

Dr. Colin S. Gray, *Understanding the Arms Race, Information Series* No. 125, September 1982 (Fairfax, VA: National Institute for Public Policy).

As Albert Wohlstetter¹ has argued, employment of the term arms race to characterize the Soviet-American military relationship of the past twenty years misleads as much as it informs. Hoverer, it is a fact that the world at large, with some justification, believes there to be, extant, a "nuclear arms race." In macroscopic terms, at least, this belief is not unreasonable.

- The United States and the Soviet Union have identified each other as their principal adversary.
- Each country is almost desperately attentive to the course, and detail of the arms programs of the other.
- Each country attends carefully to its relative position on the multi-level military balance.

These three facts do not qualify the Soviet-American military relationship as an arms race. Unfortunately, many of the pejorative connotations of "arms race" are all too lightly attached to Soviet- American military rivalry, notwithstanding the absence of supporting evidence.² Arms races tend to be associated, popularly, with the risk of war; they also tend to be viewed as an expensive exercise in futility (a particularly mindless mechanistic model of arms race dynamics still attracts a great many commentators).

Insofar as history offers any general wisdom on the subject, it is to the unhelpful effect that some wars have been preceded by arms races and some have not.³ A fundamental theoretical problem that awaits scholarly attention pertains to the identification of cases. States which envisage the possibility of fighting one another, naturally and responsibly seek to achieve or maintain a favorable relationship of military power. Since political rivalry very often is expressed, in part, in military rivalry—and since wars tend not to occur between states who had not considered each other as prospective enemies until the eleventh hour of peacetime—some historical juxtaposition of arms race and war is only to be expected. Notwithstanding the empirical knowledge claimed, and the theoretical ingenuity displayed, the possibility remains that arms races are more the invention of polemical writers and social scientists in search of cross-historical general theory, than they are genuinely

³ See Theresa C. Smith, "Arms Race Instability and War," *The Journal of Conflict Resolution*, Vol. 24, No. 2 (June 1980), pp. 253-284.



¹ See His *Legends of the Arms Race*, USSI Report 75-1 (Washington, DC: U.S. Strategic Institute, 1975).

² See Jacek Kugler and A.F.K. Organski, with Daniel Fox, "Deterrence and he Arms Race: The Impotence of Power," *International Security*, Vol. 4, No. 4 (Spring 1980), pp. 105-31.

identifiable event-sequences that do, or nay, have dynamics different from peacetime defense preparation as usual.

Heretical though the thought appears to be, it is worth considering the proposition that arms race theory has made so little progress in large part because the concept of an arms race is mainly metaphor. The confusion of metaphor and reality nay have encouraged Western arms controllers to seek what Robin Ranger has termed "technical," as opposed to "political"⁴ arms control. Because arms controllers could conceive of an arms race system, to an important degree distinct from the framework of political relations, they came to believe that that system could be controlled in useful ways with only the most minimal reference to the political environment. Authoritative confirmation of this claim has been provided by Barry Blechman.

The American theory of arms control would isolate such negotiations (SALT) from politics. In theoretical terms, arms limitation talks should be viewed as technical exercises, directed at constraining the risks which weapons themselves add to existing political conflicts. As those espousing arms control made no pretense of solving political conflicts through the negotiations they proposed, they saw no relationship (other than that artificially instilled by politicians) between progress or lack of progress in settling underlying sources of conflict and progress or lack of progress in arms negotiations.⁵

Blechman proceeds to notice that "[i]n practice, however, the United States has closely linked movement in arms control with broader political accommodations with the Soviet Union." Nonetheless, the practice of 11 linkage11 admitted,⁶ the fact remains that the political roots of competitive arms behavior continue to escape the attention of American policy-makers. Where many theorists of arms racing, and many policy proponents masquerading as arms race theorists,⁷ have erred, has been in focusing far too heavily upon the putative interactive traffic in the alleged arms race system. Indeed, the very concept of a largely autonomous arms race system encourages a quest for the military dynamics of military interaction.

⁴ Robin Ranger, Arms and Politics, *1958-1978: Arms Control in a Changing Political Context* (Toronto: Macmillan of Canada, 1979), particularly Chapter 1.

⁵ Barry Blechman, "Do Negotiated Arms Limitations Have a Future?", *Foreign Affairs*, Vol. 59, No. 1 (Fall 1980), p. 105.

⁶ See Gerard Smith, *Doubletalk: The Story of the First Strategic Arms Limitation Talks* (New York: Doubleday, 1980), pp. 25-26; Michael Mandelbaum, *The Nuclear Question: The United States and Nuclear Weapons*, 1946-1976 (New York: Cambridge University Press, 1979), pp. 199-200; and Henry Kissinger's prepared statement in U.S. Senate Committee on Foreign Relations, *The SALT II Treaty, Hearings*, Part 3, 96th Cong., 1st sess. (Washington, DC, USGPO, 1979), particularly pp. 171-173, 165.

⁷ Arms race theory of the simple (and incorrect) action-reaction kind was deployed in 1968-70 to oppose ABM and MRV, just as it has been deployed of late to oppose MX/MPS. For example, not to the unexamined action-reaction premise which permeates Peter D. Zimmerman, "Will MX Solve the Problem?", *Arms Control Today*, Vol. 10, No. 1 (January 1980), pp. 7-9.

