build nuclear weapons? Both sides would have answered that the realities they faced left no alternative. The implication is that behavior is a straightforward response to reality. Clinical psychology suggests otherwise: What determines our reactions to a situation is not so much the reality before us, but our understanding of that reality. Cognitive therapy, for example, focuses on the thoughts that automatically come to mind about given situations. Taken together, such thoughts form a *cognitive schema* or set of assumptions by which we interpret what's going on, what we expect to happen, and what we decide to do (Beck, 1976; Beck et al., 1979).

Milgram's (1974) research on obedience is instructive. He told research subjects they would be part of a scientific investigation laying the groundwork for medical advances; their role would be to administer electric shocks to people (who in fact only pretended to feel pain) to study certain effects. His subjects saw their "subjects" writhing in (simulated) pain from (simulated) electric shocks; many struggled to set aside emotional distress at the pain they believed they were causing. They did all this because they believed the situation involved accomplishing a good objective in a legitimate manner. This research has a disturbing implication: If we or others understand weapons of mass destruction to be urgently needed to advance a vital cause, we will build them, deploy them, and quite possibly use them.

If people in four major countries became involved in building nuclear bombs during the Cold War, we can suspect they, too, believed they were involved in an urgent, beneficial project requiring them to do so. And we can suspect that many of them, like Milgram's subjects, struggled to set aside feelings they might have had about endangering hundreds of millions of lives. There were many other factors that led them to behave as they did, including domestic politics in the various countries, organizational/bureaucratic dynamics, international competition, etc. But there is another factor overlooked in those explanations.

Consider the following: In the aftermath of the world wars, the countries of Western civilization could have looked back on the violence in which they'd been embroiled and could have decided the task before them was to work together to construct a world in which their many peoples could live safely. Their domestic political campaigns would then have been about who could do that best, and their bureaucracies would have tried to increase their budgets in service of those ends. But that was not how they interpreted the post-war situation. They concluded they were in

imminent danger from one another, danger that could be held at bay by building nuclear weapons. Clinical psychology would suggest the basis for that interpretation of the situation had as much to do with the assumptions each held about the world of intergroup relations as with any other factor. What then were those assumptions? And how did a set of assumptions leading the parties to be so dangerous to one another catch on so widely?

UNDERLYING/CORE RELATIONAL SCHEMA

You're a member of a country; what goes on in the world of countries may impact you. You're a member of an economic-social class; changes in the class system, and your location within it, may affect such things as how much you'll earn and where you'll live. You may be part of a national or ethnic group whose future will shape yours as well. Your skin color locates you in widely differing mindsets people have about "race." Each of those role-worlds (country, class, etc.) involves a mental "map" of the parties that make up that world, the ways you can expect them to behave, and your options for dealing with them. Cognitive therapists use the term *schema* (or *assumptive set*) to refer to assumptions that might underlie your behavior in all those different situations. A parallel term from psychoanalytic thinking is *core relational theme*. I will use a slightly different language. A *surface schema* "maps" one of the role-worlds I just listed. A set of assumptions underlying a number of those schemas is an *underlying/core relational schema*. I am suggesting two things. A core relational schema developed in the thinking in Western civilization in regard to all kinds of intergroup relations. Second, that underlying assumptive set played a large role in creating the World Wars and the Cold War.

If you examine the history of Western civilization in the centuries leading up to World War I, you'll find themes of coercion and resistance had been evolving for a long time in the interac-

tions between countries; social/economic classes (monarchs, aristocrats, middle classes, working classes, underclasses); traditional regimes and revolutionaries; national groups and the governments from whom they sought autonomy; imperial powers in relation to each other and those they fought to colonize; and between Whites and other races in the course of imperialism. No matter which kind of relationship was involved, the protagonists readily saw themselves as involved in struggles over power, with power viewed as "zero sum" (what one party gained another necessarily lost). They often believed the decision about which party would have its way would be settled by force. That core set of assumptions was summed up by Morgenthau (1948): "[I]nternational politics, like all politics, is a struggle for power" (p. 31). People assumed (a) governments are determined to get their way even if it means going to war to do so; (b) conflict is inevitable, the world is dangerous; and (c) the more military force you can wield, the safer you will be.

