Naval War College Review

Volume 33 Number 1 January-February

Article 2

1980

Targeting Problems for Central War

Colin S. Gray

Follow this and additional works at: https://digital-commons.usnwc.edu/nwc-review

Recommended Citation

Gray, Colin S. (1980) "Targeting Problems for Central War," *Naval War College Review*: Vol. 33 : No. 1, Article 2. Available at: https://digital-commons.usnwc.edu/nwc-review/vol33/iss1/2

This Article is brought to you for free and open access by the Journals at U.S. Naval War College Digital Commons. It has been accepted for inclusion in Naval War College Review by an authorized editor of U.S. Naval War College Digital Commons. For more information, please contact repository.inquiries@usnwc.edu.

Flexibility, thresholds, bargaining, negotiated war termination, and associated concepts of our theory of limited central war may rest on premises less secure or at least less pertinent than actual conditions warrant. This paper argues that the credibility, effectiveness, and attractiveness of low-level strike options is a function of the credibility and effectiveness of the entire strategic targeting design; that strategic targeting must be considered in the context of U.S. defense policy as a whole; that ways to deter or thwart an adversary's targeting initiatives and responses must be comprehended by that defense policy; that there must be strategy in and beyond the SIOP.

TARGETING PROBLEMS FOR CENTRAL WAR

by

Colin S. Gray

Strategy in Central War? The design of targeting schema is a strategic taskthat is to say it is an exercise in applied strategic thinking. Strategy is supposed to relate military assets to political purposes. In principle, at least, there can be no argument but that strategic judgment should guide sub-SIOP, SIOP, and post-SIOP targeting plans. In practice there is considerable ground for philosophical dispute. One commentator recently expressed the following, fairly popular view:

... the sheer destructiveness of nuclear war has invalidated any distinction between winning and losing. Thus, it has rendered meaningless the very idea of military strategy as the efficient employment of force to achieve a state's objectives.¹

For politically rather more authoritative expressions of opinion along not be dissimilar lines, one need look no cal further than to President Carter's State tice of the Union address for 1979, wherein sen Published by U.S. Naval War College Digital Commons, 1980

he extolled the deterrent merits of a single Poseidon-carrying SSBN,² orwith somewhat greater ambiguity--to Secretary of Defense Harold Brown's Department of Defense Annual Report, Fiscal Year 1979, where the following opinion is signaled:

I am not persuaded that the right way to deal with a major Soviet damage-limiting program would be by imitating it. Our efforts would almost certainly be selfdefeating, as would theirs. We can make certain that we have enough warheads—including those held in reserve—targeted in such a way that the Soviets could have no expectation of escaping unacceptable damage.³

As a matter of principle, as implied above, few if any people would endorse the idea that military force should ever be employed for other than clear political purposes. But, at the level of practice, many people-not excluding some senior officials-have difficulty seeing

1

how a central nuclear war really would merit description as war. The scale of destruction certain to be imposed by strategic forces even if they were targeted with a view to minimizing undesired collateral damage is widely anticipated to be such that no political purpose could be served. This paper will adopt an agnostic stance on that issue. After all, how are we to calculate, or judge, what level of damage a political system or a society (very different concepts in the Soviet case) would find "acceptable" in political circumstances that cannot be predicted with confidence? Appropriate preliminary judgment is that if the United States would find civilian casualties in excess of, say, one or five million intolerable (in the context of what political issues at stake?), whereas the Soviet state took a more brutally instrumental view of the expendability of, say, ten or twenty (or more) million of its "citizens"-then "the Western World," really, would be out of business. The bedrock of U.S. guarantees vis à vis NATOsecurity Europe and friends and allies in the Middle East, a central nuclear threat to the Soviet homeland would crumble at the first serious test. U.S. (nuclear) strategy would be a bluff: the United States could be "outbid" in its willingness to accept domestic damage at a rather modest level of nuclear violence.

On both ethical and practical grounds a policy of nuclear bluff, as indicated immediately above, is defensible. Soviet leaders could not be certain that it was a bluff, and it may be that Soviet readiness to accept domestic damage is far less impressive than many American commentators believe. The apparent views of President Carter and Harold Brown may be valid if one can assume that it will assuredly be the U.S.S.R. that has to lead a process of competitive escalation. In other words, the threat to impose "unacceptable damage" (ignoring for the moment the question of just what that damage

would be) may suffice to deter a Soviet Union that is compelled by defeat, or frustration, to face the choice between escalation or accommodation. But, how does the "unacceptable damage" thesis fare if it is the United States seeking an improved political outcome at successively higher levels of violence? If, following Dr. Brown's advice, the United States eschews (or cannot achieve, regardless of effort) acquisition of "a major . . . damge-limiting program . . . ," why would not an American President be deterred from inflicting "unacceptable damage" by the certain knowledge of the unacceptable character of the anticipated Soviet retaliation? Deterrence through the promise of societal punishment is appropriate as a strategic concept only to a country with clear superiority in general-purpose forces. For a country like the United States, with the geopolitics of its alliance structure virtually ensuring local Soviet military superiority in regions of major importance (NATO-Europe, the Persian Gulf), deterrence-through-punishment ideas lack integrity.

The United States cannot hope to sustain a favorable international order by means of an "ultimate" threat to punish the Soviet Union, unless it is willing to accept a very high level of punishment itself. In theory one might attempt to argue that a targeting strategy intended to inflict punishment-in other words, a bluff-should suffice for all anticipated foreign policy needs. If the moment of decision vis à vis SIOP-option execution ever arrived, one could always choose to accommodate. Moreover, to revert to a previous theme, one might argue that because a central nuclear war would prove to be intolerably destructive, regardless of attempts at sophisticated fine tuning of targeting plans, the danger of war-and war expansion-is reduced if "the war as general holocaust" truth is made quite explicit.

Final judgment cannot be passed on the merits of the above thesis, but there

are several grounds that should incline the U.S. targeting community to be skeptical (though not totally dismissive).

-First, even if it is judged to be probable that a central nuclear war would entail mutual receipt of unacceptable levels of damage, it is not certain. Societal-punishment targeting schemes guarantee that the worst case will occur should the pace of military operations outrun diplomacy (a condition that would hardly be surprising in the context of a central war).

-Second, a perceived inability to fight a war in a militarily sensible fashion could easily have a very debilitating effect upon the quality of pre-, and intra-, war deterrence. It appears to be the case that the Soviets believe an efficient war-fighting capability to be critical for the quality of deterrent effect. (As Soviet defense analysts are fond of saying, "what is deterrence without war-fighting?")

