

## WHAT FUELS THE SOVIET-AMERICAN STRATEGIC ARMS RACE?: AN EXAMINATION OF THE INTERSTATE ACTION-REACTION MODEL AND ITS ADVOCATES

by W. Wesley McDonald\*

A few years ago, in his preceptive analysis of the dynamics of the Soviet-American strategic arms race, Albert Wohlstetter observed that although the phrase "strategic arms race" is central to any discussion of arms policy, its meaning "remains remarkably unclear." The current literature on arms racing is characterized by a lack of conceptual clarity which leads to ambiguous and often contradictory notions of what is meant by "arms" or "race." There are, for example, various ways of assessing the arms of a nation. One could consider the total expenditures in the budget for arms procurement, or the number of strategic weapons a nation has. Another method would be to look at the qualitative improvements in its present arms; e.g. increased missile accuracy, improvements in missile speed and range, or damage limitation improvements, etc. Does the term "race" imply the rate at which weapons are acquired or does it refer to the political goals for which the nations are competing?<sup>1</sup> These are fundamentally important questions which determine an analyst's assessment of the sustaining forces of a strategic arms race.

The intent of this paper is to focus solely on one theory which purports to explain the dynamics of arms race behavior: the action-reaction model. According to advocates of this model, an arms race has a life of its own, propelled by explosive, uncontrollable forces in which each of the participants reply mechanistically to the military-technological innovations of the other with "new rounds" of technological growth and improvement. This explanation has captured the imagination of many who are critical of current arms policy. I have summarized five explanations of the Soviet-American strategic arms race below, to illustrate the current popularity of this model. Although each is distinctive, all are bound by a common adherence to the basic premises of the action-reaction model.

During the popular CBS-TV news program, "60 Minutes," Shana Alexander argued against the U.S. deployment of the neutron bomb (the Enhanced

---

\* W. Wesley McDonald is a doctoral candidate in the Department of Politics at The Catholic University of America, Washington, D.C. and an adjunct assistant professor of political science at the University of Baltimore. I wish to acknowledge the assistance of Dr. James O'Leary during the preparation of this article. Dr. O'Leary is an assistant professor of political science at Catholic University.

<sup>1</sup> Albert Wohlstetter, "Legends of the Strategic Arms Race, Part 1: The Driving Engine," *Strategic Review*. USSI Report 75-1 (Washington, D.C.: United States Strategic Institute, 1975), p. 5.

Radiation Weapon) on the grounds that it is a fallacy to assume "that if we don't have the newest deadly gadget, whatever it may be, the Russians will get us. The fact is that if we do build it, they will surely build something else. . . ." Now, the advocates of the neutron bomb are arguing that "unless we build the neutron bomb, the Soviets might start something. That kind of thinking is the engine of war. It gets wars started. Someone has to say stop."<sup>2</sup>

According to John Kenneth Galbraith, there exists an almost symbiotic relationship between the arms industries of the two superpowers which explains the dynamics of the arms race. "Each side develops the weapons that make obsolete those currently in use or on order," according to the Harvard economist. "In each country, scientists, engineers, the armed services, and the supporting industries join the effort and are rewarded by the task." Continuing, he argues that the military-industrial complexes of both nations justify the other's existence and its need for weapons.<sup>3</sup>

Likewise, Jeremy Stone has found the actions of a bureaucracy to be the primary driving force in the arms race. In Stone's analysis, though, the primary culprit is the U.S. Department of Defense. "Worst of all, through the action-and-reaction phenomenon," he argues, the Department of Defense's "aggressive pursuit of the arms race has greatly undermined the security of the nation by unnecessarily stimulating Soviet efforts to keep up." Thus, the Defense Department, by exaggerating the significance of each Soviet action, stimulates unfounded fears among the American public who then put pressure on the government to increase defense spending to keep ahead of the Russians. The Russians, according to this position, do not appear to share equal blame for pushing the arms race.<sup>4</sup>

Both Jerome Kahan of the Brookings Institute and John Newhouse, the Boswell of SALT I, additionally have argued that the strategic arms race can be explained by an interstate action-reaction phenomenon which has shaped the weapons decision-making for both nations. The momentum of the arms race, they argue, is due to the U.S. expansion and improvement of its nuclear arsenal which has forced the Soviet Union to catch up.<sup>5</sup>

All these explanations hold in common the belief that some sort of a mechanistic action-reaction phenomenon (ARP) between the Soviet Union and the United States is driving the arms race. In the opinion of these commentators and scholars, the existence of such a driving force must be viewed with alarm since it forces nation-states to divert funds to the defense budget

<sup>2</sup> "60 Minutes," Transcript Vol. —, No. 7, CBS-TV, broadcast October 23, 1977.

<sup>3</sup> John Kenneth Galbraith, *The Age of Uncertainty*. (Boston: Houghton Mifflin Co., 1977), pp. 251-252. As will become apparent below, Galbraith's version of the action-reaction model is unique among this genre in that he argues that bureaucratic responses rather than Rational Actor ones will stimulate the arms race.