It's not that there weren't *competing* core relational schemas; there almost always are. Within psychoanalytic thinking, the Kleinian model sees competing underlying schemas as expressions of one or the other of two fundamental core schemas (Ogden, 1989). The first involves destroying inner concern for others in order to pursue our own agenda; the second involves keeping a reign on action because it might be harmful to others. The first focuses on self without concern for others, the second inhibits self because others matter. The world obviously becomes a very different place depending on which of these underlies how the members of a system treat one another.

There is a relationship between the two Kleinian core relational schemas (my language) and systemic dramas. Those dramas (e.g., "industrialization," "empire-building," "globalization") are

used to organize social systems. But they involve choices about which Kleinian intent to act on: concern for one's own agenda or concern for others. Normally the two exist in a kind of balance. But the more frequently one or the other is chosen throughout a system, the more it moves to the foreground and defines the collective drama.

SYSTEMIC SPIRALS

As the twentieth century dawned, the zero-sum readiness to deprive, exploit, or kill others in pursuit of an objective was certainly not the only intent motivating leaders in the circles of power across Western civilization. It was one schema competing with others of more benign intent. But there was a gathering momentum to emphasize that assumptive set. It was understood that government leaders in various countries would resort to military force "when necessary" to get their way, a belief that became more entrenched as it was acted on in more spheres of life, from handling urban riots, to small wars, to conquering Africa and territories in the Pacific, etc. With actions provoking counter-actions, the "drama" of the early twentieth century was being defined as a set of power-struggles to be settled by force. As countries, colonies, national groups, and classes tried to impose their own objectives, they reinforced each other's belief that the world belonged to those with the power to impose their will. With many parties treating each other in accordance with that schema, a momentum developed in the system that made it hard for any one party to stop, a dynamic referred to as a *vicious spiral* (Senge, 1990).

Escalating Violence

We have learned from the field of domestic violence counseling that each act of violence can set the stage for more extreme subsequent violence. An analogous process took place in Western

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civilization, in part as a result of developments in the organization of armies and in the power of weapons. The development of the nation-state produced large citizen armies, blurring the line between civilians and the military (Adas et al., 1996; Anderson, 1991). Industrialization of warfare led to half a million soldiers being killed in single battles lasting several weeks (e.g., the Battle at Somme) and blurred the civilian/military distinction further. Bombing factory workers to demoralize them was regarded as a way to break an enemy's will to wage industrialized war. Hitler ordered the bombing of civilian England; the Western allies pursued the bombing of German cities to the point of firebombing Dresden, killing 200,000, though the city had no military value. The Allies firebombed 74 Japanese cities, and destroyed the cities of Hiroshima and Nagasaki with atomic bombs (Rhodes, 1995). By the time the warring that began in 1914 finally ended in 1945, 60 million had been killed (Sivard, 1988). Killing hundreds of thousands of civilians in cities had come to seem normal. Adding nuclear weapons to the picture seemed like an extension of a now-standard practice. With each crossing of the line as to what was acceptable militarized violence, more extreme violence had become thinkable, until even "nation killing" seemed to make sense.

POST-TRAUMATIC THINKING

The survivors of World War II had lived through the nightmare of 38 countries at war, punctuated by horrific atrocities and genocidal assaults (Balakian, 1997; Chang, 1997; Lifton, 1986), and then got the news about the development of nuclear weapons and the devastation they create. Clearly governments could have seriously murderous intent, and now they could implement that intent with nuclear weapons. People on both sides of the Iron Curtain had the kinds of thoughts and feelings people could be expected to have in the wake of horrific violence (Herman, 1992):

They were in dread of being unprepared for a surprise attack, and they felt a need to amass superior force in order to feel safe. Given existing beliefs that the world of intergroup relations was about power, and having witnessed such violence, it was easy for the different parties to assume the worst about each other and to believe the only way to be safe was to build nuclear weapons. In fact, neither side intended to invade the other, but neither could bring itself to trust the other (Organski & Kugler, 1980). Fear fueled angry determination to build more weapons; more weapons fueled more fear and anger (Wessells, 1995). It seemed a spiral with no escape.