-Third, while the United States must be careful not to design a force posture and doctrine that, in and of themselves. might function as a proximate cause of war (analogous to pre-1914 mobilization schedules), there can be no guarantees that prewar deterrence will "work" forever-as Fred Ikle reminded the defense community forcefully in his January 1973 article in Foreign Affairs: "Can Nuclear Deterrence Last Out the Century?" Furthermore, a U.S. President might find himself in a situation in which intrawar deterrent considerations, at least in the early stages of a conflict, appeared to be as irrelevant in Soviet calculations as had been putative prewar deterrent calculations. In short, a U.S. President might well find himself in a situation in which he was desperately interested in strategic employment options that made military and political sense, both in and of themselves and with respect to the Soviet ability, or willingness, to strike back.

War Aims. To argue that there should be strategy in, and beyond, the SIOP is not to assert that central wars are "winnable." Rather it is to claim that one should not threaten, let alone execute, particular strategic employment options simply because one has exhausted the menu of politically intelligent options. For example, to refer to a topic that is addressed in more detail below, is the United States really interested in wreaking great damage upon the Soviet recovery economy (as opposed merely to threatening such damage)? How would such an exercise help the United States in its conduct of the war?-How would it promote favorable conditions for war termination?-And what character of a Soviet response should be anticipated?

It is most useful to begin NUWEP analysis by identifying some possible, alternative, war outcomes and then to proceed to track back from the outcomes to attempt to see if paths to their attainment can be plotted. There cannot be a "standard or dominant scenario" for the outbreak of a central war: also, it would be prudent for the U.S. defense community to assume, for SIOP design purposes, that once a conflict assumes a central war character, that conflict cannot be subsumed within a single framework of political assumptions. These caveats are not offered with great confidence, because there are reasons to believe that a Soviet political leadership might just delegate control of the dynamics of a military conflict to its military professionals (who might believe that "central war is central war"regardless of why and how that war began).

In ascending order of ambition, the United States could seek to:

-deny the U.S.S.R. victory (on its own terms).

-defeat the U.S.S.R. (on its own terms).

-win.

To deny the Soviets victory might, in some circumstances, be the equivalent of imposing defeat. If victory denial were achieved over an issue of very great political importance, and at considerable military cost, the domestic consequences within the U.S.S.R. might be traumatic, if not revolutionary. The defeat of the Soviet Union is not, of course, the same as victory for the United States. Both superpowers might be reduced to radioactive anarchy. For the United States to win a central war, the Soviet Union would have to surrender-or be in such poor politicalmilitary condition that the issue of an instrument of surrender would be an irrelevance-and the United States would have to be intact as a political entity, able to recover on fairly short order from the damage suffered (courtesy of voluntary, and some no doubt coerced, assistance from undamaged economies abroad), able to continue or resume military operations, and generally be in a position to organize, and enforce, the terms of the new postwar international order.

Damage Limitation. Strange to say, perhaps, these three goals: victory denial, defeating the enemy, and winning, although distinguishable in principle, in practice carry a common, major, yet vastly underappreciated implication for U.S. defense policy. Specifically, they all require a serious U.S. effort to achieve a worthwhile measure of damage limitation. This author is not dismissive of the now traditional objections to damagelimiting programs. He is fully cognizant of the charges that they would be:

-very expensive.

-self-defeating and futile, in that they would simply spur the arms competitor to offset them. --dangerous, in that they might mislead a President into believing that a central war was survivable and perhaps winnable.

Damage limitation may be judged to be expensive, but what is "expensive" for a country with a \$2 trillion GNP when the issue is survival? Naturally enough the Soviet Union would be interested in offsetting any American strategic program that carried a major promise of enhancing U.S. war-waging efficiency (including the ability of U.S. society to survive and recover). In and of itself that observation is close to being axiomatic; it hardly warrants description as a devastating argument against U.S. damage-limitation programs. Why must it be assumed that the damge-limiting path would prove to be self-defeating? With respect to the dangers that might flow from damagelimitation programs directed towards the goal of assured survival, it is exceedingly unlikely that a President, indeed any President likely to be elected, would be confident that American societal damage could be kept very low (by the standards of potential damage in a nuclear war: "very low" would be very high in the context, say, of casualties suffered in World War II). The somewhat implausible danger that might attend trusting the U.S. Government with a major damage-limitation capability needs to be set against the much greater dangers that would attend a U.S. Government entering acute crisis interactions bereft of virtually any ability to limit damage to the society whose wellbeing was its charge.

The case for offensive and defensive (active and passive) programs designed physically to constrain the amount of damage that an enemy could otherwise impose, may be summarized as follows:

-The geopolitical asymmetries that distinguish the Soviet Empire from the American-led $alliance^4$ render it very

TARGETING 7

likely indeed that it would be the United States that would need to lead the escalation process into, and perhaps up through different stages of, central war. Given the extant, and predictable, balance of projectable military power vis a vis the Eurasian "rimlands," it is difficult to write plausible scenarios wherein Soviet forces in, say, Europe or the Persian Gulf region would face local defeat—thereby leading the Soviet Government to seek "central use compensation" for impending regional disaster.

-If the Soviet Union should choose to counterescalate to, and within, central war in only a very measured way (which is far from certain)-responding to U.S. countermilitary attack options and, eventually, to selective countereconomic recovery options, in kind and with roughly the same weight of attack -the United States very soon should find its employment options paralyzed through the functioning of self-deterrence. No matter how flexible U.S. strategic employment planning may be. if it is not matched by some very significant ability actually to defend North America, it would have to amount, in practice, to suicide on the installment plan. Flexibility, per se, carries few advantages. Indeed, if the flexibility is very substantial, and if the enemy agrees tacitly to a fairly slow pace of competitive escalation, it provides noteworthy time for the self-deterrence process to operate.

--Damage-limitation programs may have no bearing whatsoever upon the occurrence of central war or Soviet operational method as reflected in their conduct of a central war. Damage limitation, simply, might have meaning in the context of the character of war termination and the condition of the United States after the war.

-No matter how intelligent a U.S. exc. strategic targeting doctrine may be, in sho Published by U.S. Naval War College Digital Commons, 1980

terms of its speaking to real Soviet fears and vulnerabilities, it would lose much, if not most (or even all), of its deterrent influence if Soviet leaders believed that a U.S. President would be deterred by the prospect of intolerable Soviet retaliation from putting it into operational effect. There can be no argument in favor of a politically unintelligent targeting doctrine, but it is sensible to recognize that some considerable ability physically to defend American society should act as a "deterrence multiplier."