Scholars of Soviet-American relations tend to be ignorant of the precise historical detail of the process of genesis of a weapon system in the United States, and profoundly (and, by and large, excusably) ignorant with reference to Soviet program details. This is a subject where broad-brush characterization, deduced from first principles, can lead one astray all too easily.⁸

Consider the likely impact of the following first principles upon one's understanding of the dynamics of arms competition and the prospects for negotiated restraint:

- The defense programs of each side are, and can be, greatly influenced by perceptions of the other side's programs—actual, anticipated, and possible.
- Both sides would like to reduce the burden of resource allocation for defense.
- The larger, and more dynamic, the defense programs of the two sides, the greater the policy influence of defense-minded hard-line officials.
- Both sides would like to be able to negotiate a plateau in weaponry, or at least to be able to set some "cap on the arms race," so that strategic predictability is enhanced— permitting both governments to deny requests for programs that plainly would provide "excessive" capability. '

The above very short list encapsulates much of the theoretical, first-principle baggage with which the United States government conducted SALT and its end of the arms competition through much of the 1970s.⁹ Each of the four principles was true—for *the United States*. None of the four principles was true, or contained enough truth to be useful as a guide for policy, vis 'a vis the Soviet Union. It is difficult to improve on the words of Sun Tzu:

Know the enemy and know yourself; in a hundred battles you will never be in peril.

When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal.

If ignorant both of your enemy and of yourself, you are certain in every battle to be in peril.¹⁰

To date, American policy-makers have not made adequate efforts to know the enemy, and even the level of American self-knowledge has left much to be desired. The arms race metaphor, aside from its unhelpful pejorative aspects, encourages scholars and officials to consider Soviet-American military relations apart from their local strategic-cultural soil.

⁸ I am grateful to my former colleague, Norman Friedman, for pointing out to me the many misassessments of alleged technical-strategic motives that Western naval analysts have (falsely) discerned with references to Soviet and American naval shipbuilding programs.

⁹ See John Newhouse, *Cold Dawn: The Story of SALT* (New York: Holt, Rinehart and Winston, 1973); Thomas Wolfe, *The START Experience* (Cambridge, Mass.: Ballinger, 1979); Strobe Talbott, *Endgame: The Inside Story of SALT II* (New York: Harper and Row, 1970); and Smith, *Doubletalk*.

¹⁰ Sun Tzu, *The Art of War* (trans. Samuel B. Griffith) (Oxford: Clarendon, 1963), p. 84.

Although this discussion is cast in terms highly critical of past United States nuclear-weapons and arms control policy, it should not be supposed that all, or even most, of the strong criticism of that policy (really policies) that has been voiced of recent years is any better grounded in strategic-cultural realities than is the policy assailed. Just as one should not leap, with fashion, from a simple-minded theory of detailed inter-state action-reaction to a scarcely less simple-minded theory of *eigendynamik*, so one should not leap to precipitously from the erstwhile belief that the Soviet Union was in the process of converging upon the American theory of strategic stability (through the maintenance of *mutual* assured destruction capabilities),¹¹ to the conviction that the Soviet Union is on the high road heading, deliberately, for the goal of clear strategic superiority. All sides of the American nuclear-weapon policy debate are prone to project very American perspectives and concepts upon an alien, though not unfathomable, Soviet strategic culture.

Questions which underlie analysis of the Soviet-American arms race are the following: is there a sufficient basis of common interest for an arms control process to be able to achieve outcomes deemed at least minimally useful by the two sides? Even if a sufficient basis of common interest can be identified, what, and how strong, are the domestic political forces in the two superpowers likely to interdict the arms control process in a negative way? Finally, is it plausible to suggest that the future of arms control is likely to be as unimpressive—or short of "tangible accomplishments"—as its past, because of the very character of the Soviet Union? (In other words, to control the arms race do we need, first, to see a major change in the nature of the Soviet polity?)¹²

What drives Soviet-American military rivalry? The answer, at the macro level, is an antagonism that is part geopolitical, part ideological; while at the micro level, Soviet defense programs are driven very substantially by their own inertia and by a distinctively Soviet brand of bureaucratic politics.¹³ Each country runs, or jogs, in the so-called arms race in a fashion to be expected given its very different political system.

Arms race model builders tend to err because they have not, by and large, recognized the critical importance of the "level of analysis" problem. As a result, apparently strong—and certainly superficially plausible-cases can be made both for the proposition that the superpowers may be likened to two swordsmen, thrusting and parrying, and for the proposition that there is so high a degree of autonomy in the arms programs of each side that

¹¹ See Thomas W. Wolfe, "The Convergence Issue and Soviet Strategic Policy," in *RAND 25th Anniversary Volume* (Santa Monica, Cal. RAND 1973), particularly p. 149.

¹² If this is judged to be the case, then one can only be pessimistic about the future of arms control.

