
Japan-U.S. Missile Defense Collaboration: Rhetorically Delicious, Deceptively Dangerous

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On August 16, 1999, Masahiko Komura, Foreign Minister of Japan, and Thomas Foley, U.S. Ambassador to Japan, signed a Memorandum of Understanding (MOU) to pursue joint research on missile defense technology. Close scrutiny of this agreement is warranted, since the collaborative research it authorizes could presage fundamental changes in the Japan-U.S. security alliance, and have an important influence on future missile defense debates yet to unfold in Asia, Europe, and the United States. To grasp the dynamics and significance of this agreement, it is useful to frame Japan-U.S. missile defense research in light of ballistic missile defense (BMD) debates that have preceded contemporary developments. Japanese citizens contemplating current proposals for export of U.S. missile defense technology would do well to remember *caveat emptor*: the principle of commerce that states “buyer beware.” Such skepticism seems prudent given the long track record of U.S. strategic deception in missile defense advocacy, where American officials and industry executives have misrepresented the capabilities of BMD technologies, disguised the actual purposes of BMD systems, and attempted to silence critics who have contested the Pentagon’s official missile defense orthodoxy.

In the following discussion, missile defense’s strong political appeal serves as the focus of part I, where factors making American BMD technology a “delicious” export for Japan are considered. The track record of U.S. missile defense programs reveals frequent gaps between the advertised benefits of BMD systems

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and the actual capabilities and purposes of such systems. The significance of these gaps for proposed Japan-U.S. missile defense projects is examined in part II. Part III considers the possible fallout of a decision by Japan to accept American BMD technology, in the event that such a decision also entails importation of American strategies of deception designed to insulate missile defense systems from political criticism. Part IV compares the dynamics of potential strategic deception in Japanese Theater Missile Defense (TMD) advocacy to Cold War patterns of discourse and strategy deployed to buoy Reagan-era BMD programs such as the Strategic Defense Initiative (SDI). The paper concludes with a constructive turn in part V, where potential avenues of change are explored. During the Cold War endgame, transnational linkages forged between scientists and peace movement activists in the U.S. and USSR created back channels of communication that were instrumental in enabling both superpowers to back away from the nuclear brink. Today, similar contacts between Japanese and American citizens have the potential to counter dominant security discourses in public spheres of deliberation. Constitution of new "counter-public spheres"¹ could clear space for citizens to bring fresh perspectives to bear on missile defense dialogues that have been largely controlled by U.S. military officials and defense industry representatives for decades.

I. MISSILE DEFENSE AS A DELICIOUS U.S. EXPORT

Japan's interest in BMD dates to the mid-1980s, when several Japanese companies participated in the Pentagon's WESTPAC project, a preliminary study of missile defense requirements in the Western Pacific. The Japanese government got directly involved in BMD discussions in 1993, when an official Japan-U.S. TMD Working Group was created "to provide a forum for regular discussion of TMD."² Subsequently, U.S. corporations and defense officials lobbied heavily for Japan to endorse the TMD concept and pursue collaborative missile defense projects. Some commentators criticized such back room lobbying because it pre-empted more robust public discussion regarding the wisdom of TMD for Japan. As one editorial in the *Tokyo Mainichi Shimbun* argued, "[A]mid the absence of government and public arguments, the actual situation is that the defense industry is jumping the gun..."³ Toshiyuki Toyoda, a physicist at Meiji Gakun University, expressed similar skepticism with the observation that "people who harbor a blind belief in technology may be easily deceived by the promoters of these expensive schemes."⁴

Such reservations did little to temper American zeal in promoting a Japanese TMD system. At the second meeting of the Japan-U.S. TMD Working Group in 1995, U.S. Ballistic Missile Defense Organization (BMDO) representatives presented Japanese officials with a 40-page document entitled "Japan's

Choices Regarding TMD.” Strongly endorsing several Asian theater missile defense options, the report warned that TMD is “the last military business opportunity for this century.”⁵ While visiting with a senior Japan Defense Agency (JDA) official, a former U.S. Deputy Undersecretary of Defense said on March 10, 1995 that “relations with the U.S. military, industry, and Congress will suffer if no progress is made in introducing the TMD.”⁶ After release of the 1995 report, JDA officials questioned the feasibility of TMD and protested the language of BMDO’s presentation on the grounds that it “gives the impression that Japan has already committed itself to the TMD.”⁷

During the next few years, preliminary discussions continued, with U.S. officials pushing for TMD and Japanese officials largely soft-pedaling such proposals, until a dramatic event profoundly changed the valence of discussions. On August 31, 1998, North Korea launched a prototype *Taepodong* three-stage missile over the Japanese archipelago. According to Yoichi Funabashi, chief diplomatic correspondent for the *Asahi Shimbun*, this dramatic test was the “direct impetus” behind Japan’s decision to pursue TMD.⁸ As *The Economist* reported, the North Korean launch provided the stimulus needed to break the logjam on Japanese attitudes toward missile defense: “After years of dithering, the Japanese government promptly agreed to participate in America’s proposed Theatre Missile Defense system...”⁹

