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Herman Kahn: Applying His Nuclear Strategy Precepts Today

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By John Wohlstetter

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HERMAN KAHN: APPLYING HIS NUCLEAR STRATEGY PRECEPTS TODAY

In 1960 Hudson Institute co-founder Herman Kahn published *On Thermonuclear War*, a compendium of material from lectures delivered at Princeton University in 1959. The book sold 30,000 copies, reaching a public audience with in-depth analysis of nuclear strategy. The book caused a sensation, exposing the general public to topics familiar hitherto only to members of the strategic community and self-selected activists.

In 1962 Kahn published *Thinking about the Unthinkable*, a more compact effort to educate readers as to how to think about nuclear war in terms more readily accessible to the lay reader than his mammoth first volume.

In 1965's *On Escalation: Metaphors and Scenarios* Kahn developed, more fully for lay readers, his theories of bargaining via threats and responses that might take place in event of an intense crisis between the superpowers and (possibly) their allies.

Thinking About the Unthinkable in the 1980s (1984 posth.) updated Kahn's thinking after 15 years.

Kahn's writings yield a bonanza of incisive thinking about nuclear problems facing us today, a half-century after Kahn published his first work. Of particular utility are his powerful observations on five issues: (1) arms control and nuclear zero; (2) leaders and values; (3) accident and control; (4) missile defense; and (5) nuclear taboo.

ARMS CONTROL AND NUCLEAR ZERO

In Prague in August 2009, President Obama issued a clarion call for the elimination of all nuclear arsenals. While his declaratory policy puts the goal well into the future, his negotiators agreed to a new arms treaty with Russia, and are ready before the ink is dry on the parchment to seek further cuts that would put deployed American nuclear forces at only a few hundred more warheads than that estimated for China. Kahn counseled against rushing to nuclear zero, pointing out the potentially grave danger of nuclear breakout.

With respect to arms treaties, Kahn warned of the ease with which an adversary could exploit ambiguities in draftsmanship and engage in outright cheating:

The would-be controllers, on the other hand, are attempting to set limits on the ingenuity and cleverness of man for years in advance. They are trying to protect against all possible ways of cheating. The methods they can use are rigidly limited to those the contracting parties can agree on the evader not only knows everything the enforcer knew when the agreement was set up, he also has

the benefits of later research and development. He has the lifetime of the agreement to work out his countermeasures.¹

This proved true with the 1972 SALT I agreement, the first major nuclear arms limitation treaty signed by the Cold War superpowers. The Soviet Union substituted the newer SS-19 intercontinental ballistic missile (ICBM) for the antiquated SS-11. The agreement allowed substituting missiles in silos provided they were no more than 15 percent larger. The SS-19 was 15 percent wider in two dimensions, for an increase of more than 30 percent in volume; instead of a single warhead the larger SS-19 carried six multiple independently-targeted vehicles (MIRVs—vehicles means warheads), making it capable of placing large numbers of American ICBMs at first-strike risk.

He also predicted that little could be done after detection of cheating:

Even if it is picked up by the official inspection system there is likely to be some ambiguity involved. An ambiguity which the violator will exploit. If the evidence has been picked up by clandestine intelligence or by an unfriendly monitoring power, then of course the violator will accuse the accusor [sic] of fabricating the evidence for some nefarious purpose. Or the violator who is caught can always accuse the other side for having violated first Finally, and not all improbably, the violator can argue the absolute historical necessity for doing whatever he did.²

This was also proven prophetic. The ABM (Anti-Ballistic Missile) Treaty in SALT I limited each side to two ABM sites, one protecting the national capital and one protecting a missile base. Radars to be deployed were to be limited to local site defense, and not centrally located, from where battle management of a national missile defense system could be effected. The U.S. deployed its Safeguard system in fully operational mode for all of four months before shutting it down in January 1976. The Soviets built a monster radar facility near Krasnoyarsk, in the center of its territory. Our spy satellites easily detected the facility, which was the size of several football fields. Yet the Soviets brushed off our protests and simply denied everything, aided by ardent arms controllers in the U.S. who asserted that proof beyond a reasonable doubt had not been offered; such proof would have required on-site access denied by the Soviets. Only after the Cold War ended did the Russians concede that the former Soviet Union had indeed violated the ABM Treaty.