<sup>4</sup> Jeremy Stone in Erwin Knoll and Judith Niles McFadden (eds.), *American Militarism* (New York, 1969), p. 68 cited in Albert Wohlstetter, "Racing Forward? Or Ambling Back?" *Survey*, No. 3/4 (Summer/Autumn 1976), p. 167. (The Wohlstetter article has been reprinted in James Schlesinger (ed.), *Defending America* (New York: Basic Books, Inc., Publishers, 1977), pp. 110-168.

<sup>5</sup> Jerome H. Kahan, *Security in the Nuclear Age: Developing U.S. Strategic Arms Policy*. (Washington, D.C.: The Brookings Institution, 1975), pp. 266-269; and John Newhouse, *Cold Dawn: The Story of SALT* (New York: Holt, Rinehart and Winston, 1973), p. 133, cited in Wohlstetter, *loc cit.*, p. 167.

which could be better spent on necessary social needs. Worse yet, it arouses irrational fears which could lead to war.

Considering the popularity of this model, and its present and possible influence upon arms policy thinking, it is vitally important to analyze the assumptions which have informed this model and evaluate the policy implications of this model in the areas of strategic doctrine and arms control. Pursuant to these ends, the first section of this paper will outline and analyze the theoretical assumptions of the model, and the second will be devoted explicitly to the theories and policy recommendations of the three most eminent of the action-reaction merchants: Robert S. McNamara, George Rathjens and Paul C. Warnke. The concluding section assesses the explanatory and predictive powers of the model. In other words, how well does this explanation fit the facts of the dynamics of the arms race?

### The Basic Assumptions of the Action-Reaction Model

Considered in its broadest possible sense, no reasonable objection could possibly be made to the statement that in some sense an action-reaction phenomenon does take place between the Soviet Union and the United States. Without question, even the most casual observer of international affairs would agree that each state regularly responds or reacts to a broad range of activities committed by the other. While this is an indisputable descriptive fact, inherent in the very definition of international relations, it has no explanatory or predictive utility. Obviously, since the action-reaction theorists do purport to explain and predict, their arguments are neither so broad, nor superficial.

However, the mechanistic version of the action-reaction model, with which this paper is concerned, postulates that certain state actions will always be followed by predictable reactions from its arms race adversary. Although not all proponents of this model will agree with the assumptions that I will attribute to it below, it is my belief that this summary of the model's theoretical assumptions will contribute to the process of analysis by highlighting the salient features of dominant action-reaction thinking.

First, the interstate action-reaction model assumes a systems dominance. By definition, this model must concern itself with the interstate activities of nation-states. For defense purposes, its proponents argue, nation-states observe the actions of one another, creating a pattern of relations.<sup>6</sup> The fundamental unit of analysis is the system which determines the actions of the actors, the nation-states. To understand how the system operates and its predictive patterns, the analyst must look at the interactive processes that exist between the nation-states.<sup>7</sup>

<sup>6</sup> Colin Gray, *The Soviet-American Arms Race*. (Lexington, Mass.: Lexington Books, 1976), p. 19.

<sup>7</sup> An international system is a pattern of relations between the basic units of world politics, which is characterized by the scope of the objectives pursued by those units and of the tasks performed among them, as well as by the means used in order to achieve those goals and perform those tasks. This pattern is largely determined by the structure of the world, the nature of the forces which operate across or within the major units, and the capabilities, pattern of power, and political culture of those units." See Stanley Hoffman, "International Systems and International Law," *The International System: Theoretical Essays*. Edited by Klaus Knorr and Sidney Verba. (Princeton, N.J.: Princeton University Press, 1969), p. 207.

The fact that this model assumes a mechanistic view of the Soviet-American arms race has already been noted. The action-reaction process, according to this view, establishes a kind of determining mechanism which drives nation-states to ever-greater plateaus of strategic arms development. If one nation acquires a new strategic weapon, then by the relentless dynamics of the action-reaction process, that nation's adversary must emulate that decision with a similar weapon acquisition. Thus, the ante in this world-wide balance of terror is pushed up. Nation-states are perceived as being on a treadmill, rushing faster and faster to outdistance each other, pushing ever precariously toward an apocalyptic end. As Albert Wohlstetter points out, the "very phrase 'action-reaction' has an aura of mechanical inevitability. Like Newton's Third Law: For Every Action There Is an Equal and Opposite Reaction. Only here, since the mechanism is explosive, it seems the law is supposed to read: For Every Action There Is an Opposing Greater-Than-Equal Reaction."<sup>8</sup>

Subsumed here is the belief that the arms race adversaries are single, rational men united by a common strategic doctrine. Action-reaction theorists apparently assume that nation-states operate from essentially Hobbesian notions of rationality and prediction. Hence, each adversary is considered to be rational in the sense that its highest goal is self-preservation. Given this, the rational strategists will decide then always to maximize their nation's security by duplicating, at least, the arms decisions of its adversary. Thus, imitation among competing nuclear opponents is predictable. "Predictions about what a nation will do or would have done," as Graham Allison observes, "are generated by calculating the rational thing to do in a certain situation, given specific objectives."<sup>9</sup> Since the nation-state is always, because it perceives itself as existing in a Hobbesian state of nature in terms of its relationship with other nation-states, anticipating possible threats to its security in order to be prepared to deter them, many action-reaction theorists argue the sense of insecurity inherent in this attitude stimulates the arms race and arouses irrational fears.