There are early indications that the Japan-U.S. TMD project will focus on Research and Development (R&D) options for the Navy Theater Wide (NTW) missile defense system, with project costs running upwards of \$524 million, and expenses split evenly by the two parties over five to six years. Designed to protect against incoming missiles flying within a 1,860-mile radius, NTW is categorized by the U.S. as a theater system, even though it would be designed to have strategic capability for Japan (i.e. to protect the entirety of its geographical land mass).¹⁰ In the R&D effort, U.S. officials hope to gain from Japanese contributions in the areas of miniaturization, sensors, propulsion, and cryogenics.¹¹ Also, it is believed that Japan could help with development of the NTW system, by contributing technology and expertise enabling weight reduction of the Navy’s Standard Missile (used as the interceptor component of the new system), as well as refinement of multicolored imagers designed to enhance the ability of NTW sensors to discriminate between actual warheads and decoys. Lighter interceptor missiles could improve NTW’s overall performance by enhancing interceptor range and maneuverability, while more powerful sensor imaging technology might increase the probability that interceptor missiles could locate and home in on target missiles.

One way to shed light on the possible course of public argument and scientific collaboration in the Japan-U.S. TMD project is to look to the past. The promotion campaign for this collaborative effort carries the imprints of advocacy

schemes deployed to buoy the political fortunes of many missile defense programs since 1983, when U.S. president Ronald Reagan put BMD on the front pages of the world's newspapers with his famous "Star Wars address." As historian Frances FitzGerald points out, Reagan's key motivation for advocating Star Wars was to fashion a rhetorical tool that would allow him to respond to the ominous dangers of the superpower arms race in a way that would appeal to the nuclear freeze constituency.¹² After the speech, missile defense advocates seized upon Reagan's claim that missile defense could render nuclear weapons "impotent and obsolete" by packaging the concept of BMD in the language of peace and disarmament. Remarkably, it appears that marching orders for this rhetorical strategy of co-option were laid out in a "Proposed Plan for Project on BMD and Arms Control" entitled "High Frontier: A New Option in Space," apparently produced by the Heritage Foundation late into President Reagan's first term.¹³ According to former aerospace industry insider Carol Rosin, the objectives of this secret plan are to "get an early BMD underway and develop enough political support to ensure that it could not be turned off," and to force a drastic reorientation of the U.S. arms control debate in such a way as to "make it politically risky for BMD opponents to invoke alleged 'arms control arguments' against an early, or any other BMD system."¹⁴

Specifically, the "High Frontier" document instructs BMD advocates to "unambiguously seek to recapture the term 'arms control' and all of the idealistic images and language attached to this term."¹⁵ In a section on "Tactics," the report recommends a "radical approach that seeks to disarm BMD opponents, either by stealing their language and cause, 'arms control,' or by putting them into a tough political corner through their explicit or de facto advocacy of classical anti-population war crimes." The report continues: "[T]o the extent possible, BMD proponents should begin to stress nuclear disarmament as a new end point, perhaps using such descriptions as arms control through BMD = nuclear disarmament."¹⁶ The report also establishes a rhetorical foundation for strategic deception on the technical aspects of SDI, by suggesting that ethical arguments for BMD should be uncoupled from scientific concerns about technical feasibility; BMD "will be driven by ethical urgency, rather than by technological availability..."¹⁷

Examination of the official discourse supporting the Japan-U.S. TMD project reveals areas of overlap in the basic organizing themes for the project and patterns of persuasion pursued in the early U.S. Star Wars promotion campaign. Discussing the joint Japan-U.S. TMD project, U.S. Secretary of Defense William Cohen said, "Our interests are purely defensive."¹⁸ Japan's Foreign Minister, Masahiko Komura, paralleled this rhetorical tack, by telling the Diet that "the TMD will be purely defensive and will never pose any military threat to other countries."¹⁹ The East Asian Strategic Review, compiled by the National Institute for Defense Studies (a research arm of the JDA) rebutted China's criticisms of Japan-U.S. TMD collaboration, arguing that such research is "purely defensive."²⁰

These comments reflect TMD's strong potential appeal in Japan, where heightened threat perceptions stir calls for pro-active JDA measures, but where political and legal constraints rule out pursuit of deterrence based on a buildup of offensive weaponry. In this climate, TMD seems to be a "delicious" rhetorical option for politicians and military leaders seeking to satisfy hawks and doves simultaneously. Missile defense's potential appeal cuts across a broad spectrum of military and public opinion. The argument that missile defense can contribute to security through maintenance of technological superiority over adversaries resonates with hawks who endorse peace-through-strength logic, while missile defense's very name sounds reassuring to some doves who favor defensive military postures and doctrines. Reflecting on the rhetorical potential of Japanese missile defense in this regard, one commentator notes that since "the missiles do not detonate and are intended for defense, adoption could be more politically palatable in a country that...has explicitly renounced war in its constitution."²¹ As an anti-weapon weapon, missile defense can be lacquered in a veneer of anti-war rhetoric. The same rhetorical maneuver that President Reagan used to sell Star Wars as a tool of disarmament to the U.S. freeze movement during the 1980s appears to have been appropriated by Japanese BMD advocates seeking to reconcile missile defense with their nation's peace constitution in the contemporary milieu.