¹³ See Norman Friedman, "The Soviet Mobilization Base," *Air Force Magazine*, Vol. 62, No. 3 (March 1979), pp. 65-71. A work of enduring value is Matthew P. Gallagher and Karl F. Spielmann, Jr., *Soviet Decision-Making for Defense: A Critique of U.S. Perspectives on the Arms Rate* (New York: Praeger, 1972). Also see: Karl F. Spielmann, *Analyzing Soviet Strategic Arms Decisions* (Boulder, Colo.: Westview, 1978); and David Holloway, "Technology and Political Decision in Soviet Armaments Policy," *Journal of Peace Research*, No. 4 (1974), pp. 257-279.

the concept of an arms race is really very misleading. There is both value and error in all major schools of arms race analysis, so, rather than indulge in a protracted, essentially negative, exercises. in critical review, instead I offer the outline of a new model for the understanding of the arms competition. Perhaps the most difficult idea to communicate, though it is commonplace to pay lip-service to it, is that the two superpowers genuinely are different in their characteristic arms race behavior. Jonathan Steinberg, for example, has suggested that

An arms race is, after all, an immense social, political, legal, and economic process. Its influences penetrate every corner of the societies involved, and its attendant manifestations are simply too complex to fit the standard categories of historical analysis. Even if the subject of study is only one of the participants in such a race, as is the case here [Imperial Germany], the number of elements in that nation's social, cultural, economic, and religious traditions which significantly affect the course of the arms race is very large.¹⁴

Anns race activity cannot be explained satisfactorily exclusively either in macro or in micro terms—both must be accommodated.

Elements of Theory

American understanding of the dynamics of the strategic arms race admittedly is rudimentary. Nonetheless, the past fifteen years have yielded some persuasive evidence.

- The Soviet defense establishment has moved in accordance with the quinquennial planning cycle established for all major economic endeavors. In short, the "Soviet war machine" lumbers rather than thrusts and parries in a nimble fashion.
- The Soviet defense effort, year in and year out, is moved much more by consideration of the overall level of the U.S. defense effort than by individual U.S. weapon programs.¹⁵
- There is an action-reaction mechanism in the arms competition, but it tends to operate at the macro, and very micro, levels, rather than at the level of particular major programs.¹⁶

In other words, major American defense budgetary shifts— \dot{a} la Korea or, in minor key, even \dot{a} la Reagan—eventually will be reflected in the level of Soviet defense allocations. Similarly,

¹⁴ Jonathan Steinberg, *Yesterday's Deterrent: Tirpitz and the Birth of the German Battle Fleet* (London: MacDonald, 1965), p. 28.

¹⁵ See Colin S. Gray, *The Soviet-American Arms Race* (Farnborough, Hants, [U.K.]: Saxon House, D.C. Heath, 1976), Chapter 4.

¹⁶ See Andrew W. Hull, "Action-Reaction," *United States Naval Institute Proceedings*, Vol. 197, No. 2 (February 1981), pp. 40-45.

Soviet forces do, and will, attempt to respond effectively, tactically, to the very specific threats posed by particular U.S. weapon systems.

There can be no question b.1t that there is an arms race, even if the United States has chosen only to jog while the Soviet Union has been running. Critics of particular U.S. weapon programs tend to take very little, if any, account of the detail of our extant arms race wisdom. They are content merely to cite the fact that this or that system should catalyze a major Soviet response. Analyses highly critical of MX, for example, tend to proceed from summary denunciation straight into the range of logical alternatives supposedly open to the U.S.S.R. by way of responses.

While it is necessary and desirable to specify what Soviet defense planners might do to counter an American weapon system, it is necessary and desirable also to identify the leading Soviet stylistic elements in the conduct of the strategic arms race. For example, regardless of developments in U.S. posture and doctrine, Soviet military science (following the very general guidance of Soviet doctrine, i.e., grand strategy) prescribes an "assured survival" approach to nuclear war. Individual American strategic weapon systems, be they the Safeguard ABM or the MX ICBM, are appraised in Soviet perspective in terms of their likelihood of actual deployment and their operational meaning.

Safeguard and its immediate technological successors was dealt with effectively by the Soviet Union via the ABM. Treaty of 1972. This treaty served Soviet strategic-operational purposes—quite aside from any broader political motivations—in that it closed off an avenue of overt military high-technology competition wherein the U.S.S.R. was close to a decade behind the United States.

It is more likely than not that Soviet defense planners were far less confident than were U.S. defense scientists from MIT and Cal. Tech. that they could assuredly suppress and/or penetrate *Safeguard*. Examined in historical perspective, it is quite obvious that Soviet strategic programs have been designed far more for the prospective positive accomplishment of enduring strategic missions, than they have for the purpose of offsetting, or negating, particular American capabilities.

Some American arms race theorists chose to deploy a simple action-reaction model of the arms race in order to demonstrate how- foolish it would be for the United States to deploy the *Safeguard* ABM. That opinion was proved correct in that the Soviet Union did choose to deploy strategic forces admirably well suited to defeat *Safeguard*, save only for the fact that *Safeguard* deployment effectively was aborted by the ABM Treaty of 1972. In retrospect, it appears to be the case that the doctrinal *leitmotiv* for Soviet strategic force development is a

determination to effect counterforce success.¹⁷ *Safeguard* was not a threat to Soviet urban/ industrial targeting; rather was it a threat to hard-target counterforce planning. '

SALT agreements, to date (actual and proposed), simply have recorded the extant strategic nuclear balance. A major reason why that process was placed on diplomatic "hold" in 1980-81 was because its achievements were either very modest or even negative in American assessment.¹⁸ The Reagan Administration will resume the SALT/START process in 1982, if only to accommodate NATO-European political pressures, but currently it lacks a plausible "theory of victory" in that process—pending the naturing of new weapon programs.¹⁹

As an instrument of arms race management, it is recognized officially today that SALT can only ratify what is, or what commonly is believed to be imminent. In short, there is no arms control alternative to strategic force planning for the alleviation of predictable arms race anxieties.²⁰ At root, the arms control processes of the 1970s (SALT and MBFR) foundered upon the fact that they were conducted on far too narrow a base of common interests.²¹ Strategic doctrinal commonality was not required for arms control "success", but it is evident today that Soviet defense planners were not merely unpersuaded by Western theories of arms race and crisis stability; they were motivated, for good Russian/Soviet reasons, to pursue weapon deployments which actively would be subversive of the Western idea of stability. Yet again, and analogous with the political events of 1944-48, American policymakers have been disciplined by the reality of Soviet behavior.