Probably most pervasive of all popular preceptions is the belief that the actions of nation-states can be accounted for by the rational decisions of a unified body of national leaders. "In spite of significant differences in interest and focus, most analysts and ordinary laymen attempt to understand happenings in foreign affairs as the more or less purposive acts of unified national governments," writes Allison, "Laymen personify rational actors and speak of their aim and choices. Theorists of international relations focus on problems between nations in accounting for the choices of unitary rational actors. Strategic analysts concentrate on the logic of action in the absence of an actor."<sup>10</sup>

With the major exception of the military-industrial complex analysts, e.g. Galbraith, Stone, Morton Halperin, etc., the action-reaction theorists

<sup>8</sup> Wohlstetter, "Legends of the Strategic Arms Race," p. 9, *vide* also p. 33.

<sup>9</sup> Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis*. (Boston: Little, Brown & Co., 1971), p. 5.

<sup>10</sup> *Ibid.*, pp. 4-5.

assume the existence of Allison's Rational Actor. The actor, according to Allison's model, is the national government and its behavior reflects rational purposes or intentions. Each action, therefore, "is chosen as a calculated solution to a strategic problem."<sup>11</sup> Observes Colin S. Gray, "Implicit in the tight interstate action-reaction model is the notion that each action indicates, inherently, an appropriate reaction. Hence rational strategic responses are the stuff of which arms races are made."<sup>12</sup>

The argument that arms race adversaries are united by common strategic doctrinal concepts and even similar decision-making structures on issues of force posture and weapons deployment is very common among the action-reaction merchants. Since decision-making structures are assumed to be parallel and rational, strategic men of the arms race adversaries are assumed to hold identical strategic doctrines; it is only logical that they would watch and emulate each other. What is disturbing about this assumption is that there has been little apparent effort made to find empirical support for it. The point seems to be so obvious to its proponents that further inquiry is foregone. Even such an acute analyst of bureaucratic structure as Graham Allison has been guilty of unexamined ethnocentric perceptions. In an essay for *Daedalus*, for example, he and his co-author, Frederic Morris, conclude, although they made no analysis of Soviet domestic structure, that virtually all "the weapons in the American and Soviet force postures are predominantly the result of factors internal to each nation."<sup>13</sup> Mirror-imaging of this sort appears to have a considerable hold upon the thinking of many in the arms control community. While it simplifies enormously the process of understanding Soviet strategic intentions (which probably accounts for much of its popularity), it begs far more questions than it answers. Why should it be assumed that the Soviet Union merely duplicates U.S. weapons decisions, or that both superpowers have identical decision-making structures? These questions are left unanswered. Undeniably, though, the special attraction of mirror-imaging for the arms controllers is that it offers a possible solution to the arms race. If the Soviet Union merely mirrors U.S. strategic preferences, according to this approach, then the U.S., if it is serious about arms control, could end the arms race unilaterally by merely restraining the further development and deployment of new weapons systems with the full expectation that the Russians would follow suit.<sup>14</sup> Hence, it is easy to see how this aspect of the action-reaction model has become a useful device for defense critics to pillory Pentagon spending. On this point, Colin Gray has argued that the introduction of the action-reaction argument "reinforces the suspicion that action-reaction has all too often been used as conceptual ammunition intended to lend some analytical ballast to arguments hostile to the deployment of new weapons systems. If it is true that arms race actions necessarily trigger rational reactions that negate the value of the spurring actions, then both parties are

<sup>11</sup> *Ibid.*, p. 13.

<sup>12</sup> Gray, p. 23.

<sup>13</sup> Cited in James Dornan, Review of "Arms, Defense Policy, and Arms Control," *Daedalus*, CIV (Summer 1975) in *Survival*, XIX (July/August 1977), p. 186.

<sup>14</sup> *Ibid.*, pp. 186-187.

clearly wasting money and proliferating military hardware to their mutual disadvantage."<sup>15</sup>

Assuming that an action-reaction phenomenon does drive the arms race, the analysts see world peace imperilled. The interstate action-reaction chain will drive the arms race, they argue, to an ever-quickenning pace which will be destabilizing to world nuclear stability. Informed in their strategic thinking by the doctrine of mutual assured destruction (MAD), they must of necessity view any weapons development which jeopardizes assured destruction as inimical to nuclear stability. The "issues involved in understanding the concept of mutual stability rests on the premise that action-reaction phenomenon exists between U.S. and Soviet strategic forces and, if not contained, can increase the risks and costs of maintaining a reliable strategic deterrent posture," argues Jerome H. Kahan, in a statement which typifies such thinking, "To the degree that this premise is valed, it would serve U.S. strategic objectives to give serious and systematic consideration to the likelihood, nature, and implications of Soviet reactions to particular American weapons programs and doctrinal decisions."<sup>16</sup> Hence, all weapons decisions which are potentially threatening to the maintenance of mutual second-strike capability are seen as inherently destabilizing forces propelling the arms race spiral. The acquisition of the anti-ballistic missile system (ABM), improved missile accuracy, or any improvement in damage limitation would be criticized for creating unnecessary insecurities in the Soviet Union, forcing her to react with similar improvements in her own weapons arsenal. Such decisions would set off the arms race spiral, pushing the world precariously close to nuclear holocaust.