An additional aspect of TMD's unique appeal in the Japanese public sphere concerns the relationship between missile defense and the Japan-U.S. security alliance. Proponents of collaborative TMD projects between Japan and the U.S. highlight the defensive nature of such projects by claiming that pursuit of joint research will work as political glue to strengthen the fundamentally defensive alliance. On this logic, missile defense substitutes for offensive weapons, because it "obviates the need for Japan to consider hedging against new threats of weapons of mass destruction with its own nuclear deterrent."²² Toshiyuki Shikata, a professor of security at Teikyo University, offers a similar rationale for TMD, explaining that Japanese missile defense would "enhance confidence toward Japan in the region" and "eliminate fears that Japan aims to develop nuclear weapons."²³ Missile defense is presented here as a device that neutralizes nuclear weapons on both sides: "enemy" missiles are rendered useless, and the need for Japan to pursue a nuclear deterrent arsenal is rendered superfluous in light of protection afforded by a reliable missile shield.

II. THE LEGACY OF U.S. MISSILE DEFENSE DECEPTION

The historical record shows that in the short term, U.S. Star Wars advocates enjoyed great political success in "stealing the language and cause" of the American peace movement, by selling BMD rhetorically as a defensive weapon, largely neutralizing nuclear freeze activism in the process. In fact, the political

campaign to package SDI as a tool of disarmament eventually gathered so much momentum that it took on a life of its own, with missile defense proponents continuing to echo Reagan's promise of "BMD = disarmament," even when it became clear that such a fanciful notion was a scientific chimera.

This uncoupling of ethical themes in public argument from the technical constraints of rocket science produced a dramatic burst of deceptive discourse. Strategic deception practiced by the Pentagon during the Star Wars era grew out of an overall government policy of strategic disinformation, codified at the highest official levels, designed to inflate perceptions of U.S. military capabilities and needs during the Cold War arms buildup. At the Central Intelligence Agency, the policy took the form of a "perception management" program, outlined in a defense guidance document prescribing: "We should seek to open up new areas of military competition and obsolesce previous Soviet investment or employ sophisticated strategic deception options to achieve this end."²⁴ At the Department of Defense (DOD), deceptive practices received official sanction in a wide-ranging "coordinated disinformation effort" covering 15-20 programs, one of them SDI.²⁵ "This misinformation altered, perhaps profoundly, the course of and expenditures for SDI," explains Kevin O'Neill of the Institute for Science and International Security.²⁶ One might think that such deception programs would have ceased after the fall of the Berlin Wall and the attendant easing of superpower tensions, but surprisingly, similar strategic deception campaigns on missile defense have been carried out to bolster new BMD systems such as Patriot,²⁷ Theater High Altitude Area Defense (THAAD),²⁸ and National Missile Defense (NMD).²⁹ These deception campaigns have been necessary to keep appropriations flowing to missile defense programs beleaguered by a long track record of technical failure.

- 1984: U.S. scientists rigged the Homing Overlay Experiment by placing a homing beacon on the target missile, artificially heating the target missile, and secretly installing explosives on the interceptor missile to simulate interception in the case of a miss.
- 1985: U.S. scientists (including the Director of Lawrence Livermore National Laboratory) dramatically exaggerated the brightness and focus of X-Ray lasers in the Romano, Cottage, and Goldstone tests conducted as part of Reagan's Star Wars program.
- 1991: Pentagon officials overstated the accuracy of the Patriot missile defense system during the Persian Gulf War, exaggerated its effectiveness in post-war congressional hearings, then abused the classification system in attempts to silence critics and protect the fiction of the system's accuracy.
- 1994: The director of BMDO secretly contracted a private "SDI boutique" to produce research findings discrediting a published article questioning the legality of THAAD under the Anti-Ballistic Missile (ABM) Treaty. Without verifying

the validity of the contractor's study (which an independent assessor judged later to be "wrong"), BMDO then amplified its findings to high-ranking foreign audiences in official briefings.

- 1996: TRW, Inc. suppressed internal criticism of the company's software program designed to enable the proposed NMD system to discriminate between real warheads and decoys.
- 1999: BMDO officials failed to disclose NMD system malfunctions that caused an exo-atmospheric kill vehicle to drift off course and home-in on a decoy during a flight test.