ANALYSIS

By acting on the intention of setting aside concern for others in order to pursue an agenda, people in Western civilization built up a tradition of resorting to that schema in their dealings with one another as countries, classes, national groups, etc. With so many people included in those groups, and with the value of coercion in one area reinforced by what was going on in other areas, momentum grew to conduct intergroup relations according to this belief. The violence of the resultant world warring further reinforced their belief in the danger posed by potential adversaries. Adoption of coercion as a way of life in intergroup relations thus reinforced itself in a vicious spiral, producing a widely accepted expectation of the worst and a belief in building as powerful a set of weapons as one could. While there were many historical influences, interactive missteps, and psychological processes involved, it was the widening and deepening of belief throughout the system that led its members to fear and hate each other so much, and to build nuclear weapons against each other on such a massive scale.

IMPLICATIONS

This analysis of the psychological dynamic that made nuclear weapons central in the Cold War can guide our thinking about whether such weapons will play a central role in the future. The depth and pervasiveness of the assumption that the world is about who can impose their will on others is the key to the role weapons of mass destruction will play in the century ahead. The greater the pervasiveness of that core relational schema, and the greater the violence surrounding it, the more rigidly it will be accentuated and the greater the risk of a vicious spiral accompanied by widespread building of those weapons.

A CHANGING DRAMA

With the demise of the Cold War, it was not clear whether the momentum toward more of these weapons would increase or decrease. After the collapse of the Soviet Union, regional enemies on its borders who hadn't feared each other in the past (because their actions were contained by Soviet influence) now had to face each other unprotected. Nuclear weapons held appeal as a means of guaranteeing safety, but the enemies being feared would have the same idea. There was little confidence that international controls for preventing proliferation would keep these enemies from building such weapons (Wessells, 1995). The weapons also held allure as ways to infuse struggling countries with pride as "real" global players (Ghosh, 1998; Roy, 1998). In addition, a number of former Soviet republics had nuclear weapons on their soil; Soviet scientists were out of work. The incentive to sell nuclear weapons or anything related to them seemed great. If nuclear weapons had been widespread during the Cold War, the concern was that they would become even more widespread after its end.

The effort to retard the momentum toward nuclearization had begun in the 1960s with the Partial Test Ban Treaty. Subsequent treaties banned atomic weapons in Antarctica, Latin Amer-

ica, the South Pacific, Southeast Asia, the ocean floor, and outer space. Nuclear risk reduction centers were created, the Anti-Ballistic Missile Treaty and the Comprehensive Test Ban signed (Sivard, 1996), along with the Nuclear Non-Proliferation Treaty, which required the nuclear powers "to pursue…cessation of the nuclear arms race at an early date… [along with] nuclear disarmament, and…general and complete disarmament under strict and effective international control" (U.S. Department of State, 1971).

While the nuclear powers regard their weapons as critical to maintaining geopolitical status, the defining global theme seems to be shifting from superpowers and geopolitical conflict to super-corporations, globalized economic competition, and information technologies. That shift in the surface schema may also involve change in the core assumptions underlying intergroup relations: Maybe the world will not be about power and danger; maybe weaponry will not define the future. Iraq and North Korea are viewed as pockets where the old mindset still holds sway and weapons of mass destruction still pose a threat. There is hope that as the Cold War continues to recede in time, the residual presence of the old schema (violence as the path to safety and prestige) will fade in these pockets as well.