A realistic damage-limiting posture can offer only modest performance and comes without any guarantees. Civil defense, ballistic missile defense (BMD). defense. antisubmarine warfare air (ASW), and an impressive scale of prompt countermilitary (including hardtarget) capability could well mean the difference between day and night with respect to U.S. war-recovery potential. But preclusive damage limitation is not even remotely feasible. A U.S. damagelimiting posture would do well if it kept American prompt casualties down below the 20-30 million people range. Those are horrific numbers in ethical terms, and in the light of U.S., post-Civil War, historical experience. However, those numbers are only modestly in excess of Soviet losses between 1941 and 1945 and are almost certainly within the range of serious Soviet anticipation vis à vis a central war with the United States. If the United States is prepared, in extremis, to wage a central war-which certainly is current policythen it has to be prepared to accept 20-30 million prompt casualties, if the damage-limitation mission is approached responsibly. If damage limitation, as a very deliberate planning objective, is eschewed_as at present-then the United States is prepared, so it says, to wage, in extremis, a war in which in excess of 100 million prompt casualties should be anticipated.

Unfortunately for freedom of doctrinal and postural choice, damage limitation is not simply a war fighter's dream. It should be anticipated that even the most modest of the three central war aims of interest to the United States-the denial of victory to the Soviet Union-is very likely to be defined in Moscow as being the functional equivalent of a resounding defeat. It is very unlikely that the Soviet Union of the 1980s would acquiesce either in a local stalemate or clear local defeat without being tempted to take the conflict to a higher level. So traumatic might the political implications of such a stalemate or defeat be for Soviet authority in Eastern Europe and at home that Soviet leaders may believe that the best of a short range of bad alternatives is to initiate a central war. Logically, at least, the United States cannot expect so to manage a conflict process that damage-limitation (or warfighting) capability would be an irrelevance: whatever permutation of local strength/weakness and central systems strength/weakness one plays, the case for competence in damage limitation retains its integrity.

-If the Western Alliance is relatively weak in locally deployed (or assigned) forces, then it should be the party that would need to lead the process of escalation to a higher level of violence. Needless to say, almost, the United States could not hope to prevail through intra-(central) war deterrence, let alone fight the war through to a favorable military conclusion (which might be required if the United States declines to surrender, and the Soviet Union declines, or is unable, to negotiate), if damage to the American homeland could not be limited to a large degree.

-If the Western Alliance is relatively strong in local forces, and were to tarimpose some fair facsimile of a resound-eff ing local defeat upon Soviet arms, the nes https://digital-commons.usnwc.edu/nwc-review/vol33/iss1/2

Soviet incentive to initiate central nuclear employment should be influenced perception of likely American bv damage-limiting prowess. To repeat, no guarantee of deterrent success can be offered. The Soviet Union might feel so desperate that, counting on the welladvertised U.S. proclivity towards targeting restraint and flexibility, and hoping for a failure of U.S. Presidential nerve and will, it would attempt to force an improved political outcome through competitive strategic escalation. Or, defining the political context as the "Day of Judgment," Soviet leaders may decide that, regardless of the adverse state of the strategic balance, they are compelled to see the conflict through to the bitter end.

War is a Two-Way Street. It should be quite apparent by this stage of the paper that strategic targeting or, more broadly, nuclear weapon employment policy, is not a subject that has integrity in and of itself. Strategic targeting has to be considered in the context of U.S. defense policy as a whole. At the same time that the U.S. defense community reviews its strategic targeting philosophy, it should also consider the ways in which Soviet targeting initiatives and responses can be deterred or, if need be, physically thwarted. To repeat a critically important refrain, a supremely intelligent targeting doctrine for the United States will be of little avail if, in real historical circumstances, a U.S. President lacked adequate material means to implement it, or was (self-) deterred by the prospect of the likely Soviet reply. These cautionary words are not intended to detract from the importance of reviewing and improving U.S. targeting doctrine, only to remind readers that conflict is (at least) a two-person game.

A basic truth concerning strategic targeting design is that the credibility, effectiveness, and real-time attractiveness of lower level (of damage) strike options has to be a function of the credibility and assessed probable effectiveness of the entire strategic targeting design. In other words, every stage of strategic force application (or every "building block," if that terminology is preferred), as threat or in execution, can have utility only if the entire design of defense policy is sound. For U.S. example, it could be extremely dangerous were the United States to plan a set of very selective targeting building blocks for prospective rounds one, two and three of strategic force application, while rounds four and five entailed truly massive countereconomic recoverv strikes the actual implementation of which could never be in the U.S. interest (because of the character of the anticipated Soviet retaliation). In short, the United States needs a targeting design that has integrity from first to last. To a substantial degree that integrity can only come from a robust domestic war survival and recovery program. The principal weakness in the strategic flexibility thesis that James Schlesinger advertised so forcefully⁵ was that it neglected (at least, in public exposition) to explain how the United States thought it could deter Soviet responses.

Strategic flexibility, with its emphasis upon selectivity and restraint, is really the targeting doctrine appropriate to a country that is strategically very superior-a country that has a plausible theory of how it can limit damage to itself in the possible event that the enemy is not sufficiently impressed by very limited American central strategic employment. When designing nuclear weapon employment policy vis à vis a country like the Soviet Union, which has displayed no known interest in the idea of intrawar deterrence, and whose military science seems to be totally dedicated to improving the efficiency of force application, it is only prudent to assume that one might not be permitted to wage a central war of limited ing Published by U.S. Naval War College Digital Commons, 1980

liability. Indeed, a great deal of Anglo-American theory on the subject of limited central war (with its associated concepts of flexibility, thresholds, bargaining, and negotiated [formally or tacitly | war termination) may reflect nothing more substantial than an enduring "insular" tradition in strategic thinking. Whether or not the Soviet Union should cooperate in conducting a central war as an intrawar deterrent bargaining process is beside the point: such an approach might be alien to Soviet strategic culture and may find no place in Soviet strategic planning. James Schlesinger said

... that doctrines control the minds of men only in periods of non-emergency. Thev do not necessarily control the minds of men during periods of emergency. In the moment of truth, when the possibility of major devastation occurs, one is likely to discover sudden changes in doctrine.⁶

This much-quoted thought has provided some comfort for those who wish to believe that the U.S. defense community should not take at face value what it reads in the Soviet defense and political-military literature concerning the character of Soviet behavior in a central war. For political reasons, so the argument goes, the Soviet Union is unable or unwilling to admit that it might use nuclear weapons in a deliberate and constrained manner as an act of policy. One cannot help but speculate, however, that it is not selfevident that a Soviet leadership in a moment of central war crisis should be expected to be imaginative and to reverse its theretofore authoritative doctrinal principles for the guidance of force application.