### **Three Proponents of the Action-Reaction Model: McNamara, Rathjens, and Warnke**

We now turn to three policy analysts, who for one reason or another, had wedded themselves to a version of the action-reaction model during the 1960s and early 1970s. The three were included in this study because of the considerable reputation which they all hold within the arms control community and because they illustrate conveniently the defense policy implications of the action-reaction model.

#### *Robert S. McNamara: ARP as a Consequence of a MAD World*

On September 16, 1967, Secretary of Defense Robert S. McNamara, employed a very mechanistic version of the action-reaction argument in his announcement of the U.S. intention to deploy a primarily anti-Chinese Sentinel ABM system. During a news conference, he described what he conceived to be the terrible logic of the action-reaction competition between the U.S. and U.S.S.R. Each side, he argued, influences the other in its strategic plans. Spurred on by their own "worse case" analysis, they are continually forced

<sup>15</sup> Gray, p. 19.

<sup>16</sup> Kahan, p. 265.

to acquire weapons to guarantee assured destruction.<sup>17</sup> Elaborating on this argument in his book, *The Essence of Security*, McNamara argued that what "is essential to understand is that the Soviet Union and the United States mutually influence one another's strategic plans. Whatever be our intentions, actions—or even realistically potential actions—on either side relating to the build-up of nuclear forces, be they either offensive or defensive weapons, necessarily trigger reaction on the other side. It is precisely this action-reaction phenomenon that fuels the arms race."<sup>18</sup>

Significantly, as Colin Gray has pointed out, "McNamara's mechanistic response model . . . was the product of his own preferred strategic doctrine, not of a close observation of past arm race dynamics, nor of any general strategic necessity that must move arms race actors."<sup>19</sup> From McNamara's point of view, the ARP is a logical consequence of the MAD strategic doctrine which he assumed to inform the weapons decisions of both superpowers. Each side, according to this doctrine, must prevent the other from acquiring a first-strike capability. If the U.S. decides to deploy a massive anti-Soviet ABM system, it is only logical, then, for the U.S.S.R. to counter with an ABM system that would offset any advantages which the U.S. could hope to gain. "This is the crux of the nuclear action-reaction phenomenon," he concludes.<sup>20</sup> The reasoning, then, behind weapons deployment for McNamara, had little to do with a nation-state's need for weapons to more effectively wage war or for putative political advantage, but rather was a consequence of a "mad momentum" fueled by the ARP.

*George W. Rathjens: The "Worse Case" Analysis as a Stimulant to the Arms Race*

In an influential article published in *Scientific America*, George W. Rathjens, a former scientist and presently a professor of political science at the Massachusetts Institute of Technology, described the underlying dynamic forces which he perceived as driving the arms race. The action-reaction phenomenon, argued Rathjens, "with the reaction often premature and/or exaggerated, has clearly been a major stimulant of the strategic arms race." According to Rathjen's analysis, the U.S. and U.S.S.R. are caught up in an action-reaction dynamic which relentlessly forces each, in spite of rational security considerations, to purchase ever-more-sophisticated weapons systems. Each superpower is apt to over-react to the weapons deployment of the other because it makes a "worse case" analysis in which it assumes that it must be prepared against even the most insane risks which its adversary could take. Following this reasoning, the U.S. in the early 1960s over rated the mythical "missile gap" which had been thought to favor the Soviets. Later, the Soviets deployed the "tallinn" air defense system which was a response to the mistaken expectation that the U.S. would deploy B-70 bombers or SR-71 strike-

<sup>17</sup> Gray, p. 20.

<sup>18</sup> Robert S. McNamara, *The Essence of Security* (New York: Harper & Row, Publishers, 1968), pp. 58-59.

<sup>19</sup> Gray, p. 153.

<sup>20</sup> McNamara, p. 64.

reconnaissance aircraft. In order to get through the possible Russian ABM system, the U.S. responded by embarking on the development of various penetration aids and the Minuteman III and Poseidon missiles.<sup>21</sup>

The ARP, according to Rathjens, is aggravated by the uncertainties about an adversary's capabilities and intentions.<sup>22</sup> In the above examples, one nation was uncertain about the intentions of the other and hence made a "worse case" analysis resulting in the deployment of a new weapons systems which in turn caused its opponent to make similar judgments causing similar reactions. This action-reaction chain will continue with deployments and counter deployments of weapons until some nation takes unilateral diplomatic action to reduce these uncertainties. Rathjen's faith in the belief that a technical solution to the arms race is possible is never more apparent than in his suggestions for the easing of these arms race uncertainties. First, he advises the U.S., in order to reduce Soviet anxiety, to inform the U.S.S.R. of the rationale behind their weapons decisions.<sup>23</sup> Secondly, negotiations could be usefully employed to reduce arms race anxieties. Lastly, wholly oblivious to the fact that it is rarely weapons which cause tensions between nations but already-present tensions which require a nation to protect itself with weapons, Rathjens recommends that the U.S. deploy only those weapons likely to reduce uncertainties. "For example, it is likely to be less difficult to measure the size of a force of submarine-launched or fixed missiles than it is to measure the size of a mobile land force."<sup>24</sup>