The legacy of strategic deception in U.S. missile defense advocacy also includes episodes where Pentagon officials have misrepresented the actual purposes of BMD programs, in order to insulate them from political criticism. In 1988, the DOD joined a purely civilian research project on nuclear powered rockets, in order to design launch vehicles that could "carry particle beams, lasers, and homing rockets for missile defense purposes" into space.³⁰ Knowing that "public discussion of the dangers of nuclear-powered rockets would create difficult political and public relations problems," Pentagon officials hid this program (called Timberwind) in the black budget.³¹ Subsequently, activist Preston J. Truman videotaped Air Force officials lying blatantly to citizens at a 1991 environmental impact hearing in Utah on the rocket program. As Truman recounts, they "outright lied to the public during hearings and to regional media stating that the proposed nuclear rocket was 100 percent civilian and had no military applications and that there was no relationship whatsoever to the SDI program, while knowing full well this was not the case."³²

A similar example of strategic deception involved U.S. treatment of a high-resolution X-band radar based in Vardø, Norway. In late 1998, the DOD quietly dismantled the HAVE STARE radar system based in Vandenburg Air Force Base in California, reassembled it in Vardø, and then renamed it Globus II. When Norwegian journalist Inge Sellevåg asked about the purpose of the Globus II radar, military officials from Norway and the U.S. said that it was deployed to track space debris.³³ However, John Pike of the Federation of American Scientists calls this space debris tracking mission "a thin cover story," given that the powerful radar is one of the few X-band radars in the U.S. arsenal able to provide high resolution early warning data for enemy missile launches.³⁴ Massachusetts Institute of Technology (MIT) defense and arms control scholar Theodore A. Postol, who uncovered internal Pentagon documents demonstrating that the Globus II radar is designed to maximize effectiveness of a NMD system against Russian Intercontinental Ballistic Missiles (ICBMs), bolsters Pike's suspicions.³⁵

A grasp of the historical patterns of strategic deception employed in U.S. missile defense advocacy is useful for making sense of the Japan-U.S. TMD

agreement, since the collaborative research authorized by this agreement paves the way for eventual Japanese purchase of American BMD products. Such a purchase would likely result not only in a substantial transfer of capital and technology, but also export of American rhetorical strategies for marketing BMD systems to Japanese consumers in the executive branch, parliament, and general public. In fact, the secret "High Frontier" planning document anticipates such offshore advocacy efforts, directing U.S. Star Wars stalwarts to reach abroad in their BMD promotion campaigns through recommendations that "the strategy proposed should be appealing to U.S. allies," and that advocates "should spend a great deal of time trying to get an offshore constituency, particularly the governments of major U.S. allies, the more vocal and outspoken the better."³⁶ The document further suggests that such foreign marketing should cultivate "a broad political constituency" (including allies such as Israel and Japan) that would "make it impossible to turn off" BMD.³⁷

As it turns out, Pentagon leaders and American industry officials pursued such plans under the aegis of WESTPAC, a mid-1980s joint study on the feasibility of missile defense in the Pacific theater. The significance of this effort is laid out in the "High Frontier" document: "This offshore advocacy will provide several desirable things at the same time: it will lend credibility to domestic U.S. proponents of BMD, while enlisting political support overseas that inevitably will begin to register on the entire U.S. national-security bureaucracy."³⁸ Here, the enlistment of foreign allies in missile defense projects is seen as an important tool providing leverage for U.S. NMD advocates persuading domestic American audiences of the inevitability (and thus desirability) of massive BMD appropriations.

If Japan makes a sizable financial commitment to TMD, this will create a substantial political incentive for missile defense proponents in the U.S. to argue for perpetual funding of BMD across the board. "Having a technological giant like Japan involved [in missile defense] makes the project more convincing to the American people," says one U.S. government researcher in military technology. "It will be difficult to terminate the program, no matter how unpromising it is, if other countries have committed so much money to it."³⁹

III. BUYER BEWARE: POSSIBLE FALLOUT FROM TMD DECEPTION

Part I of this essay depicted how missile defense's peaceful veneer makes pursuit of BMD a delicious strategy for politicians hungry to talk tough in the face of foreign threats, yet eager to maintain the pose of a fundamentally defensive military posture. The proclivity of officials to leverage this rhetorical strategy with deception schemes designed to mask technical failure and camouflage the real purposes of BMD systems was elucidated in part II. The following discussion considers how the dynamics of BMD as a delicious but deceptive American

export might shape the future course of Japanese missile defense policy and color Japanese and U.S. public arguments regarding BMD.

Initially, it is worth noting that many of the same political dynamics that drove previous U.S. deception schemes on missile defense are currently present in the context of Japan-U.S. TMD collaboration. Once a decision is reached to deploy a joint missile defense system, the huge momentum that builds up behind such a project makes it difficult to alter the course of its eventual realization. This is particularly true for Japan, where commentators have noted that TMD has the potential to be the “live coal that will jolt Japan’s defense industry...If Japan does decide to introduce TMD, whether or not defense-related firms become involved in TMD will largely affect their destiny as the budget for armaments for direct use in warfare tapers down.”⁴⁰ Akira Kato, a defense specialist at Obirin University in Tokyo, puts this more bluntly by stating that a Japanese TMD would have the effect “of keeping Japan’s defense industry going.”⁴¹ Days after the Japan-U.S. joint research agreement was announced, *The Economist* reported that, “the Japanese defense industry is now rubbing its hands in glee at the prospect of being handed even more big and lucrative contracts.”⁴²

In the case of the U.S. Star Wars system, a similar hitching of the financial health of defense contractors to the fate of BMD programs created momentum for far-flung strategic deception schemes, designed to keep the idea of missile defense afloat, even when widespread corruption and incompetence undermined the technical soundness of BMD research efforts. The zeal with which American corporations such as Raytheon, Inc. have pushed the concept of Japanese TMD, coupled with the huge financial windfall awaiting Japanese defense contractors in the event of a major government commitment to missile defense, combine to make conditions ripe for strategic deception in the Japanese context. The historical record indicates that such deception could play out on multiple levels.