A second kind of concern also exists. I have described how a schema that is fairly ruthless in nature can dominate people's conception of intergroup relations, even though they personally may be oriented to positive social relationships in everyday life. But there are individuals whose personality structures are organized around belief in exploitation, danger, and the utility of killing, regardless of whether the larger social drama supports such themes or not. Individuals whose personalities contain a large component of psychopathy (predatory behavior, a preference for being dangerous to others) or delusional paranoia (sense of others as dangerous) at a level where

killing is regarded as potentially useful, can organize extremely dangerous projects if given the chance, including the development of weapons of mass destruction. Those high in psychopathy are more likely to lead organizations in which psychopathic themes persist on the social level, such as criminal cartels. Those high in delusional paranoia (with religious content) are more likely to organize religious cults.

The potential threats from "residual pockets," criminal cartels, and cults involve the risk of a small number of weapons of mass destruction. What about the potential for their large-scale deployment? Will the nuclear powers eventually disband their still immense arsenals? Will there be a build-up of such weapons on a large scale in the future? The answers depend on whether the core assumptions that led to their widespread deployment in the past change or not. If the underlying relational schema that the world is about achieving objectives at whatever cost to others continues to be pervasive, "globalization" will be susceptible to deteriorating into another vicious spiral, replete with large numbers of nuclear, chemical, and/or biological weapons. If the core schema survives on a pervasive basis, such weapons will be widely built. If it does not, they won't. The question is how to detect whether the underlying relational schema is changing or not.

INDICANTS OF CHANGE

Adapting the Kleinian model (Ogden, 1989) to this problem, we should be looking to see how widely intergroup relations are based on assumptions that: (a) groups (countries, classes, national groups, etc.) are absorbed in making relationships mutually empowering; (b) with a resultant sense that the world is safe (from threats of coercion, intimidation and violence); and (c) with no one thinking that accumulating means for violence is a path to safety or success. To the degree

these assumptions underlie the surface schema in intergroup relations and generate a self-reinforcing momentum (Senge's *virtuous spiral*), weapons of mass destruction will likely not play a large role in the future. Determining which set of core assumptions underlie intergroup relations is the key to predicting the future role of these weapons.

MOVING FROM A DANGEROUS WORLD TO A SAFE WORLD

Herman's (1992) model of recovery from trauma suggests a set of indicants of change from an underlying belief in the world as dangerous to an underlying belief in safety, with indicants grouped in three categories. The first group indicates movement out of the old schema (with their absence suggesting a lack of change in core assumptions despite changes in the surface historical drama). The second indicates a transition between assumptive sets, while the third indicates consolidation of the new set.

Category I: Establishing Safety

The first signs of substantive change from assuming the world is about coercion involve concrete actions that undo investment in intimidation. Four such indicants will be outlined.

First, are the existing nuclear arsenals still ready for launch on short notice? Do nuclear, chemical, and biological weapons still exist? "Yes" answers indicate a continued assumption that the world is organized around coercion. Their elimination (Schell, 1998) would indicate a government no longer worried that this is so.

Second, building and deploying weapons of mass destruction draws substantial resources away from projects that could keep people alive. The United States spent some $10.5 trillion on the Cold War military effort (Markusen & Yudken, 1992); the four nuclear powers spent an esti-

mated $8 trillion on their nuclear weapons (Sivard, 1996). As of 1996, the United States continued to spend $26 billion to $39 billion per year on nuclear weapons (Sivard, 1996). Millions could have lived had those resources been allocated to projects needed to keep them alive (Christie, 1997). Current annual U.S. expenditures for nuclear weapons, for example, could pay the yearly cost of the following life-saving measures *globally:* elimination of starvation and malnutrition ($19 billion); basic shelter ($21 billion); health care and AIDS control ($21 billion); refugee relief ($5 billion); removal of land mines ($2 billion) (World Game Institute, 1997). Should major governments shift investment of that magnitude from these weapons to programs that keep people alive (rather than, for example, the next generation of high-tech products unrelated to survival), that reallocation would indicate a shift in the core sense of the meaning of relationships. The more resources shift from militarization to keeping people alive, and the more parties engage in that reallocation, the greater the indication of substantive change in the intentions being brought to intergroup relations.