At the basis on Rathjen's action-reaction model are two assumptions which inform the judgments which run through his analysis. One involves his preferred national priorities and the other his preferred strategic doctrine. First, Rathjens is distressed by all military expenditures since they divert resources from meeting "pressing social needs." Much of this money, according to Rathjens, is wastefully spent as well. Thermonuclear war, writes Rathjens and his co-author, G. B. Kistiasky, "between the superpowers, considering the vulnerability of the two societies, is a totally irrational policy choice."<sup>25</sup> Given this fact, nuclear war is consequently an irrational act from which any rational nation would draw back. Hence his preferred strategic doctrine leads him to the conclusion that it is basically irrational for nuclear powers to acquire weapons beyond what is necessary for deterrence. The reasons for deep cuts in defense then become especially compelling for the authors when they consider "the growing popular realization—at least in the U.S. and presumably in the U.S.S.R.—that each side already has an enormous overkill capacity with respect to the other, and that further escalation in strategic-

<sup>21</sup> George W. Rathjens, "The Dynamics of the Arms Race" in *Arms Control: Readings from Scientific America*. (San Francisco, California: W. H. Freeman and Company, 1973), p. 181. The original article appeared in 1969.

<sup>22</sup> *Ibid.*, p. 186.

<sup>23</sup> Must we now assume that the Soviets are not reading *The New York Times* or do not have their own sources for this sort of information? One wonders what the reaction of the Soviet Union would be if the US started suddenly to volunteer normally secret defense information to them. It would be likely, probably, to confuse rather than reassure them. In any case, the USSR would probably distrust the accuracy of this information.

<sup>24</sup> *Ibid.*, pp. 182-183.

<sup>25</sup> G. W. Rathjens and G. B. Kistiakowsky, "The Limitation of Strategic Arms" in *Arms Control, op. cit.*, p. 201.



force levels would entail tremendous costs and new dangers at a time when both countries are confronted with a host of other pressing demands on their resources."<sup>26</sup>

This argument illustrates American mirror-imaging at its worst. Devoid of all supporting data, the authors merely assert that a parallel hierarchy of values and interests exist between the U.S. and the U.S.S.R. At not point do the authors feel compelled to support this argument with any analysis of either Soviet strategic trends or military doctrine. There is no evidence, for example, that Soviet strategists have been particularly worried over the so-called "overkill" problem. Rather, Soviet military strategists, contrary to what American MAD proponents have argued, have consistently agreed to the doctrine that nuclear weapons do have political utility. Furthermore, there is little evidence that Soviet defense decisions have been much affected by popular demands that more defense monies be spent on social programs. From all we know about how the Soviet system operates, it appears that everything takes second priority to meeting the needs of the Soviet defense establishment.

Consistent with his MAD doctrinal preference, Rathjens considers the greatest danger to mutual stability and arms control to be any U.S. improvements in damage limitation. He opposes, therefore, the deployment of the U.S. anti-ballistic missile system (ABM), or any improvements in U.S. counterforce capability. "To the extent that one accepts the action-reaction view of the arms race," argues Rathjens, "one is forced to conclude that virtually anything we might attempt in order to reduce damage to ourselves in the event of war is likely to provoke an escalation in the race."<sup>27</sup> Also, there is the additional hazard that the Soviets might become so nervous over damage limitation improvements (in that they might undermine the Soviet's second-strike capability and hence MAD) that they may risk a pre-emptive attack.<sup>28</sup>

Rathjens is encouraged, though, by what he believes to be a convergence of strategic doctrinal viewpoints now occurring between the U.S. and the U.S.S.R. The "U.S.S.R. may at long last be prepared to accept the prevailing American view about the action-reaction phenomenon," he concludes hopefully, "and about the intrinsic advantage of the offense and the futility of defense." The recent Russian decision not to deploy an ABM system is seen as clear evidence of "the convergence of viewpoints" on the MAD strategic doctrine.<sup>29</sup> The fact is, contrary to Rathjen's speculations, no such evidence exists to support the notion that the Soviet abandonment of its Galosh ABM system, which was to be deployed around Moscow, was a consequence of a sudden conversion to MAD. Rather, the Soviets were willing to trade their Galosh system for a clear counterforce shot at U.S. ICBM silos and bomber bases by agreeing to the ABM Treaty.<sup>30</sup> This decision would be consistent with their

<sup>26</sup> *Ibid.*

<sup>27</sup> Rathjens, "The Dynamics of the Arms Race," p. 184.

<sup>28</sup> *Ibid.* See also p. 181. Each adversary is likely to over-react to the development of the other's damage-limiting capabilities "because of the conservative assumption that the adversary's damage-limiting forces will be far more effective than they are in fact likely to be." Rathjens and Kistiakowsky, p. 206.

<sup>29</sup> *Ibid.*, p. 185.