The moral of this brief excursion for the U.S. defense community is that it would be unwise for it to assume any likelihood of a real (crisis) time Soviet proclivity to wage a central war according to American rules. Such tacit Soviet

cooperation as might occur, to arrest the slide to total war, may well have to be coerced. It is not unreasonable to speculate that in the event of the outbreak of a central war a U.S. President would be almost as interested in securing prompt war termination, as he would be in denying victory to the Soviet Union.⁷ Unfortunately, it would be consistent with the Soviet evidence to hand, to claim that a Soviet leadership would be more interested in securing an outcome that it could call victory than it would be in achieving a very prompt termination of hostilities. This is not a prediction, but it does point to a distressing potential mismatch of a mix of objectives which the U.S. defense community is obliged to take seriously. Wishful thinking has no place in war planning.

Escalation Control and Intrawar "Firebreaks." Whether or not the United States purchases substantial passive and active defenses for the goal of domestic damage-limitation, there is everything to be said for designing the U.S. strategic posture, and advertising appropriately in a general way, its probable operational utility, with a view to maximizing the prospect that the Soviet Union would lack attractive strategic counterescalation options. No one can guarantee that intrawar deterrence will function to the U.S. advantage, but intelligent postural design-married to a well-orchestrated declaratory policyshould stack the deck as favorably as psychological, political and military conditions permit.

It seems probable, though it is far from certain, that a major duty laid upon the Soviet strategic force posture is strategic counterdeterrence: in short, to deny the United States the initiative, or freedom of employment action, with its strategic forces.⁸ If, as seems very safe to predict, the United States will be unable for the foreseeable future to be confident that it could effect a (total)

surprise preclusive disarming attack against Soviet strategic forces, design of a U.S. strategic force posture that can deter attack upon itself has to take logical priority over targeting doctrine. To stand a modest though very worthwhile chance of controlling the escalation process, the United States needs an "intrawar firebreak" that would deny the Soviet Union the ability (not merely to deter, but actually thwart) to wage a largely counterforce and counter-C³I (Command, Control, Communications, Intelligence) war. In practice this advice means that the United States should deploy an ICBM force that the Soviet Union could not attack with profit;⁹ a manned bomber and cruise-missile carrier (CMC) force that could not be reduced catastrophically by Soviet SLBMs fired on depressed trajectories; and a C^{3I} system (including an NCA) that looks remarkably unattractive as a target set. Such a U.S. posture does not freeze the Soviet Union out of the escalation competition, but it does markedly and usefully, counteract. Soviet strike options. Above all else, Soviet defense planners would be placed in what for them would almost certainly be a nightmare condition, where they would be expected to prosecute a central war in a militarily intelligent fashion, while the United States would retain essentially an inviolate strategic posture.

Counterforce incompetence (vis à vis strategic force assets) should be expected to have far more discouraging an effect in Moscow than it would in Washington. In effect, such a condition would checkmate what is known concerning Soviet doctrine and operational method.¹⁰ The concept of deterrencethrough-societal-punishment, although probably reflected very imperfectly in actual U.S. targeting plans, has nonetheless been the dominant strain in Western deterrent philosophy for more than 15 years. Soviet political and military leaders might believe that they could win a process of competitive escalation wherein societal and nonstrategic military assets would dominate the targeting lists of both sides, but it would not be unreasonable to argue that a largely nontargetable U.S. ICBM, SSBN, homber and CMC force structure would promote healthy traumas for the Soviet general staff, and would vastly increase the prospects of an intrawar deterrence mechanism functioning fairly promptly to the Western advantage. However, to repeat, there are no quarantees. "Firebreaks," so called, may cease to work as intended. The United States cannot eschew active and passive defenses on the grounds that a nontargetable ICBM (et al.) force should enforce escalation discipline. What if it does not?

Fears-U.S. Interests. U.S. Soviet strategic deterrence and targeting problems defy simple characterization. Nonetheless, two questions above all others serve usefully to focus discussion. These are: first, what does the Soviet Union fear most?; second, what targeting strategy would it actually be in the U.S. interest to implement? It is not implied here that identification of the worst Soviet fears need necessarily point to an optimum U.S. strike doctrine. In some circumstances, the United States need not brandish the most fearsome threat, and some Soviet fears may not actually be exploitable by U.S. strategic action (though advertisement of such a U.S. threat may have considerable deterrent merit). At this juncture it is appropriate to comment that a general East-West war would embrace every kind of military instrument, and it could be a great mistake to approach the general war problem as though it were almost entirely a central war between so-called waged strategic forces. Indeed some of the more promising ideas for denying victory to, or defeating, the Soviet Union require imaginative offensive actions by Western general-purpose forces, not the clever

placement of strategic nuclear warheads.

The leitmotiv for U.S. targeting design should be the known Soviet obsession with political control. In answer to the question, "what does the Soviet Union fear most," one can reply, loss of political control. In extremis, loss of political control at home means the demise of the Soviet state. Since the early postwar years, the territorial integrity of the Soviet imperium has been nonnegotiable (save in one very special case-the Soviet occupation zone in Austria and perhaps Azerbaijan in 1946). The essential, defensive, reason for this Soviet stance appears to be the Soviet fear (whether well-founded or not) that it could not contain the consequences of what its subjects would view as a process of retreat.

Ideally, the Western deterrent against Soviet misbehavior would be a credible threat to unravel the Soviet Empire in Eastern Europe. If the United States could field a strategic force posture married to domestic war-survival programs such that a Soviet leadership would be unable to discern any "theory of victory" at the level of central war, any Western military success in Central Europe would have truly traumatic implications for the stability of Soviet holdings. There is an instability potential in Eastern Europe (meaning that even a modest shock to the status quo could have quite immodest consequences) that is the West's greatest potential deterrent asset. Some defense analysts would proceed much further and suggest that the Soviet Empire at home is none too solid a structure.

It is moderately obvious that the Western enemy is the Soviet state and its instruments of domestic and external coercion; while a potentially decisively important ally is certainly the vast majority of the population of Eastern Europe and, much less certainly, large sections of the Soviet population itself. Identification of the Soviet state as the enemy is the essential first step in the

design of an intelligent targeting strategy. If the United States and its allies (and potential allies in Eastern Europe) are able to wage war against the Soviet state, there is every good reason for desisting from imposing damage upon the Soviet citizenry and its means of livelihood. Indeed, if the Soviet state can be brought down (a task far more likely to be effected 1917-style-i.e., by disaffected Russian (et al.) soldiers, workers and peasants-than by a flock of U.S. MIRVs) through precisely targeted action, and reverses suffered by Soviet projection forces abroad, any successor regime or regimes would stand an improved prospect of political success if its (their) economy(ies) had not fallen victim to the U.S. SIOP.