The twelve years, 1970-82, have seen American defense officials and commentators grope for a theory of arms race dynamics which would begin to fit the historical facts. It is known that the tight action-reaction theory propounded in the era of the "great ABM debate" (1969-70) is wrong, but what is right? The arms race (stability) arguments deployed to oppose *Safeguard* and MIRV plainly were largely devoid of merit—given the historical facts of Soviet strategic deployment 'behavior in the 1970s—so how does the strategic arms race "work"? It is useful to begin negatively: with explicit identification of propositions which have been shown by events to i.e., false. The following, incontestably, are not true:

¹⁷ John Erickson, "The Soviet Military System: Doctrine, Technology and 'Style'," in Erickson and E.J. Feuchtwanger, eds., *Soviet Military Power and Performance* (Hamden, Conn.: Archon, 1979), particularly pp. 24-32.

¹⁸ On the current "crisis of arms control," see Blechman, "Do Negotiated Arms Limitations Have a Future?," pp. 102-25; Christoph Bertram "Rethinking Arms Control," *Foreign Affairs*, Vol. 59, No. 2 (Winter 1980/81), p. 352-65; and Richard Burt, "The Relevance of Arms Control in the 1980's," *Daedalus*, Vol. 110, No. 1 (Winter 181), pp. 159-77.

¹⁹ See Colin S. Gray, "Wanted: An Arms Control Policy," *Arms Control Today*, Vol. 12, No. 2 (February 1982), pp. 1-2, 8-9.

²⁰. This thesis pervades *Defense Planning and Arms Control*, Proceedings of a Special NSAI Conference, June 1980 (Washington, DC: National Security Affairs Institute, National Defense University, USGPO, 1980).

²¹ See Donald G. Brennan and Colin S. Gray, *Common Interests and Arms Control*, HT-3218-P (Croton-on-Hudson, N.Y. Hudson Institute, August 1980).

- Soviet development and deployment of strategic weapons is driven by a determination to offset anticipated American counter-military prowess.
- Soviet strategic doctrine is dynamic and is open to innovative ideas bearing upon the strategic desirability of the preservation of a condition of mutual societal vulnerability.
- Soviet defense planners think systemically about the implications of their preferred strategic-force deployments for American decisions.

An observation made ten years ago by Johan Holst remains valid today: "We just do not have an adequate explanatory model for the Soviet-American arms race."²² However, inadequate though the available explanatory models remain, the historical experience of Soviet strategic behavior in "the SALT era" of 1969-79 has yielded an evidential base for the derivation of propositions. These do not amount, as yet, to an "explanatory model," of the strategic arms race, but—in toto—they may merit ascription as promising pre-theory.

*First, both superpowers develop and deploy weapons in accordance with the character of their separate national "strategic cultures."*²³ In short, in the language of social science, the Soviet-American arms race is subsystem dominant. There is, in practice, no *general* rationality to strategic posture; instead there are separate rationalities, given the local details of culture and politics.²⁴ American strategic theory in the 1950s and 1960s tended to be long on somewhat abstract deduction and rather short on concrete inductive historical reasoning. Expressed in the vernacular, each superpower has "done its own thing," in individual character.

Second, the national strategic cultures of the United States and the U. S.S.R. are sufficiently distinctive that neither has understood, or been able to respond empathetically to, the concerns of the other.²⁵ While the United States has held to a *leitmotiv* of stability, defined in terms of the total mutual vulnerability of societies and the very substantial mutual invulnerability of strategic weapon systems, the U.S.S.R. has sought enhanced security through the unilateral ability to assure state and national survival by means of a multi-level capability to limit damage. In the authoritative American view, damage limitation in war will be a function of intra-war deterrence, of a reciprocation.in targeting restraint. In the Soviet view, damage limitation will be enforced physically by the timely destruction of U.S. strategic-force assets,

²² "Comparative U.S. and Soviet Deployments, Doctrines, and Arms Limitation," in Morton A. Kaplan, ed., *SALT: Problems and Prospects* (Morristown, N.J.: General Learning Press, 1973), p. 68.

²³ See Jack L. Snyder, *The Soviet Strategic Culture: Implications for Limited Nuclear Operations*, R-2154-AF (Santa Monica, Cal.: RAND, September 1977).

²⁴ For example, see Desmond Ball, *Politics and Force Levels: The Strategic Missile Program of the Kennedy Administration* (Berkeley: University of California Press, 1980).

²⁵ See Colin S. Gray, *Nuclear Strategy and National Style*, HI-3362-PR (Croton-on-Hudson, N.Y.: Hudson Institute, June 1981).

the disruption and destruction of U.S. command and control, and the physical protection of essential Soviet state values.