<sup>30</sup> See Gray, pp. 122-123, for a discussion of this point.

expressed counterforce strategic preference. Furthermore, even though the development of an ABM system is currently forbidden by the present 1974 ABM Treaty, no limitations have been placed on ABM R & D. Evidence exists that the Soviet Union is now investing extensively into new laser technology for future ABM use.<sup>31</sup>

In fairness to Rathjens, it must be pointed out that he has recently recanted much of his enthusiasm for the strictly mechanistic action-reaction model. Much "of the analytical literature and testimonial in the past, including some of our own," he confesses, "has suffered from having treated the nations involved as unitary actors whose behavior it is assumed is, or in any case *ought* to be, governed by 'rational' considerations of national interest."<sup>32</sup>

### *Paul C. Warnke and the Prospects for Unilateral Disarmament*

On March 9, 1977, Paul C. Warnke, Washington lawyer and former Assistant Secretary of Defense under McNamara, was confirmed, after much Senate debate, for the dual posts of chief negotiator to the Strategic Arms Limitation Talks (SALT) and as Director of the Arms Control and Disarmament Agency (ACDA). The conflict which the Warnke nomination precipitated in the Senate was evoked largely by the controversial policy recommendations which were derived from his often-repeated version of the action-reaction model. The Warnke variation on this theme had postulated that the U.S. and U.S.S.R. "ape" one another (or rather, the U.S.S.R. tends to "ape" the U.S. more often than *vice versa*), consequently creating a treadmill effect in which both nations are running faster and faster, like Alice's White Rabbit, to keep ahead in arms.

He makes this argument most strongly in what is probably his most widely read essay, "Apes on a Treadmill." Here, he uses the metaphor, "apes on a treadmill," to describe what he believes is the most distinguishing characteristic of the present strategic arms race. Both nations "ape" one another in weapons deployment, thereby creating a treadmill effect in which one nation desperately tries to keep ahead while the other is just as earnest about overtaking its opponent's lead. National interests and security concerns do not play much of a role here. The only objective is to keep ahead in this mad race even if it militarily makes no sense. Thus, the two "apes on a treadmill" continue jogging "with one contestant apparently running harder but never quite catching up."<sup>33</sup> This is a mindless race, since "primitive beasts like apes

<sup>31</sup> Jacquelyn K. Davis, Christopher M. Lehman, Nils H. Wessell, *SALT II and the Search for Strategic Equivalence*. "Foreign Policy Research Institute Monograph Series," No. 19. (Lexington, Massachusetts: Lexington Books, 1975), p. 23.

<sup>32</sup> George Rathjens, "ASW, Arms Control and the Sea-Based Deterrent: in Kosta Tsipis et al. (eds.), *The Future of the Sea-Based Deterrent* (MIT Press, Cambridge, Mass., 1972), p. 125, cited in Gray, pp. 21-22. (Emphasis in the original) Rathjen's co-author, G. B. Kistia-kowsky, though, has conjured up a new bugaboo to blame for fueling the arms race: "parnonia" or the "baseless nightmares" of the U.S. hardliners. See his "Is Paranoia Necessary for Security?" *The New York Times Magazine*, (November 27, 1977), pp. 52ff.

<sup>33</sup> Paul C. Warnke, "Apes on a Treadmill," *Foreign Policy* (Spring, 1975), p. 17. See also his "Arms Control, Before Time Runs Out," *The New York Times* (February 8, 1977). This is a summary of the former article. It should be noted by those who argue that Warnke has recanted this view by the time of his nomination that the *Times* article was published *after* his nomination by the President.

have no intentions, properly speaking, only reflexes," observed George F. Will in a column critical of the Warnke nomination, "So one cannot infer alarming intentions from the Soviet rush to strategic superiority."<sup>34</sup>

Warnke's argument is designed to be more than just a mere description of the character of the dynamics of the strategic arms race. Primarily, it is intended to serve as a justification for a call for deep cuts in the U.S. defense budget. Although Warnke believes that the arms race is fueled by an interstate action-reaction phenomenon, he further believes that the primary responsibility for the accelerating pace of this arms race resides with the U.S. Given the fact that the U.S. has, for the past generation, held the preeminent position of power in the world, the Soviet Union consequently "has only one superpower model to follow." Since the U.S. had been racing to keep ahead of the U.S.S.R., "superpower aping has meant the antithesis of restraint."<sup>35</sup> If Soviet imitation of the U.S. remains constant, then Warnke assumes that it would logically follow that U.S. arms restraint would be also "aped" by the Soviet Union. "It is time, I think, for us to present a worthier model," he writes hopefully, "The strategic arms competition is a logical place to start. The steps we can take in trying to start a process of reciprocal restraint are not drastic. They would create no risk to our security. We can be first off the treadmill. That's the only victory the arms race has to offer."<sup>36</sup>

Warnke makes little effort in his argument to hide his belief that Soviet strategic position, in comparison to that of the U.S., is backward and primitive. The Soviets are so unimaginative and uninformed that they have no choice, he seems to imply, but to imitate the defense decisions of the U.S. Warnke has been very candid on numerous occasions concerning this view. This position leads Warnke to two conclusions. First, the U.S. should "educate" the Russians in the logic of MAD so that they might understand the futility of war in the modern era.<sup>37</sup> No effort, though, should be made by the U.S. to understand the "inferior" Soviet strategic doctrine since it is only a matter of time before the Soviets come to accept the superior position of MAD. Secondly, the unimaginative Soviet imitation of the U.S. is assumed to be so mechanical that the Americans could depend on the Soviets withholding further deployment of new weapons if the U.S. were to take the lead.

<sup>34</sup> George F. Will, "Warnke: 'Aping' Through Unilateral Abandonment," *The Washington Post* (February 10, 1977).