Third, critical to breaking the pattern of dangerous interactions among governments is their relating to each other differently, including accepting mutual responsibility for the danger they jointly create (Blight & Lany, 1995; White, 1984). That process was modeled in research interventions by Blight and Lany, in which Americans, Russians, and Cubans examined together their roles in the Cuban Missile Crisis of 1962. The greater the shift by government leaders from jockeying for advantage to trying to understand together what went wrong and what each party could themselves do to make things collectively work better, the more likely governments will be able to stop making the world as violent as they have made it in the past.

Fourth, the surface focus of the global drama is shifting from conflicts among governments

to globalization of economic competition. In economics, worst-case scenarios involve economic collapse rather than nuclear war. That step away from military violence may reflect small but positive movement. If the driving intent behind globalization remains at the level of epic business projects pursued at the expense of others, little substantive change will have occurred at the core schema level, and the global system will be at risk of remilitarizing relationships. If the shift to an economic drama is the first step in an ongoing evolution such that the driving intent behind economic endeavors becomes helping everyone (globally) stay alive and have a decent life, that would indicate substantive change in the underlying relational schema. It is important to remember that global enterprises not only perform the tasks at hand, they enact one or another core schema and thereby move it to the fore. The objectives pursued by these enterprises and by countries will define for our children and grandchildren the answer to this question: Is this a world of coercers and predators (in which only weapons ultimately create safety), or a world of collaborative good intent that actually works? Projects like the U.N. effort led by Graca Machel to end the impact of war on children (United Nations, 1996; Wessells, 1998) answer that our relationships can be driven by a concern to be protective of one another, or at least protective of one another's children. The more that global enterprises are driven by that primary purpose, the less likely the future will involve widespread deployment of weapons of mass destruction.

Category II: Narration, Remembrance, and Mourning

Category II indicants mark the subtle shifts that occur during the transition between assumptive sets. These indicants have to do with the narratives (media reports, political speeches, history texts) produced by the various parties to global relations. As people move from one assumptive set to the other, the nature of their narratives goes through changes that reflect those shifts.

The core schema in which parties pursue their own gain with little regard for the cost to others generates narratives driven by the agendas of various parties to dominate or resist domination. Narration is *propaganda*. Narratives of nationalism become epic tales of timeless glory from which ignoble moments are erased and the experiences of enemies dismissed. The public voice of the dominated is silenced.

A shift from forging words and images as instruments in struggles over power and justification to reflectively putting into words one's historical experience (*narratives of identity*) indicates some shift at the core schema level. That shift can be seen in two different kinds of identity narratives, those of the intimidated or oppressed and those who have dominated. Signs of change in the latter include admission of wrongdoing, recognition of the impact of past (or present) actions on others, reflection with compassion for their own experience, and exploration of the practices and ideas used to harden them against empathy so that domination could be a "livable" way of life. In both cases, the indicant of change is a shift in what preoccupies the authors from establishing justification for further power struggles to struggling to get a clear sense of identity in the context of intergroup history, with the moral complexity of what has been taking place.

Further change is indicated by a shift from narratives of identity to *multi-sided narration* which involves the principle that leaders and ordinary people from all sides must be interviewed or quoted, and that each side must be presented as having a story to tell. Genuine multi-sided narration can be recognized by a concern to present the history of interactions and intentions in such a way that all sides can find their own dignity in what they hear or view. It entails giving voice to the hopes and suffering of all the sides, with a reflection of their intentions and efforts, as well as actions they took that obstructed peace, unintentional or otherwise.