Countereconomic targeting, even in the refined form of countereconomic recovery targeting, is fundamentally flawed both as a deterrent, and as an operational concept. This is not to denv that the prospect of suffering a major degree of economic damage has some probable merit as a deterrent. No Soviet leader would lightly place at risk the physical accomplishments of 60 years of socialism. In addition, there could be circumstances wherein a U.S. Government might wish to damage the Soviet economy, with a view to influencing the postwar balance of power. Unfortunately, perhaps, no one has yet been able to explain either why a Soviet leadership would be likely to believe that an almost entirely unprotected (by passive and active defenses) United States would actually implement the threat of large countereconomic strikes, or why a moderately prudent U.S. President would ever believe that actual execution of large-scale countereconomic strikes would promote U.S. interests. Given the failure of the countereconomic and countereconomic recovery strike concepts to pass the test of credibility or U.S. interest in execution, the targeting debate probably should focus elsewhere. As a final word

on this issue, it is not sound even to think of a large countereconomic strike as comprising the SIOP threat or option "of last resort." The U.S. "last resort" threat should target the Soviet political control structure. If the war had to be fought through to the very end, our ultima ratio should consist of a large strike against such identifiable targets as the essential bureaucratic and coercive organs of the Soviet state. Such a strike would, at least, be related directly to the most expansive of U.S. war aims-the demise of the Soviet state -and should contribute constructively to the transition to non-Soviet regimes in what previously had been Soviet territory. By way of sharp contrast, a massive strike against Soviet economic targets would be purposeless and almost certainly suicidal (although damage to the Soviet control structure just might impair the ability of the remaining Soviet forces to continue the war, it is probably more likely that it would trigger a spasm response).

Political Control in the Soviet Union. In practice, the Soviet state almost certainly cannot be targeted directly by the United States with anything even approaching high confidence. Prominent among the weaknesses in the concept of counterpolitical control targeting are the following:

-The potential target set is very large.

-The location of some of the targets is not known precisely.

-It will be difficult, if not impossible, to know exactly who will disperse to which facility.

-The communication equipment in many of the facilities must remain a matter for speculation.

-The effect of countercontrol strikes upon Soviet ability to conduct military operations and organize a postwar recovery effort cannot be predicted with confidence. -Once executed, a very large strike against the Soviet political and administrative leadership would mean that the United States had "done its worst." If the Soviet Government, in the sense of an NCA, were still able to function, it is likely that it would judge that it had little if anything left to fear.

-If very successful, a large (or small but superefficient) counterpolitical strike would probably impair fatally the ability of the U.S.S.R. either to negotiate war termination, to control residual but active, deadly Soviet forces, or even to accept some face-saving offer that amounted to a surrender.

Just how seriously the U.S. Government should regard the above objections depends in good part upon the role(s) assigned counterpolitical targeting. Aside from the most obvious and urgent necessity-specifically, a need to know just how feasible it would be to impose particular kinds of damage upon the Soviet control system-two alternatives have to dominate consideration of this question. First, countercontrol targeting could be approached as a major warfighting task, in the hope or expectation that Soviet ability to conduct the war would be impaired very substantially, and to U.S. advantage. Ideally, in this view, a prompt large strike against the central Soviet leadership cadre would (should?) paralyze the Soviet war machine. If they could be deprived direction (meaning highly centralized direction), Soviet forces may not need to be destroyed. Second, the counterpolitical control option might, as suggested above, serve as the "ultimate U.S. threat." In this second approach the countercontrol threat would comprise the major safeguard deterring a massive Soviet strike on U.S. cities. In part (though only in part), a persuasive appearing countercontrol threat might perform as the functional equivalent of a major U.S. damage-limitation capability.

In practice, many difficulties would appear-in addition to those already cited.

-The countercontrol option as the defender of U.S. cities (in deterrent prospect) could only work as outlined here if the Soviet Union were the deterree and the United States were the deterrer. In real life it could well be the case that the Soviet Union had secured major net advantages through the countermilitary war-meaning that the next move would be up to the U.S. President (who would know or suspect that the execution of the countercontrol option would result in Soviet countervalue retaliation).

-Neat central war sequences of move and countermove (or decisions not to move) may amount to little more than academic fantasy: the pace of competitive SIOP execution(s), amidst the devastation of C^{3I} assets, could translate into no clear "rounds" with each side halting as at a whistle prior to the next "play."

-The Soviet fear of the large countercontrol strike probably would need to be enhanced through some small precursor strikes intended to demonstrate the vulnerability of the Soviet control system.

-There could be a strong military case for striking early in a war at some of those Soviet C^3I assets in the U.S.S.R. that bear upon Soviet ability to control projection forces. Such a strike might be too successful, in that it would speak to the believed Soviet anxiety over loss of political control and might provoke a very rapid Soviet panic escalation of the war.

--Many Soviet political control targets are in or fairly close to major cities. U.S. strikes on almost any scale against the political control structure could well

be indistinguishable, in Soviet eyes, from a countercity attack. This may or may not be an important point: it depends on the timing of such a strike (early in the war as a warning, or very late in the war either again as a warning, or as the U.S. ultima ratio).

Because of the known and enduring Soviet obsession with central political control of their imperium, the case for threatening to impair the quality and quantity of that control is overwhelming. Less overwhelming is the case for actually striking at what is identified as the most important nodes in the Soviet control system. Should the United States ever execute such a strike, a maximally punishing Soviet response (probably launched on warning of the U.S. countercontrol strike) should be anticipated. However, as noted above, for reasons to do with a theater war, or for the purpose of illustrating vividly just how vulnerable the Soviet political control could be, the U.S. targeting community should look closely at small and very selective countercontrol strikes (intended to have both a military effect, and—in some cases—a definite political effect).

There is some small danger that the option of targeting the Soviet political leadership, and the organs for centralized control of its military, police and economic activities, might attain the status of being fashionable. Countercontrol as threat and in execution is, rightly, of enormous interest to the United States, but it is not a panaceanecessarily able to function as a "great equalizer," compensating for any deficiencies in U.S. military (and civilian) programs. In addition, the very importance of the political control target set should lead the U.S. defense community to approach it with great caution and with all the sophistication that can be mustered.

postwar world. "Regionalization" of the U.S.S.R. (dismemberment or balkanization, if preferred) has been much studied of recent years, and perhaps with good reason. However, it would be refreshing to read a persuasive analysis of just why such regionalization would constitute a preferred condition, in U.S. perspective. The deterrent merit of such a threat in Soviet eyes can scarcely be doubted. Nonetheless the question remains, why would the United States, in practice, favor a regionalization of what is now the U.S.S.R.? While recognizing that regionalization might occur as a consequence of the chaos attendant upon a nuclear war, regardless of the political vision informing U.S. targeting design, it still behooves us to consider the following points: a regionalized former U.S.S.R.