<sup>35</sup> Warnke, *loc. cit.* Also see his testimony before the U.S. Senate Committee on Foreign Relations, *Strategic Limitation Agreements, Hearings*, 92nd Cong. 2 Sess. (1972), p. 185 (hereafter referred to as *SALT Hearings*); also James L. Buckley and Paul C. Warnke, *Strategic Sufficiency: Fact or Fiction?* Rational Debate Series. (Washington, D.C.: American Enterprise Institute for Public Policy Research, 1972), p. 53; and his testimony before the U.S. Committee on Foreign Relations, *Warnke Nomination, Hearings*, 95th Cong., 1st. Sess., 1977, p. 66 (hereafter referred to as *Warnke Hearings*).

<sup>36</sup> *Ibid.*

<sup>37</sup> For example, while testifying in favor of the SALT I treaty, Warnke, without any real analysis of the substance of Soviet strategic thought, scornfully dismissed it as obviously inferior. He argued that the US should not imitate the Russians by acquiring more strategic weapons. Since we possess a superior understanding of nuclear logic (MAD), the US should not "substitute their judgment for our common sense when it comes to further accumulation of offensive nuclear weapons." *SALT Hearings*, p. 121; see also "The Real Paul Warnke," *The New Republic* (March 26, 1977), p. 23, which is also cited in Richard Pipes, "Why the Soviet Union Thinks It Could Fight and Win a Nuclear War" *Commentary* LXIV (July 1977), p. 21; and Buckley and Warnke, p. 79 for similar Warnke arguments.

The process of mutual restraint on arms could begin with the U.S. informing the U.S.S.R. "both privately and publicly that we have placed a moratorium on further MIRV-ing of our land- and sea-based missiles." This would be followed by announcing a hold on the Trident submarine and the B-1 bomber. Following this initiative, the Soviets would have a six month period in which to respond to the U.S. unilateral restraint. The Russians, argues Warnke, would be under considerable world pressure to respond in kind. However, if they choose not to reciprocate, the U.S. would still be free to resume normal production and deployment of strategic weapons.<sup>38</sup> No danger to the U.S. could possibly be incurred by such a moratorium, because, in Warnke's opinion, the present strategic balance is so stable (each adversary having acquired assured destruction) that the Soviet Union would be unable in six month period to do anything that would disturb it.<sup>39</sup>

Warnke's argument that U.S. technological innovation and weapons deployment policies in defense is the driving force behind the arms race momentum leads logically to his arms control position. If the Soviet Union does tend to emulate the U.S., then the race could be terminated, or, at least deaccelerated, by unilateral U.S. restraints on the development and deployment of specified weapons systems. Not unsurprisingly, this call for unilateral restraint created the most negative comment on his nomination for the dual arms controlling posts during the Senate nomination hearings. Significantly, during these hearings, Warnke did back off in his testimony (perhaps disingenuously), from a strong defense of this position. Rather, he argued before the Senate Committee that the U.S. cannot expect Soviet restraint merely in response to major cuts in the U.S. defense budget. Rather than U.S. unilateral restraint, Warnke called instead for mutual reciprocal restraint between the two nations in which both would by prior agreement freeze certain weapons systems. This act would establish an atmosphere conducive to obtaining an agreement at the forthcoming SALT talks since neither nation would be trying to develop new weapons to be used as "bargaining chips" at the negotiating table.<sup>40</sup> Since the entire process of restraint in this approach depends upon mutual cooperation, the elements of the mechanistic action-reaction model are not present here. There is really nothing novel in this proposal, alas, since its success depends upon the utilization of traditional diplomatic negotiations.<sup>41</sup>

## Conclusion

The popularity of the action-reaction merchants appears to have declined somewhat recently. Most of the current literature on the strategic arms race shows a greater appreciation for domestic inputs into weapons decisions.<sup>42</sup> As

<sup>38</sup> Warnke, "Apes on a Treadmill," p. 29; also *SALT Hearings*, p. 185.

<sup>39</sup> *Ibid.*, p. 15.

<sup>40</sup> *Warnke Hearings*, pp. 21, 28, 63-64, 66, and 75.

<sup>41</sup> This proposal betrays a lawyer's mind at work. Consider the assumption implicit here that the right procedure will establish the proper atmosphere for resolving fundamental national differences.

<sup>42</sup> Gray, p. 20.

a consequence, more emphasis is currently placed upon the doctrinal, bureaucratic, and personal contentions, for example, which go into the formulation of defense programs. There is also a growing awareness that, unlike the mechanistic action-reaction model, reactive responses to weapons decisions may be severely time-lagged because of these domestic factors.<sup>43</sup>

The fact that the Soviet Union and the United States do frequently respond to each other's weapons decisions has not been in dispute here. Rather, this paper has contended that the interstate action-reaction phenomenon cannot be offered as the complete answer to what fuels the arms race and the advocacy of this model leads to unwise arms control policy positions. The model's fundamental difficulty is that it depreciates enormously the integral part that the struggle for power plays in interstate behavior. Its tendency is to lead its proponents to the belief that arms control decisions are basically technical problems divorced from the clash of political issues. Even "if an action-reaction mechanism does fuel the arms race," Gray further notes, "it does not follow that arms control interdiction of such a mechanism need lead either to a termination of the race or to an improvement in the security condition of the United States." Action-reaction is a sensible response of states, he concludes, which sensibly distrust each other.<sup>44</sup>