The New START Treaty promises more of the same. As with SALT I the adjudicatory mechanism for disputes is a commission composed solely of appointees from the two signing parties. Thus Russia can follow in the former Soviet Union's footsteps and baldly deny allegations of violations, secure in the knowledge that ardent New START supporters in the US will adopt any interpretation that denies violations over one that favors finding them, lest the agreement be scrapped by Moscow. Needless to say, no

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¹ On Thermonuclear War (hereinafter "OTW"), p. 247.

² OTW, p. 249.

outside party can coerce either party into accepting a non-party interpretation of the document.

Making matters even worse is that—even in advance of a ratification vote on New START—senior administration officials publicly told senators at a hearing that even large-scale violations by Moscow would not matter, because the United States retains sufficient retaliatory capability. The remarks, later unconvincingly retracted, led Senator John McCain to ask what was the point of signing a treaty at all, if violations are to be ignored. An administration clearly committed to the treaty, as the centerpiece of its attempt to "reset" relations with Moscow will surely ignore even massive violations, lest Moscow withdraw from the treaty. This is a threat Moscow is sure to make for any major interpretations it dislikes—including, one may easily predict, any missile defense effort Moscow opposes.

Kahn also addressed what now is called "nuclear zero": total disarmament. He called it utopian:

It has probably always been impractical to imagine a completely disarmed world, and the introduction of the thermonuclear bomb has added a special dimension to this impracticality. Given the large nuclear stockpiles in the Soviet Union, the United States, and the British Isles, it would be child's play for one of these nations to hide completely hundreds of these bombs....The violator would then have an incredible advantage if the agreement ever broke down and the arms race started again Even if the problem of what we may call the "clandestine cache" were solvable ... one could not disarm the world totally and expect it to remain disarmed. But the problem of the clandestine nuclear cache itself makes total disarmament especially infeasible.³

Kahn stressed the problem of what strategic analysts call "breakout"—a nation concealing a small arsenal of nuclear weapons in a nuclear-free world, whose value is immensely multiplied because other nations would be without any nuclear weapons. In such a world, a small cache of nuclear weapons is a potentially decisive strategic trump card:

For nuclear weapons, the problem of the clandestine cache is overriding. While nuclear weapons do have some maintenance problems, they are relatively storable and would be simple to hide in large numbers. It is also relatively simple to get most designs back in working order. We can therefore assume that a total ban on nuclear weapons would not be enforceable, since preparations to counter the effect of a violation imply the existence of counter nuclear weapons to use either as a deterrent or for waging war.⁴

The administration is committed to further arms reductions to "set an example" it hopes others will follow. Yet the U.S. nuclear warhead arsenal peaked at 32,000 in 1967, when

³ OTW, pp. 5-6.

⁴ OTW, p. 236.

the Johnson administration unilaterally stopped increasing; Moscow continued to build until its arsenal peaked in 1986 at 45,000. Since then the superpowers in several rounds of agreements have halved their total arsenals, and reduced deployed warheads by far more—from 12,000 per side to 2,200. New START will further reduce American deployment, while Moscow, which for economic reasons is far below the current ceiling, will actually be able to *add* newer, far more modern ICBMs under New START.

And how have the most dangerous nations responded to these serial rounds of reductions? North Korea and Pakistan clandestinely joined the nuclear club; Iran bids fair to do the same. The administration does not grasp that *the fewer warheads America keeps, the more valuable small arsenals become*. China, with an estimated few hundred nuclear warheads, would be sorely tempted to increase its arsenal to surpass an under-1,000 American nuclear arsenal, in pursuit of strategic regional dominance in the Pacific. Arms controllers discount such numbers, but there is no evidence whatsoever that the *realpolitik* Chinese leaders—or any nuclear-state leader outside the West—shares such a view.

LEADERS AND VALUES

At the UN, President Obama renewed his original offer to negotiate with Iran, despite Iran's contemptuous flouting of existing rules on nuclear activity and its deliberate concealment of facilities from, and obstruction of monitoring by, international nuclear inspectors. Meanwhile Iran President Mahmoud Ahmadinejad used his time at the podium to accuse America of carrying out the 9/11 attacks for the motive of boosting America's economy. This brings to mind how Kahn focused extensively on the problem of Hitler-type leaders wielding blackmail, and on Western leaders being rarely able to cope effectively with such adversaries.