-would be prey to still powerful neighbors or near neighbors (China, Germany?).

-would almost certainly be condemned to interregional war for a long period, probably followed by imperial reorganization in the interest of the strongest successor state or states.

-would probably require (largely) U.S. "ordering" and policing on a truly major scale (a foreign entanglement of unprecedented magnitude and complexity).

-would constitute a series of scarcely, or nonviable, military and economic entities, governed dictatorially (of necessity), and racked by civil and international conflicts.

For all its deficiencies and imperfections, the cause of international order (and peace) was not well-served by the demise of the Austro-Hungarian Empire. Regionalization of the U.S.S.R. should be approached as a temporary (though possibly highly useful, for the West)

Countercontrol targeting also raises be approached as a temporary (though the question of the nature of a tolerable possibly highly useful, for the West) https://digital-commons.usnwc.edu/nwc-review/vol33/iss1/2

TARGETING 15

embarrassment for Moscow, as a permanent condition (with what implications for the future balance of power in Eurasia?), as a threat, and as a succession of execution options. There is always the danger that a flurry of "how to do it" (regionalization) studies may obscure the logically prior question should it be attempted?

Soviet Military Power and U.S. Targeting. Inherently the Soviet military posture (and allied-to some degree) constitutes the most interesting target sets for U.S. defense planners. Soviet military power of all kinds, almost certainly directed with great determination against Western military assets, would be the Soviet policy instrument that needs to be blunted and defeated in short order. If Soviet military power cannot be denied its military goals, and-moreover crippled in the process, none of the other possible U.S. war-waging schemes (countereconomic and political control targeting, for leading examples) are likely to have an intolerable and enduring effect. In short, to misquote Gen. Douglas Mac-Arthur, "there is no substitute for victory-denial." If the Soviet military are able to win theater-wide campaigns in Europe and the Persian Gulf regions, and perform very well in central war counterforce missions (including homeland defense), the undoubtedly catastrophic damage the United States could impose upon Soviet industrial structures, the degree of regionalization that might be imposed, and even the disruption possibly enforceable against the political control system, would constitute only temporary embarrassment (albeit of a very painful kind). A militarily victorious Soviet Union could (and should be expected to) use the rest of the world, as it chose, for a recovery base, and could restore domestic authority at its leisure.

(a) minimizing, if not eliminating, the problems of self-deterrence; (b) being inherently sensible (which assists credibility); and (c) enjoying immense respect in Soviet eyes. From the perspective of escalation control, the better the U.S. counterforce capability, the less pressure there should be on a U.S. President to initiate those kinds of countereconomic and political control strikes which would invite a large Soviet countervalue response. In addition, of course, the more successful the strategic counterforce strikes, the more manageable the problems become for civil defense, air defense, and one hopes (for the future)-area ballistic missile defense.

If one is serious about the need for a war-waging capability on both (pre and intrawar) deterrent and prudential defense grounds then there has to be a judicious balance between offense and defense. For example, in practice it is entirely possible that most Soviet strategic force payload will be immune to U.S. offensive attention: most of the SSBN fleet would be at sea; most of the strike assets of Long Range Aviation would be in the air; and Soviet ICBMs may not wait for the arrival of U.S. reentry vehicles. Bearing that strong possibility in mind, it is necessary both that U.S. strategic forces essentially be untargetable, and that proper U.S. defensive provision be made for thwarting much of the purpose of Soviet offensive force missions. The United States should, with high confidence, be able to enforce at least a stalemate upon the Soviet Union in any countermilitary phase of a theater or central war. The stress laid in this paper upon the need for damage limitation through homeland defense rests upon the anxiety that what the Soviet Union cannot accomplish through force-on-force engagements, they might gain as a consequence of the very unequal provision made by the two states for domestic survival and

P.(ofsiall kinds) has the reanifold gas to of mons, recovery. Also, of course, if the United 13

Countermilitary targeting capability

States should fare badly in a counterforce exchange, following a disaster in Europe, it would be the United States that would have to contemplate very seriously the risks of escalating to the level of counterpolitical strikes (with all of the self-deterrent problems thereto connected).

It should not be forgotten that damage wrought against the Soviet military machine translates, in Soviet perspective, into threats to the political integrity of the Soviet Union. This is one of the very healthy asymmetries in the Soviet-American competition, and its importance should not be undervalued. Military defeat would be a national tragedy for the United States (and for hundreds of thousands of American homes), but the defeat would have to be on a monumental scale before one would expect the very stability of the U.S. political system to be shaken. Even a clear military defeat in (and confined to) Europe probably would not result in a military coup in Washington, or any similarly dramatic discontinuity in U.S. constitutional forms. Can one imagine what the effect of defeat in Europe would be upon the domestic political stability of the Soviet Empire? Stable democracies like the United States and Great Britain can lose campaigns, even in humiliating style (recal) the spring of 1940 and Dunkirk), but the troops (even if they are conscripted, or "duration-only," civilian soldiers) do not come home breathing revolution. At worst, scapegoats are located and fired, and the political-military leadership is shuffled. In terms of deterrent effect in Soviet official minds, the prospect of suffering enormous military losses in campaigns that are not obviously succeeding has to be far more dissuasive an anticipation than would be the prospect of very large civilian population or industrial damage.

The practical problems that must attend any U.S. endeavor to target Soviet projection forces are formidable.

To mention but a few:

-By the time SACEUR's deep-strike nuclear systems (not to mention U.S. SIOP-assigned forces) would be released, the Warsaw Pact forces that really mattered, in the context of a minimum warning (4 days of mobilization) attack, would probably be deep into Western Europe, or clustered in Central Europe. There are thousands of nonstrategic force fixed military targets inside the U.S.S.R., but striking at these, say, 10 to 15 days into a war in Europe would not save NATO-Europe.

-Very early nuclear employment against fixed targets on the reinforcement routes the Soviet third echelon must transit en route from the three westernmost military districts of the U.S.S.R. to Central Europe could have a very useful delaying effect. However, militarily intelligent target plans and politically intelligent nuclear release practice, might be very different indeed. Moreover, the warhead yields on the ICBM and strategic bomber forces probably render them overly muscular for strikes into Central Europe, while the SLBM force has communication, on-station, and force loading inflexibility constraints. It is far from obvious that SACEUR's in-theater deep-strike, nuclear-capable, assets would be survivable in adequate quantity through to the time of desired mission execution.