Using Gulf War deception on Patriot missile accuracy as a template, Japanese and U.S. officials might manufacture exaggerated claims of TMD effectiveness to calm Japanese citizens made nervous by Chinese nuclear saber rattling. Japanese scientists could follow in the footsteps of Edward Teller and manipulate scientific data on missile defense feasibility to win budget appropriations. Or Japanese corporations could copy the TRW, Inc. strategy of silencing and retaliating against in-house whistle-blowers who raise technical concerns that might jeopardize lucrative missile defense contracts. In this vein, the case of former TRW, Inc. senior engineer Dr. Nira Schwartz provides a possible precedent for such a “hush to failure” strategy. Schwartz worked for TRW, Inc. from 1995-1996 on computer software enabling NMD interceptors to discriminate between target missiles and decoys. In documents filed in a Los Angeles federal district court, Schwartz alleges that TRW, Inc. “knowingly made false test plans, test procedures, test reports, and presentations to the United States Government,” then retaliated by firing her when she refused to cover up such fraud-

ulent activity.⁴³ Schwartz's charges are corroborated by Postol, as well as an official Pentagon investigation conducted by the U.S. Defense Criminal Investigative Services (DCIS), an investigative arm of the DOD Office of the Inspector General.⁴⁴

When assessing the Japan-U.S. TMD project, citizens interested in government accountability and nuclear safety would do well to put stock in the old aphorism: you can't judge a book by its cover. If historical trends continue, there is good reason to expect that the official discourse on Japanese TMD will cover up technical failure and disguise politically unpopular missions planned for any joint Japan-U.S. system. There are several negative consequences that could result from such deception.

One end result of a politically motivated decision to pursue Japanese TMD, based on doctored scientific data, could be deployment of a deeply flawed missile defense system that is technically bankrupt, yet has an illusory veneer of effectiveness. In addition to the fact that such a fraudulent scheme would sacrifice huge amounts of taxpayer funds at the altar of corporate profit, such a development would present profound security risks of its own. Consider that missile defense advocates point to the possibility of "rogue state blackmail" as an emerging threat justifying rapid pursuit of missile defense. This blackmail scenario envisages major powers embroiled in a diplomatic or military dispute where a so-called state of concern (e.g. North Korea, Iran or Iraq—armed with weapons of mass destruction [WMD]) attempts to exact concessions from wealthy states, by threatening their homelands with long-range rocket attack.⁴⁵

In such a tragic situation, it is suggested that missile defense would preserve "freedom of movement" to call the state of concern's bluff. To do this, however, leaders of shielded nations would need to have supreme confidence in their missile defense systems. If such confidence was based on faulty or doctored feasibility data, the stage could be set for a miscalculation of tragic proportions. For example, misplaced faith in a leaky missile defense shield could mistakenly embolden a Japanese president to take diplomatic risks that would recklessly expose thousands (perhaps millions) of civilians to nuclear, chemical, or biological attack.⁴⁶

Perhaps an even more frightening scenario involves a case where missile defense works—but not for its publicly advertised purpose. The frequent argument that BMD is "purely defensive" belies the fact that much missile defense technology can be used for offensive military missions. Consider that the same missile used as an interceptor in the NTW system, the U.S. Navy Standard Missile-3 (SM-3), can also be outfitted with powerful warheads and used in offensive strikes on land and sea targets. "In a strict definition," explains Yuan Hong of the Chinese Academy of the Social Scientists, "the TMD is a weapon system with both defensive and offensive capabilities."⁴⁷ Such insight is reflected in *Newsweek International's* observation that "politicians from Seoul to Surabaya view Tokyo's new defense debate as a smoke screen for rearmament."⁴⁸

Any clear-cut distinction between offensive and defense in the TMD context is hopelessly muddled when one realizes that plans for the NTW system include a substantial space component. An elaborate network of space satellites (as well as spaceborne forces to protect them) would be essential features of any robust NTW system, providing early warning data of enemy missile launches, as well as tracking information designed to guide SM-3 interceptors to their targets in mid-flight. It is instructive to note that politically powerful missile defense proponents such as U.S. Senator Bob "Spaceman" Smith (R-NH) envision NTW integrated into an overall space force that would pursue both defensive and offensive military missions.⁴⁹

We need to incorporate forward-deployed capabilities like the Navy Theater Wide program and the Air Force Airborne Laser as space-based missile defense programs to ensure [that] we can stop missiles in their boost phase, dropping the debris fallout over our adversary's homes, not ours...[S]pace offers us...the prospect of inflicting violence—all with great precision and nearly instantaneously, and often more cheaply. With credible offensive and defensive space control, we will deter our adversaries, reassure our allies, and guard our nation's growing reliance on global commerce.⁵⁰