Kahn's leadership themes focused on four aspects: First, the multiplier effect a nuclear arsenal gives smaller powers, for example, the safety North Korea enjoys today, despite being a rogue state whose demise Western powers would greet with sighs of relief. Second, leaders with Western values have extreme difficulty in confronting ruthless blackmailers like Hitler, knowing that such leaders not only do not shrink from naked aggression, but also positively revel in the prospect. Third, most chillingly for today's strategic environment, rising resentments in the non-Western world are directed at prosperous Western countries unable to assuage them. Finally, Kahn foresaw declining deterrence as smaller, less reliable nuclear powers emerge.

Western Values and Nuclear Conflict. Kahn correlated the mega-lethality of nuclear war with leadership decisions, stating that rational leaders might well avoid retaliation if doing so invited a devastating response from the attacker:

It is the nation that is at risk, and the nation does not destroy itself in cold blood. Neither does it frivolously or uselessly generate problems for the entire world and for unborn generations. It seems to be difficult for many Americans to understand the point that if the President's anger abates long enough for him to consider the situation, he will realize that there is no way to undo the damage that is done and that revenge may appear to make less sense than trying to make the best of a bad situation.⁵

He saw that many leaders might shrink even from nuclear victory:

Even if military advantages were not to be had by deliberately limiting attack to counterforce targets, I suspect that most governments would still prefer to observe such limits. Almost nobody wants to go down in history as the first man to kill 100,000 people.⁶

Kahn thought little of Western officials regarding their nuclear thinking:

The capacity of Western governments to indulge in wishful thinking in the military and foreign policy fields whenever it is possible to do so is almost without limit.⁷

Western values virtually rule out calculated nuclear war:

It is very difficult for us in the West, with our abhorrence of force and the widely prevalent view of automatic mutual homicide, to believe that a situation could occur in which a perfectly sane but calculating, decisive or ruthless decision maker could rationally decide that he is better off going to war than not going to war. In particular, we do not believe that any such calculation could make full allowance for uncertainties and still be correct. Yet sober studies indicate that this widely prevalent belief could be wrong.⁸

Use of nuclear weapons by major powers against small ones is unacceptable:

There is one wartime control measure that already exists; a ban on the use of atomic weapons in minor conflicts. Official statements to the contrary, it would be almost unthinkable for the United States or the Soviet Union to use atomic weapons against a small country that did not possess atomic weapons. Of course, we might use atomic weapons in reprisal for a large attack by the Russians or Chinese, even if this attack were restricted to conventional weapons. However, even in this case we are likely to be deterred from using atomic weapons. Thus it

⁵ OTW, pp. 170 - 171. (Italics in original.)

⁶ OTW, p. 171. In strategic parlance, "counterforce" means striking military targets; "countervalue" means striking at the civilian population.

⁷ OTW, p. 223.

⁸ OTW, p. 230.

is quite possible that there could be a large, mostly conventional war in which the use of nuclear weapons would be limited at most to air defense and naval actions.⁹

On the tendency to underestimate the risks of an outbreak of war, Kahn noted that in December 1938 Lloyds of London offered 32:1 odds (NOT a misprint) against war in 1939, and that 10 of 12 European reporters polled August 7, 1939 predicted there would be no war. (Hitler launched World War II by invading Poland on September 1, 1939.)

Nor is de-escalation always benign:

De-escalation is usually thought of as a "friendly" act, but it need not be so. Thus, after the Battle of France, Hitler deliberately avoided provoking the British in an attempt to decrease their willingness to continue the war. 11

A Hitler's rage, ruthlessness and cunning create a huge negotiating edge:

Today, a Hitler of the type we picture now, one who is reckless, absolutely determined, and who is crazy or realistically simulates madness, would have an important negotiating edge. If anybody says to you, "One of us has to be reasonable and it is not going to be me, so it has to be you," he has a very effective bargaining advantage, particularly if he is armed with thermonuclear weapons. If he can convince you he is stark, staring mad, and if he has enough destructive power, you will also be persuaded that deterrence alone will not work. You must then give in or accept the possibility of being annihilated. 12

Gambles by leaders have been frequent in history:

We tend to forget that throughout history many decision-makers were delighted to accept "double or nothing" tactics if the odds looked sufficiently favorable. ¹³

Joseph Stalin was as ruthless as Hitler, or anyone else in human history. But he was more cautious than Hitler, a caution less likely to have been present had the Soviet Union possessed a postwar nuclear monopoly. In 1949 Stalin told Walter Bedell Smith, then U.S. ambassador to the USSR:

We do not want war any more than the West does, but we are less interested in peace than the West, and therein, lies the strength of our position.¹⁴

⁹ OTW, p. 241, (Italics in original.)