Third, it is "the Soviet wav" to maintain very large armed forces which express as well as enforce the will of the state, and to seek whatever degree of military preponderance foreign competitors permit (or cannot prevent). As a continental Great Power, with vulnerable frontiers and geographically proximate enemies, the Soviet Union is the historical heir to a tradition of military prudence that is fundamentally alien to such insular powers as Great Britain or the United States.

Fourth, stability on the home front is a cardinal tenet of Soviet 12 military doctrine. Soviet military programs are not turned on and off as theoretical whim or immediate political expediency appears to suggest to be desirable. The U.S.S.R. is a country governed economically on a five-year planning cycle. The action and reaction implied in some arms race theorizing implies an ability and a willingness to fine-tune weapon research, development and deployment in response to signals received from the arms race system. The Soviet economy does not function like that. Socialist planners are committed to the idea of full employment—and that includes weapon design bureaus and the manufacturing industrial sector which produces bombers, ICBMs end SSBNs.²⁶

Fifth, the Soviet-American arms race is driven, at root, by the political antagonism which divides the two states. With reference to the founding political dogma, which rationalizes the very "right to rule" of the CPSU, Soviet leaders define the United States as an enemy. Aside from ideology, geopolitics or *realpolitik* informs Soviet leaders that the United States is the principal external energy capable at present of denying the Soviet Union control, or *contrôle*,²⁷ over the whole of Eurasia- Africa. The more advantageous the multi-level East-West military balance is in the Soviet favor, the greater the political freedom of action enjoyed by Soviet leaders.²⁸

*Sixth, Soviet foreign policy—and the military capability which supports it—is a captive of the "dynamics of empire."*²⁹ Soviet political power must expand, as logically must the military capability supporting it, because the Soviet government is the insecure suzerain of an empire

²⁶ On this subject see Arthur J. Alexander, *Decision-Making in Soviet Weapons Procurement, Adelphi Papers,* Nos. 147-148 (London, IISS, Winter 1978/9).

²⁷ The French *contrôle* means general supervision, by way of some contrast to the more rigorous implications of the English word control.

²⁸ See Benjamin S. Lambeth, "The Political Potential of Soviet Equivalence," *International Security*, Vol. 4, No. 2 (Fall 1979), pp. 22-39; and Dimitri K. Simes, "Deterrence and Coercion in Soviet Policy," *International Security*, Vol. 5, No. 3 (Winter 1980/81).

²⁹ See Colin S. Gray, "The Most Dangerous Decade: Historic Mission, Legitimacy, and Dynamics of the Soviet Empire in the 1980s," *Orbis*, Vol. 25, No. 1 (Spring 1981), pp. 13-28; and Rebecca V. Strode and Colin S. Gray, "The Imperial Dimension of Soviet Military Power," *Problems of Communism*, Vol. XXX, No. 6 (November-December 1981), pp. 1-15.

wherein every "holding" depends upon every other "holding". The Great Russian core area of Muscovy and Byelorussia is protected (and threatened) by nearly four centuries of imperial land grabbing which, in its turn after 1945, has come to be protected in the West by the Eastern European marches of East Germany, Poland, Hungary, Czechoslovakia, Romania and Bulgaria. The outermost fringes of empire (be it Roman, British, French or Russian/Soviet) are always threatened by states or tribes beyond the imperial frontiers. In short, Soviet power at hone is not secure without control of Eastern Europe; and control of Eastern Europe is not secure without control, or perhaps *contrôle*, of Western Europe. If this imperial argument is true, it tears a very cautionary tale for those in the West who seek to establish an East-West military relationship guided by some rough facsimile of the concept of strategic stability.

Seventh, the United States has never had a settled arms-race strategy: the U.S. has functioned almost as a "wild card" in the competition. The United States, on the historical evidence of 1945-82, has surged its defense effort in response to particular sequences of "security shocks" (the invasion of South Korea in 1950; the "missile gap" of 1957~61; and, most recently, the invasion of Afghanistan in December 1979), and then has coasted on the budgetary surfeit temporarily provided until the next "shock" galvanizes a popular political reaction which cannot be denied. To date, it is accurate to claim that the American people have never been told that the Soviet Union poses, prospectively, a *permanent* problem. While the U.S. coasts and surges, and coasts again, the U.S.S.R. pursues its defense program business in a near steady-state mode.

Eighth, turning, or decision, points in the strategic arms race are political rather than militarytechnical. The across-the-board improvement in Soviet military capability is impressive when assessed in a long-term cumulative vein (i.e, in 1982 as opposed to 1972), not when assessed year to year.³⁰ The Soviet arms race challenge is assayed by the United States in political, not military, terms. The electorates of democracies tend not to be moved by annual military briefings which explain that the Soviet Union is doing better this year that which she was doing last year. Democracies, at the level of public opinion and pressure on policymakers, are moved by dramatic political events.