This full-throated call for a robust blend of offensive and defensive space weaponry reflects a strategic principle elucidated by Frank Barnaby: when it comes to arming the heavens, "anti-ballistic missiles and anti-satellite warfare technologies go hand-in-hand."⁵¹ The interlocking nature of offense and defense in military space technology stems from the inherent "dual capability" of spaceborne weapon components. To the extent that ballistic missile interceptors based in space can knock out enemy missiles in mid-flight, such interceptors can also be used as orbiting "death stars," capable of sending munitions hurtling through the earth's atmosphere at dizzying velocities.⁵² As Marc Vidricaire, a member of the Canadian Delegation to the U.N. Conference on Disarmament, explains: "If you want to intercept something in space, you could use the same capability to target something on land."⁵³ Furthermore, spaceborne BMD components can be used for offensive attacks in outer space itself, where orbiting space assets belonging to adversaries could be targeted for destruction. According to defense analyst James E. Oberg, "...the benign, defensive nature of a ballistic missile killer is not the only facet of such a system—it also has inherent offensive capability against satellites."⁵⁴ This dual capability of BMD systems provides one rationale for why space weapons advocates such as Senator Smith propose to make offensive attack weapons part of missile defense. In a world where deployment of purely offensive space weaponry might be difficult to justify as a stand-alone military initiative, Oberg speculates, "the means by which the placement of space-based weapons

will likely occur is under a second U.S. space policy directive—that of ballistic missile defense.”⁵⁵

Although these “death star” scenarios might seem like they come straight out of Hollywood special effects studios, it is worth noting that the U.S. Space Command is on record endorsing military strategy that favors weaponization of space as a force multiplier for offensive attack missions. An official planning document entitled “Vision for 2020” foresees “space-based strike weapons” as part of “global engagement capabilities” designed to enable “application of precision force from, through, and to space.”⁵⁶ Aggressive pursuit of these “strike weapons” is imperative, according to Space Command officials, because “space superiority is emerging as an essential element of battlefield success and future warfare.”⁵⁷ Arguing that “it is inevitable that mankind will weaponize space,” Air Force Lt. Col. Thomas D. Bell claims in a 1999 paper that, “The U.S. ability to conduct combat operations in this environment will provide the technical asymmetry that the U.S. will need to win the next war, just as it used strategic bombers and the atomic bomb to win World War II and stealth technology and precision guided munitions to win the Gulf War.”⁵⁸ These plans recently received concrete expression in comments from Gen. Ralph E. Eberhart, Air Force Space Command Commander. While addressing a group at the Joint Tactical Ground Station in South Korea, Eberhart declared that “[s]pace is the ultimate high ground...Not only do we have to use it, we have to be able to defend it and deny our enemy the use of space if we are at war...we have to ensure space superiority for our commanders and men and women who rely on it during the fight.”⁵⁹

Although missile defense advocates frequently trumpet the “purely defensive” nature of BMD, such systems exist in a strategic framework that ineluctably includes offensive space weaponry. “The PR spin is that the U.S. military push into space is about missile defense or defense of U.S. space satellites. But the volumes of material coming out of the military are concerned mainly with offense—with using space to establish military domination over the world below,” notes professor Karl Grossman.⁶⁰ Such a suggestion carries particular significance for Japan, since as Frank Umbach, Senior Research Fellow at the German Society of Foreign Affairs, explains, “a possible Japanese TMD deployment may require an integration of the anti-missile defense command and control (C-2) systems of Japan and the U.S., which could have far-reaching implications for both sides.”⁶¹ Eventual deployment of a joint Japan-U.S. TMD system could saddle Japanese officials with the sober responsibility of making command decisions regarding use of spaceborne weapons for offensive military missions.

It is tempting to take comfort in the idea that JDA leaders would not permit a joint missile defense system such as NTW to evolve into a platform for offensive space power, especially since such a development would flout Japanese legal and constitutional prohibitions against such military adventures. However,

in a joint command situation, it is not clear that such constraints would hold up, especially in light of intimidating comments by space power enthusiasts such as Senator Smith, who vows to use his position on Capitol Hill to ram space weaponry down the throats of opponents, regardless of how vocal they are: "If the Air Force cannot or will not embrace spacepower, we in Congress will have to drag them there, kicking and screaming if necessary."⁶²

Another possibility is that Japanese objections against incorporation of offensive space power into a joint missile defense program could be rendered moot by strategic deception. Part II of this essay explored cases where U.S. missile defense advocates deployed subterfuge to camouflage the actual purpose of BMD programs, in order to insulate the program from political criticism. A similar approach would seem politically attractive for public affairs officers dealing with the sensitive issue of a Japanese TMD's offensive military capabilities. Since such capabilities would clearly prove to be public relations liabilities for missile defense advocates attempting to justify TMD to Asian publics, there could be great institutional inertia to pursue a Pentagon-style public relations strategy of hiding such capabilities behind layers of secrecy, classification, and obfuscation, then dominating public debate with talk of "purely defensive" BMD systems.