¹⁰ Thinking About the Unthinkable, (hereinafter "TATU"), p. 41.

¹¹ *On Escalation: Metaphors and Scenarios* (hereinafter "OE"), p. 237.

¹² TATU, p. 83.

¹³ TATU, p. 270.

¹⁴ Quoted in TATU, p. 49.

Hitler and Stalin, both highly shrewd calculators of how civilized peoples usually shrink from avoidable confrontation, surely understood what Kahn later wrote, as to the desire for revenge versus desire to survive: "In most people's value systems, revenge will have a lower priority than survival." ¹⁵

On use of power by strong nations against weaker ones, Kahn noted its recent rarity:

In all the colonial conflicts that have taken place in the decade and a half since World War II, there has hardly been one in which the colonial power did not have the physical power, or at least the potential physical power, to suppress indefinitely the nationalist movement or uprising.¹⁶

Kahn saw an emerging code of behavior for Western leaders in the nuclear age:

As courageous behavior, whatever personal fears may be felt, is expected from an officer or soldier as part of his professional standard, so coolness and rationality already have been established as part of the expectations the public has of its crisis leaders in the nuclear age. There is now a widespread hostility to defiant or rashly "brave" counsels of nuclear conflict or bargaining....

This current emphasis on coolness and calculation sharply contrasts with much in the Western tradition, which has inclined to a romantic or quixotic attitude toward war. The Soviets, unlike Westerners, have almost no tradition of chivalry or of war as a romantic occupation. They are more influenced by the Byzantine tradition of a cynical and instrumental use of force, waging war so as to maximize the gains.¹⁷

Small Nuclear Power Security. Kahn foresaw a growing potential for blackmail, revenge, accidental wars, Munichs in a world with small powers going nuclear:

When the small nations have acquired nuclear weapons, however, not only does the danger of accidental incidents go up sharply but the dangers of "arranged accidents" also increase.¹⁸

Of leverage applicable by small nuclear powers against larger ones:

It is likely that other nations with a relatively small number of megatons in their hands will be able to exert a disproportionate leverage on the distribution of political power.¹⁹

¹⁵ TATU, p. 72.

¹⁶ OE, p. 24.

¹⁷ OE, p. 221.

¹⁸ TATU, p. 227.

¹⁹ TATU, p. 238.

Rising Non-Western World Resentment. Kahn's prescient analysis of trends outside the Western world came without knowledge that at the turn of the 21st century militant Islam would launch what the Orientalist Bernard Lewis has called the third great assault of Islam against the West. (The first great advance encompassed the Arab conquests in Islam's first, tumultuous century, culminating in the subjugation of Spain in the early eighth century; Islam's original advance was stopped shortly thereafter in France. The second great push was that of the Ottomans, who toppled the Byzantine Empire in 1453 at Constantinople; that thrust ended two centuries later at the gates of Vienna. The decisive battle in the latter case was fought on September 11, 1683.)

Kahn saw rising anger directed at the West:

Rising nationalism, racism, envy, greed exacerbated by the population explosion, a partial frustration of the revolution of rising expectations, and the memory of real or imagined past wrongs—all of these may act as spurs to the wider acquisition of nuclear and other military capabilities, and to an acceleration of technology while imposing new strains on whatever degree of international order may exist. We must not fall into the error of imputing to others our own sense of legality and restraint. A large number of the actors on the international stage are going to consider the old system as a corrupt, evil and inefficient ancient regime designed to protect ill-gotten gains and privileges. As a result there may be bitter struggles between white and colored, rich and poor, developed and underdeveloped. These struggles could reach levels of conflicts—waged with weapons of modern technology—that, even if relatively limited, might be more bitter and destructive than the religious and ideological wars of the past.²⁰

Declining Deterrence. Rising, irrational powers would undermine the nuclear deterrence model that prevented a nuclear war during the Cold War. Put another way, there likely will be at least one adventurer among emerging nuclear power leaders. It will take all to prevent but only but one to start a nuclear conflagration.