But there exist additional difficulties with the model which throw its theoretical validity into grave question. For example, for a nation to rationally respond to the actions of another it must be able to perceive accurately not only the quantity and quality of the weapons which its adversary is deploying, or about to deploy, but also the intended strategic purposes of these weapons. Yet, misconceptions about the military strengths and intentions of adversaries are quite common. According to one study, during the 1950s the CIA overestimated the quantity of Soviet ICBMs only to be followed by a decade of underestimation by a large margin of the Soviet ICBM build-up.<sup>45</sup> Furthermore, there is little agreement among the arms control community or strategic analysts as to what the preferred strategic doctrine of Soviet military thought is. The arms control community holds the position that the Soviet Union is moving toward the U.S. position on MAD.<sup>46</sup> However, as Richard Pipes has argued persuasively, the Soviets prefer a war-winning doctrine, counterforce targeting of missiles, and have always regarded MAD as a second-rate doctrine.<sup>47</sup> Consequently, intelligence and defense experts are apt to want to respond differently to Soviet moves. Given the conflict of opinion over what the Soviet potential and aims are, there is no clear, unified

<sup>43</sup> *Ibid.*, p. 22.

<sup>44</sup> *Ibid.*, p. 19.

<sup>45</sup> William T. Lee, *Understanding the Soviet Military Threat: How CIA Estimates Went Astray*. Agenda Paper No. 6 (New York: National Strategy Information Center, Inc., 1977), p. 25; See also Wohlstetter, "Racing Forward?," p. 196, and his "Legends of the Strategic Arms Race," pp. 9-16; (on the missile gap deception see Arnold L. Horelick and Myron Rush, *Strategic Power and Soviet Foreign Policy* (Chicago: The University of Chicago Press, 1966).

<sup>46</sup> John H. Barton and Lawrence D. Weiler (eds.), *International Arms Control: Issues and Agreements* (Stanford, California: Stanford University Press, 1976), pp. 136 and 202; Kahan, p. 271. As noted above, Rathjens and Warnke both argue this point.

<sup>47</sup> Richard Pipes, "Why the Soviet Union Thinks It Could Fight and Win a Nuclear War," *Commentary*, LXIV (July 1977), pp. 30-34. See also Lee, pp. 32-33, and Colin Gray's *The Soviet-American Arms Race*.

idea of what a rational response to their weapons decisions should be. Similar confusion is likely to exist concerning U.S. defense expenditures in Soviet decision-making circles.

Lastly, the argument that soaring U.S. defensive expenditures are the driving force behind the arms race cannot be supported by recent trends in U.S. defense spending. As Albert Wohlstetter has argued, U.S. defense spending has not only not been climbing, but in recent years has actually declined. In fact, the decline in strategic arms has been "larger, more consistent, and more durable than any other item in the defense budget."<sup>48</sup> By contrast, the Soviet Union has not similarly reduced its defense spending to match U.S. trends, but rather has remained at a steady 7-8% per annum increase. Another factor, not considered by the action-reaction restrainers, is that the U.S. has, in the past, in a unilateral act of arms control, frozen the production of certain arms. In the mid-1960s the U.S. froze its force of ICBMs at 1054 and further limited itself to the 656 missiles on board 41 submarines which had been attained in 1967. Massive civil defense programs were abandoned and the U.S. dismantled nearly all her bomber defenses.<sup>49</sup> Given the action-reaction argument, the Soviet Union should have responded in kind. The failure of the Soviet Union to react as predicted is not even doubted by the optimistic Warnke.<sup>50</sup> The fact that the action-reaction merchants have never dealt with this obvious failure in their theory is a disturbing indication of their tendency to stick to preferred beliefs even when the facts do not fit.

The most persistent source of error for U.S. policy makers is the ethnocentric character of their analysis of Soviet military doctrine.<sup>51</sup> There persists an arrogant and misinformed tendency among many U.S. analysts, who have not studied adequately Soviet thinking and history, merely to "mirror-image"—that is, to attribute to the Soviets the same interests and purposes which dominate U.S. strategic thinking.<sup>52</sup> The mechanistic action-reaction model, a product of this unfortunate sort of thinking, leads to the highly questionable notion of doctrinal convergence and the expectation of Soviet emulation of U.S. force postures. This uninformed understanding of Soviet military doctrine and choice leads ineluctably to misperception and error. To expunge this one source of error from strategic analysis, the action-reaction model must be approached with the greatest skepticism.

---

<sup>48</sup> Wohlstetter, "Racing Forward?," p. 203 and pp. 199-210 inclusive for an analysis of defense budget trends. "For the thirteen years from 1961 to 1974 the average rate of decline was about 8 per cent per year," observes Wohlstetter in his "Legends of the Strategic Arms Race," p. 40.

<sup>49</sup> Pipes, p. 25, and Edward N. Luttwak, "Defenses Reconsidered," *Commentary*, LXIII (March 1977), p. 53.

<sup>50</sup> See *Warnke Hearings*, p. 64.

<sup>51</sup> For example, *vide* McNamara, Rathjens and Warnke as discussed above.

<sup>52</sup> Gray, p. 181; and Lee, p. 30.