Ninth, the quality of arms-race systemic sensitivity between the superpowers is low. Given that a genuinely new strategic weapon technology tends to require a canonical five-to-ten year period to progress from drawing board to silo, submarine, or airfield, it is scarcely surprising that the agile thrust and parry of the archtypical liberal arms race theorist is not well represented in the annals of the Soviet-American arms race. Quite aside from the truly major problems of domestic doctrinal-bureaucratic-industrial inertia confronted by both superpowers, there remains the significant difficulty of the moving target. In other words,

³⁰ See John Collins, *U.S. Soviet Military Balance: Concepts and Capabilities, 1960-1980* (New York: McGraw-Hill, 1980).

the Soviet, or American, strategic program which I plan to confound may not actually exist, or exist in anything close to operational detail, for the better part of ten years. For example, pity the poor Soviets in 1980-82. The Main Operations Directorate of the General Staff wishes to suggest the optimum means for countering U.S. MX ICEM deployment, but the protracted indecision .in the U.S. defense community has denied the General Staff a fixed target. Even if each side wanted to, and was capable of fine-tuned arms-race thrusting and parrying, the tec1mical-industrial reality of extended lead-tines would frustrate that endeavor.

The nine propositions specified above have, *in toto*, major implications for the arms race consequences of particular weapon systems. All too often, opponents of a weapon posit an American-style Soviet arms race opponent who is willing and able rapidly to shift defense preparation gears in order to pose a total threat to it.

The Action-Reaction Hypothesis

Arms-race analysis in the West continues to be afflicted by theorists seeking to identify patterns of arms-program interaction. It is my contention that, although each superpower has sought to be responsive in a broad and general way to trends in the evolution of the military capabilities of its principal rival, there has been very little detailed action and reaction. Because of the near-total absence of direct evidence on the motives behind individual Soviet-weapon programs, this author and the scholars who he is criticizing, are driven, more often than not, to argue by technical inference.

While it would probably be an error to assert that Soviet defense programs are insensitive to perceived and anticipated threats, the historical facts of the period 1964-1982 (the Brezhnev leadership period, to date) suggest that a claim for the very substantial autonomy of the Soviet defense effort (*vis à vis* changes in the level of the American defense effort) is unlikely to be far off the mark. In that extensive period, the rate of increase in the level of the Soviet defense effort roughly coincided with t h e rate of increase in the growth of the soviet economy.³¹ It is possible to argue that the absolute decline in the level of the American defense effort (until quite recently) has encouraged the Soviet Union to compete more vigorously, but that argument lacks for evidence in its support—notwithstanding both its logical appeal, and its apparent fit with the facts. In Harold Brown's words:

³¹ At least as averaged over the years. Typically, as best we can judge, the Soviet defense effort in the Brezhnev period has registered roughly a 4 percent rate of real growth each year. Such a rate was somewhat below the rate of growth in Soviet GNP in the better years of the 1960s, is somewhat above the rate of growth of the late 1970s, and is *well above* the expected rate of growth of Soviet GNP in the early to mid-1980s. As the Soviet Union enters a period of rate of economic growth averaging, say, 2-2½ percent *per annum*, unless one is willing to predict a Soviet willingness to contract the scale of its military programs, then one has to conclude that the expectations, if not the actual living standards, of the Soviet consumer will have to suffer.

As our defense budgets have risen, the Soviets have increased their defense budget. As our defense budgets have gone down, their defense budgets have increased again.³²

In short, the rest two decades offer a happy playground for statisticians eager to establish positive and negative correlations. In practice, as is known from American weapon program histories, much of the detail of a particular program is negotiated for reasons, and to conclusions, that have little or nothing to do with the anticipation of external threat. President Carter's MX, multiple protective structure (MPS) system, for example, with its "baseline" configuration of 200 MX missiles and 4600 shelters, certainly was defensible— and indeed, had to be defended—in terms of the Soviet threat, but the Soviet threat did not drive the determination of the basic parameters of the system. The figure of 200 MX ICEMs was a compromise number negotiated between the Air Force and Senator Macintyre of the Senate Amed Services Committee. The Senator was opposed to a force size too obviously capable of posing a credible first-strike threat to Soviet silo-based ICBM.³³

Because the lead-tine for a major strategic weapon system is on the order of ten years (or longer—to full operational capability [FOC], neither superpower can act and react in the mechanical, deft manner suggested by some arms control theorists. In other words, so many are the technical, budgetary, political, and (in the Unites States' case) even basic doctrinal hazards facing a weapon program over its very long gestation period, that it simply is not possible to react to Soviet offensive or defensive developments. How could the United States, in 1982, react with a new weapon program to a Soviet weapon program anticipated for the period 1990-2000?³⁴

Aside from the truly major uncertainties of strategic intelligence predictions for a decade hence—the lead-time pertinent to major weapon program evolution—each party to the arms competition has unique foreign policy duties to perform, very individual strategic preferences to express (in weaponry and C3I), and very particular domestic-process considerations to accommodate. In short, American officials and extra-official commentators cannot sensibly support or oppose a particular weapon program, be it MX, LoADS or whatever, on the grounds "that the Soviet Union will respond as follows..."³⁵

³² Department of Defense Annual Report, Fiscal Year 1980 (Washington, DC: USGPO, January 25, 1979), p. 6.

³³ For a comprehensive study of the MX/MPS program, See Colin S. Gray, *The MX ICBM and National Security* (New York: Praeger, 1981).

³⁴ For several years it has been argued that the U.S. cruise missile program would drive the U.S.S.R. to a massively expensive, offsetting air defense deployment. While the Soviet Union undoubtedly will endeavor to optimize its tactical efficacy against the cruise missile threat, U.S. officials tended to neglect to point out that the Soviet Union has long been committed to the orderly modernization of a massive air defense capability and that the scale of Soviet resource allocation to PVO-Strany is probably close to unaffected by predictions of the fate of individual U.S. weapon programs.