On deterrence being dependent upon who holds the nuclear weapons:

Deterrence, therefore, is not just a matter of military capabilities; it has a great deal to do with perceptions of credibility, i.e., the other side's estimates of one's determination, courage, and national objectives. For example, in the early days of the nuclear era, the British nuclear forces probably could have inflicted much greater damage to the Soviet Union in either a first or second strike than the Soviet Union could have inflicted on the United States in a first or second strike. However, we are reasonably sure that the Soviets were not too concerned about the British, whereas we were very concerned about the Soviets.²¹

Kahn flagged the seductive temptation planners face to make convenient, reassuring assumptions about enemy attack strategies:

²⁰ TATU, pp. 239 – 239. (Italics added.)

²¹ Thinking About the Unthinkable in the 1980s (hereinafter "TATU 1980s"), p. 89.

Thus, in evaluating an enemy's capabilities, it is important to look beyond the conventional tactics that the standard assumptions lead one to expect, since a clever enemy might employ creative and unconventional methods. A defender should not assume what Albert Wohlstetter has called "defender-preferred attacks"—*i.e.*, those a potential defender feels most able to deal with and therefore would prefer. Instead, the focus should be on "attacker-preferred attacks," namely those a desperate or highly ideological aggressor may prefer.²²

ACCIDENT AND CONTROL

Command and control of nuclear weapons is coming to the forefront of problems in today's world. Newly minted and soon-to-emerge nuclear states are led by leaders whose grasp of the risk of accidental nuclear war appears highly problematic. There is the possibility that Pakistan's democratic government might fall to Islamists who thus gain control over Pakistan's nuclear arsenal. North Korea's regime may stumble into nuclear war by excessive provocation. Iran's leaders may ignite a Mideast arms race upon crossing the nuclear threshold.

Kahn stressed the importance of sophisticated command and control systems and protocols to guard against accidental war and war by miscalculation. He set four categories of war: (1) *Inadvertent* War—accident; (2) War as a result of *Miscalculation*—misinterpretation; (3) *Calculated* War—first strike; (4) *Catalytic* War—started by a third party, as in World War I.²³

He stressed the importance of nuclear powers safeguarding against accidental war:

It is important that all possessors of nuclear capability be fearful of starting an accidental war, so fearful that they will be willing to accept large peacetime, operating costs and substantial degradations of capability in order to decrease the possibility of accidents and to increase the likelihood of error-free behavior.²⁴

Asked which they prefer, an invulnerable system with a one percent risk of accidental war versus a system vulnerable to a clever attack but secure against accident, most people chose the latter.²⁵

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²² TATU 1980s, p. 111. In full disclosure, the late Albert Wohlstetter was the author's uncle.

²³ TATU, pp. 40-61. (Italics added.)

²⁴ OTW, p. 183. (Italics in original.)

²⁵ OTW, p. 209.

On command and control increasing incentives and ability to contain escalation:

Particularly, if most or all of the parties with nuclear weapons had also initiated procedures and equipment for reliable command and control, and the controlled-response tactics ... were well understood, it would not be likely that nations would automatically involve themselves in, or escalate, a conflict simply because a nuclear exchange had taken place. It is more likely that everyone would be extraordinarily cautious of the dangers of escalation, and would be most careful not to respond blindly or emotionally to either accidental or deliberate attack.²⁶

On arguments regarding nuclear deterrence and war made with sparse historical data:

Despite the fact that nuclear weapons have already been used twice, and the nuclear sword has been rattled many times, one can argue that for all practical purposes, nuclear war is still (and hopefully will remain) so far from our experience that it is difficult to reason from, or illustrate arguments by, analogies from history. Thus, many of our concepts and doctrines must be based upon abstract and analytical considerations.²⁷

During the Cuban Missile Crisis, one Soviet submarine commander was under siege by an American destroyer dropping depth charges, aiming to force the diesel sub to surface in the Atlantic Ocean, east of Cuba. (This tactic is virtually impossible with nuclear-powered subs, which can cruise underwater for months at a time.) The submarine commander had one torpedo carrying a Hiroshima-size nuclear warhead, capable of obliterating the American vessel and generating a water wave that would have swamped nearby ships.