However, back door deployment of offensive space weapons would pose grave security risks, given the potentially disastrous consequences of an unconstrained arms race in space. Lt. Col. Bell provides a glimpse of some of the varieties of space weapons that might be produced in such a scenario: "A mix of space weapons will offer the capability to destroy various types of surface and sub-surface targets with three types of weapons: continuous lasers that use heat to melt structures and destroy them; pulsed lasers that vaporize material and penetrate the structure; and kinetic energy weapons that provide the capability to attack targets hundreds of feet under the surface of the earth."⁶³ According to Senator Charles S. Robb (D-VA), space weaponization could transform Reagan's hopeful Star Wars vision into an ominous "death star" future.

During the Reagan years, advocates of the Strategic Defense Initiative ran an effective television spot featuring children being saved from nuclear attack by a shield represented by a rainbow. If we weaponize space, we will face a very different image—the image of hundreds of weapons-laden satellites orbiting directly over our homes and our families 24 hours a day, ready to fire within seconds. If fired, they would destroy thousands of ground, air, and space targets within minutes, before there is even a chance of knowing what has happened, or why. This would be a dark future, a future we should avoid at all costs.⁶⁴

A buildup of space weapons with capability to execute offensive missions might begin with noble intentions of "peace through strength" deterrence, but

this rationale glosses over the tendency that "...the presence of space weapons...will result in the increased likelihood of their use."⁶⁵ Military commanders desiring to harness the precision strike capability afforded by space-based "smart" weapons might order deliberate attacks on enemy ground targets in a crisis. The dizzying speed of space warfare would introduce intense "use or lose" pressure into strategic calculations, with the specter of split-second laser attacks creating incentives to rig orbiting death stars with automated "hair trigger" devices. In theory, this automation would enhance survivability of vulnerable space weapon platforms. However, by taking the decision to commit violence out of human hands and endowing computers with authority to make war, military planners could sow insidious seeds of accidental conflict. Yale sociologist Charles Perrow has analyzed "complexly interactive, tightly coupled" industrial systems, which have many sophisticated components that all depend on each other's flawless performance. According to Perrow, this interlocking complexity makes it impossible to foresee all the different ways such systems could fail. He further explains, "[t]he odd term 'normal accident' is meant to signal that, given the system characteristics, multiple and unexpected interactions of failures are inevitable."⁶⁶ Deployment of space weapons with pre-delegated authority to fire death rays or unleash killer projectiles would likely make war itself inevitable, given the susceptibility of such systems to "normal accidents."

It is chilling to contemplate the possible effects of a space war. According to Bowman, "even a tiny projectile reentering from space strikes the earth with such high velocity that it can do enormous damage—even more than would be done by a nuclear weapon of the same size!"⁶⁷ In the same laser technology touted by President Reagan as the quintessential tool of peace, David Langford sees one of the most wicked offensive weapons ever conceived: "One imagines dead cities of microwave-grilled people."⁶⁸ Given this unique potential for destruction, it is not hard to imagine that any nation subjected to a space weapon attack would escalate by retaliating with maximum force, including use of nuclear, biological, and/or chemical weapons. An accidental war sparked by a computer glitch in space could plunge the world into the most destructive military conflict ever seen.

IV. RETURN OF COLD WAR MISSILE DEFENSE?

Official announcements of the August 1999 missile defense Memorandum of Understanding signed by Japan and the U.S. were draped in tentative, exploratory language; yet bureaucratic inertia could gather quickly for deployment of a Japanese TMD. One reason to expect such inertia to mount in the political arena is the fact that American arguments for missile defense are rhetorically "delicious" exports. Politicians from Ankara to the Hague have discovered

what President Reagan showed during the original Star Wars era: BMD has substantial political appeal, because it is a military weapon that can be sold to a broad political spectrum of domestic constituents. A "purely defensive" TMD system would seem to have particular attractiveness for Japanese citizens, who are increasingly wary of regional military threats, yet generally support constitutional restraints on offensive military power.

The fact that Japanese leaders have already shown a proclivity to extol TMD's "purely defensive" qualities is evidence that any American export of missile defense to Japan will likely include not only technology, but also accompanying rhetorical strategies designed to politically safeguard such hardware in the crucible of public debate. As discussed earlier, missile defense advocates used Reagan's suggestion that Star Wars could render nuclear weapons "impotent and obsolete" to co-opt the rhetorical high ground occupied by the disarmament left. Tests were rigged and scientific processes manipulated to buoy the political fortunes of the Star Wars, Patriot, THAAD, and NMD programs. Further, the actual purposes of the Timberwind and NMD programs were covered up in attempts to hide politically unpopular aspects of such initiatives. Perhaps these episodes of strategic deception in U.S. missile defense advocacy would be easier to excuse if they were conducted by "rogue" scientists who broke the law for profit or fame. But CIA defense guidance documents, internal DOD directives, and presidential National Security Decision Directives reveal that during the Reagan Star Wars era, strategic deception was not only legally authorized, but also officially mandated, as part of the public relations campaign to promote missile defense.⁶⁹

Although Japanese leaders greeted American Star Wars-era missile defense overtures with skepticism, the 1998 launch of a *Taepodong* missile by North Korea over Japan galvanized political support for TMD in Japan and led eventually to the inking of the August 1999 MOU between Japan and the U.S. Unfortunately, the same threatening environment that drives support for missile defense also provides rationales for public officials to ratchet up secrecy and dodge public accountability, with the explanation that full disclosure of the nature of TMD plans and their lack of scientific basis would give comfort to the enemy. However, this preemption of public debate introduces its own set of security concerns.