³⁵ In 1980, Admiral Turner, the Director of Central Intelligence, waged a campaign, via the national intelligence estimates, to dissuade the president from continuing with MX/MPS. The CIA, allegedly, predicted

Close study of such Soviet evidence as there is available suggests that the Soviet Union strives to achieve maximum prospective combat effectiveness (in the interest of proletarian internationalism, deterrence, and plain common sense), but that also it is devoted to the preservation of stability on the home military-industry front. Major changes in resource allocation for defense vis à vis non-defense programs, or even between defense programs, are very expensive in the Soviet system. An economy centrally planned on a series of fivevear cycles is not the most agile of vehicles for the conduct of an arms competition supposedly characterized by an action-reaction process. The more that is learned of Soviet defense industry, and that remains all too little, the less convincing becomes the image of a Soviet defense establishment willing and able to conduct a process of deft thrusts and parries in the strategic arms con-petition. One should be prepared to believe that the Soviet defense system, writ large, is capable of "lurching" in step-level jumps, given sufficient notice. In other words, should an American administration decide to raise the level of American defense expenditure by, say, fifty or one hundred percent, one should expect the Soviet defense machine to react. However, one should not expect the Soviet defense machine to react directly, in detail to the new United States' defense program, and neither should one assume that the Soviet Union necessarily could react—even in a gross fashion—as some action-reaction theorists tend to imply. It is not obvious that the Soviet Union could much increase the output of its high-technology industry for defense functions.³⁶

A Soviet Union devoted to the improvement in its military condition at all levels easily lends itself to misassessment by Western theorists. Where Western theorists are inclined, by strategic culture, to see purposeful design, one should perhaps see only prudence (defined in Soviet terms). Benjamin Lambeth has offered the relevant thought that

[i]t would probably not be overly facetious to suggest that for Soviet military planners, the favored measure of strategic sufficiency is the notion that "too much is not enough".³⁷

The Soviet Union has not imposed a condition of strategic inferiority on the United States. Such a condition, if it exists,³⁸ is the product of steady momentum, or perhaps just inertia, in

a Soviet "response" to MX/MPS at the high end of the possible threat range, surprising well in excess of 20,000 ICPM warheads. The basis for this estimate range was, very largely, (CIA) strategic logic—it was not Soviet evidence. See Richard Burt, "Soviet Nuclear Edge in Mid-80s Is Envisioned by U.S. Intelligence," *The New York Times*, May 13, 1980, p. Al2.

³⁶ It is only fair to point out that the U.S. defense community is divided in its assessment of Soviet mobilization potential *vis à vis* defense high technology. A useful discussion is Abraham S. Becker, "On the Politics and Economics of the Burden of Soviet Defense," unpublish paper (RAND), May 1980.

³⁷ Benjamin Lambeth, *How to Think About Soviet Military Doctrine*, P-5939 (Santa Monica, Cal.: RAND, February 1978), p. 7.

³⁸ The strategic balance is notoriously difficult to measure. Today, and for the next several years, I do not believe that the United States could wage acute crises or wars with the U.S. S. R. and secure her foreign policy goals. This has to translate into strategic inferiority—"soft" though the reasoning admittedly has to be. There

Soviet weapon programs, and an enduring deficiency in American attendance upon its strategic-force survival problems. The current crisis in the survivability of the American ICBM force is not the result of a dramatic Soviet arms race challenge, nor need it be read as clear evidence signifying Soviet determination to achieve strategic superiority. Indeed, even to frame the problem in that way probably is to impose a very un-Soviet mode of thinking upon the Soviet defense establishment.³⁹

Believing that war can occur, and that the quantity and quality of defense preparation (considered expansively) can make the difference between victory .and defeat, but all the while hoping that a direct military clash with the United States can be avoided,⁴⁰ the Soviet Union has pursued an orderly, affordable, program of military modernization across the board of capabilities. Soviet effort with respect to strategic offensive forces has been extraordinary in relation to other military programs, a fact which may be explained by reference to the comparative disadvantage of the U.S.S.R. in high-technology defense research, development, and production, and to the extraordinary significance of strategic nuclear weapon systems in the structure of Western strategy.⁴¹ While Western analysts may well overprice some of the more manpower-intensive military capabilities of the U.S.S.R., they almost certainly underprice Soviet strategic-nuclear programs.⁴²

As an arms race participant, the Soviet Union appears not to be racing to achieve any particular relationship of power, unless an appreciation of the political and military benefits of a growing (though necessarily fragile) preponderance may be so characterized. The Soviet Union, driven both by paranoid fears and by the general belief that coercive power is always useful, can never be satisfied that it has "enough" or "sufficient" military power. In a very dogged, steady, manner—the Soviet defense establishment makes, by and large, marginal improvements in its capabilities, year after year.⁴³ Insofar as can be discerned it is not performing at all consciously in a particular pattern of action and reaction (of any kind). The enemy is clearly identified, Soviet military science provides a stability of guidance for strategic direction, so—undramatically—the Soviet Union improves its ability to wage war,

is no magic metric or yardstick which can inform the U.S. defense community as to whether or not its programs are sufficient.