Serious desire to understand self and others in context, with both goodness and moral flaws, leads to a shift in tone as well. Multi-sided remembrance carries an undertone of poignancy, as suffering and loss are revisited, given dignity and context. Righteous belligerence can have an exciting ring, but multi-sided remembrance faces difficult questions: How is it that they, who were agents of so much of our pain, were also only human? How it is that we who were so good hurt innocent others? What might life have been, had we all been more generous to each other? There is a poignancy to the fact that, despite righteousness and even rightness, much has been lost. Perhaps the most difficult shift has to do with hatred (conscious or unconscious) that is completely identified with, whether it involves determined suppression/deprivation of others by people in power, or unremitting hatred by people out of power. Letting go of hate and control as centers around which identity is organized, and allowing for sorrow and less emphasis on control, along with forming relationships with those who were hated, is very painful and takes time. But without that shift, re-creating danger comes easily. What should be evident behind the words and images in the narrative struggling through these issues is a sense of care to help the parties have a more complex understanding and a deeper feel for themselves and for each other, so they can go forward into the future more constructively.

The emergence of multi-sided narration signals a shift from being locked in the drama (and core schema) of the past, to looking back upon both with a growing sense that "it is behind us, it is over." Ebbing of belief in pursuing agendas no matter who gets hurt is a harbinger of assumptive sets in which kinder possibilities can come to life. Transit between underlying schema can be recognized in the movement from propaganda to narratives of identity to thoughtful efforts at understanding together how life works and how together it can be made to work better.

Category III: Building Relationships on New Values

Category III indicants reflect consolidation of the assumption that the primary interest of all parties in the global drama is making life a good experience together. What are the signals of that shift?

Beyond the effects associated with dominance and resistance (fear, anger, shame, contempt, moral hostility) lies a very different kind of feeling for life. Ezrahi (1997) focused on a change in personal psychology among "ordinary people." A self that can resist epic calls to die in war for a "great cause" begins with individuals wanting not to die, i.e., with experiencing personal life as a precious gift to be cherished. He suggests a person who loves her/his own aliveness can feel a compelling affection for life in others and make of relationships something other than the calculus of power. Sustaining love of life, he suggests, requires working to identify and give voice to personal experience, which in turn makes possible empathy for the personal experience of others. Krystal's (1988) work on trauma focuses on change from the sense of catastrophic danger to a renewed capacity to feel emotions (vs. alexithymia) and to love life (vs. anhedonia). He redefined the central affect in life not as anxiety (as Freud held) but as love, seeing it as the basis for empathy. By implication, both authors suggest looking for a sustained tone of delight in the organization of life.

We can extend this to looking for the building of public purpose out of supporting a life well-loved by all parties. For example, Jervis (1976) postulated a politics of "generosity" in which a group gives what another needs even though it is not compelled by power considerations to do so. Markusen and Yudken (1992) wrote about "nurturing" economics, raising the question of what the economic world would be like if decisions and policies were primarily driven by a de-

sire to see others do well in life. Nelesson (1993) developed an urban planning methodology for helping people envision their community's physical structure in ways they experience as beautiful as well as evocative of pleasure and affection, and then assists them in bringing that vision to fruition. This involves regaining shared control over life (effective democracy) and gives a message that people should value/love their own feelings about beauty, affection, and pleasure in life enough to act on them. Alexander's (1979; Alexander et al., 1977) work on architecture conveys the sense that public life can focus on supporting the interactions in which life is loved. The administration of Jamie Lerner, an architect-mayor in Curitiba, Brazil, provides a demonstration of putting such intentions and attitudes in practice on a city-wide level, along with the impact on the populace's feel of life (Mc Kibben, 1995).

Indicants that the alternative Kleinian assumptive set underlies global intergroup relations involve a shift in the intent driving public institutions and a resultant change in the affective tone in public life. There needs to be a predominance globally, in political and economic problem-solving and decision-making, of an underlying feel for the gift of life, and evidence that the formulating and implementation of public purpose centers on all parties responsibly making a life together that they love. That would be the strongest indicant of core change and the strongest predictor that weapons of mass destruction will not be a central feature of the future.

CONCLUSION

This chapter examined the underlying assumptive set that led to building weapons of mass destruction on a large scale and the processes that give that set the power to dominate the Cold War era. The key to whether such weapons will be widely built in the future lies in whether the dominant assumptive set changes or not. Indicants for recognizing the degree of change have been

presented.