-The targeting of projection force assets within the U.S.S.R. subsumes the superpower homeland threshold, or sanctuary, problem. For example, if a large American expeditionary force in the Gulf region (say, in Saudi Arabia and Kuwait) were in the process of being defeated, in part as a consequence of Soviet air missions being flown out of Soviet homeland-located airbases, it is not at all obvious that a U.S. President would choose to strike at those bases. At the very least such a strike would

https://digital-commons.usnwc.edu/nwc-review/vol33/iss1/2

license Soviet attacks upon U.S. carrier task forces (and the U.S. Navy could argue that it could not afford to lose a carrier in a "sideshow") that theretofore probably would have enjoyed sanctuary status (as off Korea and Vietnam).

--It is a fact that there are no agreed "rules of engagement" vis à vis strikes at projection force target sets in Soviet territory. This fact and some of its less pleasant possible implications underlie much of the current West European uneasiness over the deployment on NATO-European soil of systems capable of striking into the Soviet Union.

Conclusions and Implications. The U.S. defense community, with respect to its strategic targeting problems, should adopt a frankly agnostic stance. It is hoping to deter, and-if needs be-conduct military operations, in a situation for which there is no close precedent. No one honestly can affirm confidently that very careful postural and SIOP design will have any very marked effect upon the quality of pre and intrawar deterrence, or even upon the outcome of a general war. There can be no peacetime "road tests" of the adequacy of the U.S. defense posture and its preferred targeting schemes. If an acute political crisis has a nonviolent resolution, it is unlikely that strategic historians will agree on why the crisis did not explode into war.¹¹

Nonetheless, the indeterminacy of peacetime planning problems, for which there are no provably correct solutions, does not absolve the planners and their policymaking masters from behaving responsibly. With respect to strategic targeting issues, it is responsible to attempt to understand "the Soviet way," or Soviet strategic culture, style and probable operational method. A continuing weakness in U.S. defense thinking, not excluding some recent targeting analysis, is the relative neglect of likely Soviet objectives and methods.¹² It would not be prudent to advance recommendations for U.S. NUWEP or NUWEP implementation, resting upon even a sophisticated appreciation of Soviet vulnerabilities, in the absence of a balancing assessment of U.S. vulnerabilities.

Also, it is responsible to attempt to design nuclear employment plans and capabilities that would coerce the enemy into waging the war in ways most advantageous (or least disadvantageous) to the United States. In practice one might not succeed, but there could be no excuse for a failure to attempt this. The United States needs a theory of victory (or victory denial) to which each building block in the nuclear (et al.) employment design ultimately relates.

Finally, it is responsible not to assume that preferred outcomes are very probable. For examples: it is prudent to take the problem of war waging seriously, because there can be no guarantees that prewar deterrence will "work" forever; it is prudent to design U.S. employment building blocks so as to optimize the prospects that intrawar deterrent effect will lead to early, and not unfavorable, war termination; but, it is also prudent to make damagelimiting provision for the eventuality that intrawar deterrence falls victim to the "fog of battle" or to Soviet hostility to the prospect of anything other than a clear military verdict in the contest.

This paper reflects analysis in progress, so the "conclusions," itemized below, should be viewed as being both tentative and contingent upon a great deal of additional supportive detail. This paper suggests that:

1. Regardless of the SIOP design preferred, there is an absolute need for the United States to be able to limit damage to itself. Indeed, a good deal of the potential value of a well-designed nuclear employment policy will be negated, or undermined (courtesy of the

Published by U.S. Naval War College Digital Commons, 1980

self-deterrent effect), if American society is totally in a hostage status.¹³

18

2. A targeting review exercise has to be married to a campaign analysis that is understanding of Soviet strategic style and method. Our design of building blocks, thresholds and the like, might be brought to nought by very un-American strategic employment on the part of the Soviet Union.

3. Following (2), the U.S. defense community should think very carefully about ways in which the U.S.S.R. might be coerced, or induced, into waging a central war along U.S.-preferred lines, for a U.S.-preferred outcome. In other words, it would be inappropriate to be unduly skeptical of the prospect for agreeing tacitly upon some "rules of engagement": through appropriate postural design, and perhaps in part through negotiated arms control agreements, Soviet employment options should be capable of being constrained.

4. When designing building blocks, the U.S. targeting community should, wherever possible, identify high-leverage "threat multiplier" strikes. In other words, a limited strike today should open the door to a far more damaging strike tomorrow. Near ideal-type illustrations of this tactic would be corridorblowing strikes against Soviet air defenses (PVO-Strany) and against the Moscow ABM radar: such strikes would inflict only very modest damage on the Soviet homeland, but should quarantee U.S. (et al.) penetrating aircraft and cruise missiles a free ride in the (near) future. One can conceive of limited strikes against some Soviet C³I and general-purpose force elements that, similarly, should function as threat/ vulnerability multipliers.

5. The design of the war plans should have political integrity, considered as a whole. *In extremis*, ideally, they should reflect the progressive unfolding theory of U.S. victory. Even if such an outcome is implausible, for reason (among others) of the vulnerability of U.S. society to Soviet retaliation, identification of a clear, ultimate (though not exclusive), war aim-the demise of the Soviet state-should enable the U.S. defense community to track back in search of strike options that ought to promote that end. This particular, definitive, war aim has several rather obvious merits. First, by definition, its accomplishment would deny success to Soviet leaders. Second, in and of itself, it would have operational appeal to a U.S. President. Third, practical difficulties aside. Soviet appreciation of this American war aim should have an enormous deterrent effect (this is one threat that Soviet leaders would be most unlikely to undervalue).

6. In the absence of a very capable civil defense program, and survivable air and missile defenses, a large U.S. strike against what can be identified of the essential Soviet political control structure, could not prudently be executed as an initiative. The threat to the rule of the CPSU should be thought of as the United States' "Sunday punch" intended to deter the Soviet Union from striking at U.S. cities.

7. Careful attention needs to be paid to the question of which side would be the deterrer, and which the deterree – a question that requires campaign predictions embracing the war outbreak scenario. The large countercontrol threat could function as a war terminator, but only if the onus of further escalation lay with the Soviet Union.

8. Following (7), the efficacy, indeed relevance, of the counterpolitical control threat depends almost entirely upon U.S. (and U.S.-allied) military

prowess in the war to date. Soviet knowledge (or belief-whether well, or ill-, founded) that the U.S. could degrade Soviet political control, perhaps fatally, should discourage strikes against the U.S. homeland of such a character that the U.S. leadership might reason that it had nothing left worth preserving (i.e., freed from obedience to any ethic of consequences, the U.S. leadership could "do its worst"). Many, if not most, of the credibility problems that attend different SIOP designs stem from the prospective fact that the United States has to assume that it will need to take the initiative at all stages of a conflict-in other words, the burden of decision to escalate will be on American, not Soviet, shoulders. In practice, this logic might not apply. Soviet military literature is guite unequivocal on the subject of the virtues of seizure of the initiative: this reflects not poor escalation reasoning (which it is - in U.S. terms), but rather an apparently different approach to the conduct of war.