³⁹ It is far from obvious that the U.S.S.R. recognizes a concept of strategic superiority outside the enveloping framework of the correlation of forces. See Seweryn Bialer, *Stalin's Successors: Leadership, Stability, and Change in the Soviet Union* (New York: Cambridge University Press, 1980), pp. 241-253.

⁴⁰ In Paul Nitze's words: "The Kremlin leaders do not want war; they want the world." "Strategy in the Decade of the 1980s," *Foreign Affairs*, Vol. 59, No. 1 (Fall 1980), p. 90.

⁴¹ See Henry Kissinger, "The Future of NATO," *The Washington Quarterly*, Vol. 2, No. 4 (Autumn, 1970), p. 6

⁴². And perhaps not only strategic-nuclear programs. ZSU-23-4 anti-aircraft and guns and BMP infantry combat vehicles also have been judged to be relatively more expensive for the Soviet Union than the U.S. (with reference to U.S. counterparts) to produce. See Collins, *U.S.-Soviet Military Balance: Concepts and Capabilities*, *1960-1980*, p. 83.

⁴³ The U.S.S.R. has provided, and is providing, a near-classical illustration of this thesis with its year by year improvement in what, generically, is termed the fourth generation of its ICBMs.

and hence enforce a deterrent condition, year by year. The fragility to which brief reference was made parenthetically above, lies in the inherent, structural limitations of Soviet high-technology industry. Soviet officials know very well that they could not win or even sustain a rough parity in a high-technology arms competition with the United States. In other words, although American carelessness may have yielded them an advantage in the central nuclear balance, narrowly defined, in the 1980s, they cannot—and probably do not—expect that carelessness to continue for much longer.

The model of the arms competition implicit in the above discussion should have an impact upon Western debate over arms control policy. To summarize, the Soviet arms-race/armscontrol adversary-partner has the following essential characteristics:

- A total, though long-term, commitment to the demise of Western governments. Detente, or even near-entente (as in the current phase of Sino-American relations), has to be solely a matter of tactical convenience.
- Both a geopolitical (*realpolitik*) and an ideological antipathy to the "maritime alliance" which continues to deny it a total imperium over Eurasia.
- A very Russian, and certainly non-Western (and even premodern), suspicion of foreign ideas and, indeed, of any alien elements that are not controlled by Moscow.
- A commitment, born of historical understanding and ideology, to global instability (in Western terms). Relationships of power and influence are not stable, they are dynamic, and the Soviet Union/Russia has learned at first hand what apparent weakness can cost.
- A commitment to offer the most effective defense feasible should war occur. Soviet defense programs are not guided, or inhibited, by any consideration of strategic stability that would be familiar to Western theorists.
- A stable doctrine, a stable strategy, and a commitment to orderly, stable, defense programs. This is not to deny the probable fact of inter-service rivalry having a biasing effect upon the evolution of quite broad categories of Soviet defense capabilities (for example, consider the shifting fortunes of Soviet Long Range Aviation), but it is to suggest that the Soviet defense effort, as a whole, is not an instrument capable of playing new tunes on little notice.

Interaction between Soviet and American defense capabilities tends, therefore: to be intermittent and necessarily somewhat broad in its effects at the higher levels of policy direction; to be all but absent at the level of particular major program development (the region classically assumed to be driven by a tight pattern of action-reaction); and to be quite intensive at the sharp end of (tactical) operating detail. Consideration of the evolution of weapon programs from the early 1900s to the present day suggests a surprising degree of autonomy in national rationales. Whether it be with respect to *Dreadnoughts* and *Super-Dreadnoughts* prior to 1914, or to ABM, MIRV and MX in the 1960s and 1970s, the evidence

(pertaining to the real detail of program genesis and evolution—as opposed to inferred strategic logic) of patterns of program interaction is, to be polite, extremely thin.

Conclusions

The argument presented immediately above may have major implications for United States' weapon programs and arms control policies, because- arms race stability is prominent among the defense and arms control objectives of the United States. Western theories of arms race stability posit a presumed relationship between "what we do" and how we anticipate the adversary to react. Most of the Western theoretical literature on arms race stability, because it does not rest upon a robust understanding of what drives the race, must simply be discarded.

The U.S.S.R. is committed irrevocably, by its basic character, to permanent struggle. The U.S.S.R. cannot become just another, though a rather unusually powerful, authoritarian state. The past and present sacrifices of the Soviet peoples have to be justified in terms of a historic mission. Not merely does the U.S.S.R. need a foreign enemy, but the ideology that legitimizes the Soviet state very conveniently identifies such an enemy. The only choice open to the United States is whether or not she will compete effectively with the U.S.S.R. There can be no peaceful settlement of basic differences with the Soviet state—a detente process can have no foreseeable end point of that kind. The arms race must continue until either the U.S.S.R. suffers domestic revolutionary change of a character ultimately benign to the security condition of others, or until there is a military decision between East and West. This is hardly pleasant news, and it is scarcely surprising that prominent American politicians have not shared this insight with their electorate. The relevance of this argument to the study is the long-term, really inalienable, nature of the problem to which it points. The roots and sustaining fuel of the Soviet-American arms race do not lie so much in the separate, very complex "domestic processes" which can be explored in detail by scholars of the bureaucratic-politics or Military-Industrial Complex (MIC) persuasion, rather do they lie in the particular political character of Soviet state power and in the facts of geopolitics.