Though under orders from Moscow not to release nuclear weapons without specific authorization from the Kremlin, communications with Moscow were impossible then. (Even today, undersea communications with land are difficult.) Nor did the Soviets in 1962 have so-called trigger locks preventing the commander from arming and firing his weapon on his own decision. The commander later said that he came close to doing so, in his anger at being forced to the surface. Strictly speaking this would not have been accidental use, but rather a failure of command and control.

Kahn noted that in 1962 the U.S. communicated to the USSR, publicly and then in private follow-up, information on how to "accident-proof" their nuclear weapons.²⁸

²⁷ OE, p. 134.

²⁶ OE, p. 99.

²⁸ TATU 1980s, p. 193.

MISSILE DEFENSE

Missile defense appears increasingly necessary in a world of proliferating, hostile powers. Yet its effectiveness remains debatable despite successful tests, and if proven too successful may, opponents fear, provoke the very nuclear conflict that its deployment aims to prevent. Kahn advocated a limited defense, and explained why a large-scale defense could not be relied upon.

Regarding the ability to predict the probable consequences of large-scale attacks, Kahn noted endemic, substantial, irreducible calculation uncertainty:

Actually, even with tested missiles, results of attacks are not really mathematically predictable. The probability of extreme variations in performance, the upper and lower limits, cannot be calculated accurately. But laymen or narrow professionals persist in regarding the matter as a simple problem in engineering and physics.²⁹

He noted an insoluble problem of judging the probabilities of things going wrong:

[N]o one really knows what the probability is that things will go wrong. In particular, no one could put together a completely persuasive story to a hostile and skeptical audience.³⁰

Kahn thus advocated a "thin" missile defense shield, *i.e.*, one not numerous enough to attempt to deflect a large-scale strike, and thus not a threat to the Soviet Union. Such a system would be designed to deflect small attacks. In Kahn's time that meant China. Today it means North Korea and Iran, rogue powers led by regimes more unstable than was China's even under Mao Zedong's brutal rule. Tomorrow it may refer to an Islamist Pakistani state.

NUCLEAR TABOO

Allied powers in the West have long stressed the "firebreak" between conventional and nuclear use. Some emerging powers show no signs of recognizing this. Kahn did, and warned that consequences of crossing the nuclear line again and thus ending the taboo carry unpredictable, potentially horrific dangers.

Kahn stressed the value of the nuclear taboo:

²⁹ OTW, p. 195.

³⁰ OE, pp. 64-65.

³¹ OTW, p. 303.

That other "easily recognizable limitations" exist is clear; but it remains true that once war has started no other line of demarcation is at once so clear, so sanctified by convention, so ratified by emotion, so low on the scale of violence, and—perhaps most important of all—so easily defined and understood as the line between not using and using nuclear weapons.³²

On weakening the nuclear threshold:

Nevertheless, I believe that two or three uses of nuclear weapons would weaken the nuclear threshold, at least to a degree where it would no longer be a strong barrier to additional uses of nuclear weapons in intense or vital disputes. There would ensue a gradual or precipitate erosion of the current belief—or sentiment—that the use of nuclear weapons is exceptional or immoral. The feared uncontrolled escalation would be rather more likely to occur at the second, third or later use of nuclear weapons than as a consequence of first use. 33

On sudden widespread proliferation and the risk of nuclear war:

But this would not prevent the technology from improving, and the theoretical availability from increasing. As a result, sometime in the 1980's or 1990's, an incident might occur that would result in a number of nations *suddenly* procuring the then easily available weapons within a very short period of time, possibly only a year or two. We might thus experience an explosive diffusion of nuclear weapons to fifty or sixty inexperienced and "uneducated" nations. Such a diffusion could present a far greater danger, a far greater potential for disaster, than the gradual adaptation of international and national societies to these devices.³⁴

On the difficulty of restoring the tradition and custom of nonuse after nuclear use:

More important, in a world in which there is no legislature to set new rules, and the only method of changing rules is through a complex and unreliable systems-bargaining process, each side should—other things being equal—be anxious to preserve whatever thresholds there are. This is a counsel of prudence, but a serious one: it is not often possible to restore traditions, customs or conventions that have been shattered. Once they are gone, or weakened, the world may be "permanently" worse off.³⁵

Kahn's warning of 45 years ago rings even truer today. It has been 65 years since America ended the Second World War by dropping two atomic bombs on Japan. For

³² OE, p. 95.