9. Some aspects of the counterpolitical control strike option require careful political consideration from the perspective of U.S. interests in a postwar world. The issue was raised whether "regionalization" of the current U.S.S.R. necessarily would serve the end of a viable and defensible international order. A further question pertains to long-term U.S. relations with the PRC. It would certainly be feasible for the United States to inflict great damage upon the Soviet projection forces (46 divisions at present) deployed along the Sino-Soviet frontier, and thereby perhaps "kick the door in" for Chinese acquisition of a lot of territory. However, it is not obviously in the U.S. interest that the PRC should profit very greatly from an East-West war. Because the United States could open the gate for the PLA, does not mean that it should-notwithstanding any objective U.S.-PRC alliance. Nonetheless, if one

had to choose, the United States should prefer a strong PRC to a strong Soviet Union.

10. It is debatable whether a substantial fraction of U.S. strategic nuclear assets should be allocated for strike options against Soviet economic targets. The United States has a great interest in ensuring that the U.S.S.R. does not win a war, but has somewhat less interest in impeding Soviet economic recovery from war.* Given the virtual absence of a U.S. domestic war-survival and recovery program, a large threat to the Soviet recovery economy would be: (a) incredible; (b) suicidal if implemented; and (c) quite possibly less than very deterring-even if Soviet leadership believed the threat to be a real one. A case can be made for targeting Soviet warsupporting industry, resting upon the reasoning that it is prudent not to assume a very short war, and that the Soviet Union probably places such targets in the analytical and operational category of "military" rather than "urban/industrial." It has become almost popular to argue for "endurance" in the strategic force posture and in its related $C^{3}I$, and to be skeptical of very short war assumptions. However, the assertions that endurance is important and worth paying for, and that a general war may last months rather than weeks, days, or hours, require careful examination. This author is friendly to the idea of purchasing much greater "endurance," but he wishes to record the caveat that the long war thesis (with its associated implications regarding the importance of the Soviet and American mobilization bases) is in dire need of politicostrategic analysis. There is some danger that the United States might slip from one set of

Published by U.S. Naval War College Digital Commons, 1980

^{*}However, it can be argued that if the United States is to lose a general war, it would be prudent to attempt to ensure that the Soviet Union lost also.

rather apolitical and mindless assumptions concerning war duration (which become a self-fulfilling prophecy—as a posture was evolved that lacked endurance), into another such set.

11. Unlike past bureaucratic practice, it would be desirable if U.S. (and NATO) research and development, procurement, targeting, and arms control planning, could move more roughly in step, each with the others.¹⁴ Although it is desirable to build flexibility into the force posture, there is no denying the fact that substantial changes in strategic asset allocation between very different target systems carry with them some very different postural requirements. Similarly, SALT policy planning should not be innocent of targeting considerations. For example, really deep cuts in strategic force levels could have dramatic implications regarding target coverage (for the U.S.S.R. as well as the United States).

12. Strategic nuclear targeting reviews naturally, and quite properly, encourage imagination and ingenuity in designing force application options. But, on the negative side, they carry the risks of discouraging reflection both upon what *cannot* be accomplished, or can be accomplished only very imperfectly, with strategic nuclear weapons, and upon the quantitative underpinning of U.S. strategy. General war, and particu-

larly a protracted general war (to reflect the new recognition of the need for endurance in the strategic force posture and its C31), should be approached. après Soviet practice, as a "combined arms" problem. Strategic nuclear application may well help in the unraveling of the Soviet Empire, but the 'liberation" potential of a Mk 12A warhead is limited and probably of a terminal character. The U.S. defense community can usefully be chided for its apparently enduring neglect of strategy in favor of managerial competence. However, some of the current targeting problems reflect not so much intellectual deficiencies, but rather muscular inadequacy.

BIOGRAPHIC SUMMARY



Colin S. Gray is Co-Director of National Security Studies, Hudson Institute. He was educated at Manchester and Oxford Universities, receiving the D.Phil. degree in international politics from

the latter. His research interests include American and Soviet defense and foreign policy, European security issues, arms control theory and practice, and strategic doctrine. Dr. Gray has lectured at most American senior service colleges and has published widely. His books include The Soviet-American Arms Race and Strategic Studies and Public Policy: The American Experience.

NOTES

1. Leon V. Sigal, "Rethinking the Unthinkable," Foreign Policy, Spring 1979, p. 39.

2. The New York Times, 24 January 1979, p. A13.

3. U.S. Dept. of Defense, Annual Report-Department of Defense, Fiscal Year 1979 (Washington: 1978), p. 65.

4. See Colin S. Gray, The Geopolitics of the Nuclear Era: Heartland, Rimlands, and the Technological Revolution (New York: Crane, Russak [for the National Strategy Information Center], 1977).

5. For example, in U.S. Congress, Senate Committee on Foreign Relations, Subcommittee on Arms Control, International Law and Organization, U.S.-U.S.S.R. Strategic Policies, Hearings (Washington: U.S. Govt. Print. Off., 4 March 1974).

6. U.S. Congress, Senate Committee on Foreign Relations, Nuclear Weapons and Foreign https://digital-conings/Weishingtem/nwE-revew/Fol33/isff/2 1974), p. 160.

TARGETING 21

7. See Bernard Brodie, "The Development of Nuclear Strategy," International Security, Spring 1978, p. 79.

8. A forceful statement of this thesis is Paul H. Nitze, "Deterring Our Deterrent," Foreign Policy, Winter 1976-77, pp. 195-210.

9. See Colin S. Gray, Strategy and the MX ICBM, HI-3075-P (Croton-on-Hudson, N.Y.: Hudson Institute, October 1979).

10. For a useful summary that rests upon Soviet written sources, see Joseph D. Douglass and Amoretta Hoeber, Soviet Strategy for Nuclear War (Stanford, Calif.: Hoover Institution Press, 1979).

11. Of recent years there has been much sterile debate (exchange of assertions) over just what was the U.S. trump card in October 1962.

12. See Ken Booth, Strategy and Ethnocentrism (London: Croom, Helm, 1979).

13. This elementary, though critically important, truism, was explained with exemplary forceful clarity in Bernard Brodie, *Strategy in the Missile Age* (Princeton, N.J.: Princeton University Press, 1959), pp. 296-97. What was true in 1959 remains true today.

14. See Thomas W. Wolfe, The SALT Experience (Cambridge, Mass.: Ballinger, 1979), passim.