³³ OE, p. 98. Strategists call "first-strike" starting nuclear war from scratch; "first-use" escalates an ongoing conventional conflict, as America did in 1945.

³⁴ OE, p. 131. (Italics in original.)

³⁵ OE, p. 133.

years after the widespread assumption, shared by many professional analysts, was that nuclear exchanges were more likely to occur than not. There were several close calls in the Cold War era. Most were accidental—radar blips that resembled attacking missiles. In such instances nuclear restraint was practiced by both superpowers, each possessing a large, widely dispersed deterrent force that permitted riding out a surprise first strike.

But one close call was no accident: the October 1962 Cuban Missile Crisis. Though both President Kennedy and Premier Nikita Khrushchev resolved early on during the 13-day confrontation to pull back from the abyss of a nuclear exchange, one key player felt differently. Cuban dictator Fidel Castro, seized of revolutionary Marxist fervor and seething at the Kennedy administration's serial attempts to assassinate him, urged Moscow to launch a nuclear war, even after having been informed that his island nation would be obliterated in any major nuclear exchange. Castro recently admitted he was mistaken in his desire then.

Imagine a nuclear Iran that triggers an arms race among Arab Mideast powers fearful of Iranian dominance. In close physical proximity, several nations having (a) small nuclear arsenals highly vulnerable to surprise attack, rapidly built up and thus lacking secure control protocols; (b) held by nations lacking even a modicum of trust and without hotline communications; (c) with at most an hour or two for leaders to decide what to do in an intense regional crisis. Put simply, this is a perfect prescription for a regional nuclear war by accident or miscalculation.

THE CONTINUING RELEVANCE OF HERMAN KAHN'S WORK

Herman Kahn's work is not only brilliant and prescient in many ways, even in retrospect. It offers a roadmap for confronting the emerging, growing nuclear dangers, and one especially important for Western leaders to apply. Kahn faced questions Western leaders instinctively recoil from carefully assessing. But a nuclear Iran and the rise of militant Islam is forcing Western leaders and publics to recognize that nuclear war is a growing, mortal threat to Western civilization.

At the recent opening of the UN General Assembly session, the signs were that President Obama had not absorbed the lessons taught by the work of Herman Kahn. Iran President Mahmoud Ahmadinejad put on a chilling display of Hitlerian blackmail, offering false diplomatic gambits and adding an undertone of menace as to what would happen should anyone strike at Iran's nuclear installations.

True, Iran is not Nazi Germany, whose war machine fought a 26-nation coalition for nearly six years with one full-time ally (Japan) and one part-time ally (Italy). But a nuclear Iran would have the capacity to inflict vast harm, given even a small arsenal of nuclear weapons. It could obliterate Israel, killing several million and effectively extinguishing the Jewish state forever. A few nukes detonated in American cities could easily kill millions. Even one nuclear device set off in New York or Chicago could kill more than the 400,000 Americans killed during World War II. Nukes in both cities could take a toll that tops the combined one million killed and wounded casualty total for

America in World War II.

President Obama may well be resolved that soon he will order action to destroy Iran's facilities if all else fails, or Israel may do so (the latter appears far more likely). Yet Iran's leaders may miscalculate. Hitler miscalculated in believing that England and France would, once again, back down after he invaded Poland. Osama bin Laden also miscalculated in believing that America would, once again, fail to respond to a terrorist attack after the 9/11 strike. Signals sent the two leaders six decades apart were not clear enough to deter aggression. And so it may prove to be yet again with Iran's leaders, who may misread our desire to negotiate as a sign of weakness. A misreading can easily arise if Western leaders "mirror-image" enemies by assuming a goodwill peace offer is not judged inconsistent with future action. A nuclear attack could well provoke a response that destroys Iran, but for a Western country that victory would prove Pyrrhic.

If Iran crosses the nuclear threshold and thus triggers a Mideast arms race, a subsequent nuclear war in any of various forms could create hideous mass carnage on a scale and speed unmatched in human history. Or these prospects might be averted by taking Herman Kahn's still relevant and still sage advice.