Excessive secrecy locks in Cold War patterns of public discourse, where defense officials and industry representatives monopolize arguments, sealing their positions with the unassailable proof of classified evidence. Threat assessments drift toward worst-case scenarios generated from simulation and speculation, rather than more sober appraisals of foreign military capabilities and intentions. Military officials who see the idea of public debate as a superfluous luxury skirt critical arguments, removing issues of grave national importance from arenas of democratic deliberation. With these patterns of public argument structuring official missile defense discourse in the U.S. during the past two decades, American

citizens have been coaxed to spend billions of dollars for doctored scientific experiments that cover up the technical flaws of ill-conceived BMD initiatives. The recent Japan-U.S. MOU on joint missile defense research clears the way for such strategies to be exported to Japanese public spheres.

Export of these patterns of public argument to Japan could potentially produce tragic consequences. Profit-hungry aerospace companies, working with government scientists well-schooled in the art of technical deception, could swell political momentum for deployment of a TMD system that appears flawless, yet is riddled with systemic deficiencies that may only come to light in combat situations. This outcome could invite catastrophic miscalculations in Japanese foreign policy. False confidence in a seemingly impenetrable TMD shield could prompt Japan's leaders to expect their nation to be protected from enemy rockets in future conflicts, when in fact their level of vulnerability to missile strikes would be much greater than believed. One shudders at the prospect that such a discrepancy between actual and perceived effectiveness of a Japanese TMD system would be brought to light by an actual ICBM launch on a Japanese city. Yet this is precisely the scenario that would seem possible if Japanese leaders embrace the American suggestion that missile defense can be a potent tool of diplomacy in scenarios of rogue state blackmail. In such situations, rather than yielding ground in a diplomatic stalemate, shielded nations would dare a rogue state (or state of concern) to follow through on their promise to launch an ICBM. Bluffing poker players who are forced to show their poor cards after a called bet often lose the hand. Presidents bluffing about the capability of their missile defense systems could lose entire cities.

Some missile defense proponents maintain that even if a missile shield doesn't work, cultivating the perception that it does can accomplish important diplomatic aims. On this logic, missile defenses work symbolically like medical placebos.⁷⁰ For example, adherents of the "Reagan victory school" of history believe that the illusion of Star Wars' effectiveness sped up collapse of the Soviet Union and helped deliver Cold War victory to the U.S.⁷¹ According to this reasoning, although Star Wars was a scientific bust, it nevertheless tricked Soviet leaders into spending millions of rubles in response, bankrupting the Soviet economy and forcing Soviet negotiators to make concessions in arms control negotiations.⁷² Today, a corollary of this strategy has appeared in the suggestion that a Japanese TMD could have similar effects on China.

Some say that while TMD may be useless, it may be a useful tool of diplomatic negotiations. They reason that even though the Strategic Defense Initiative (SDI), also known as the Star Wars project, was impractical despite its enormous research cost, it was useful to push the Soviet Union into concession in U.S.-Soviet summit talks. By the same token, they say, TMD can also be used to obtain Chinese concessions.⁷³

Aside from the fact that revival of this Reagan-style "peace through strength" approach to foreign policy is likely to ignite a cold war-style arms race (rather than force China into making bold military concessions),⁷⁴ there are basic flaws in the historical premises underlying such a comparison. As the Federation of American Scientists' John Pike argues, "there is no evidence whatsoever that the Soviet Union materially altered any of its military plans or budgets in response to Star Wars. It is ludicrous to even suggest that a system that survived the onslaught of Hitler's legions would implode in the face of a pile of viewgraphs and a few special effects tricks."⁷⁵ There were many other historical currents at work that accounted for the draw down in superpower tensions prior to the fall of the Berlin Wall. Matthew Evangelista, a professor of government at Cornell University, notes that two such factors were peace movement pressure and transnational scientific dialogue. Even with some of the freeze movement's popular appeal defused by Star Wars, the combination of residual movement pressure and international scientific exchanges combined to create the conditions necessary for the end of superpower hostilities. These insights challenge the veracity of "Reagan victory school" narratives based purely on celebration of brute "peace through strength" logic. In fact, Evangelista's careful historical analysis reveals that transnational peace movement activism was perhaps the primary factor driving official decisions by both superpowers to back away from the nuclear brink.

In addition to coordination of specific policy initiatives, the transnational network of U.S. and Soviet disarmament supporters also worked together to create an overall atmosphere conducive to restraint on each side...*The warming of U.S.-Soviet relations would not have been possible had Reagan not been pushed by the U.S. peace movement to address the threat of nuclear war...* U.S. and Soviet members of the transnational scientists' movement all considered Star Wars a dangerous waste of money, but they did not want it to stand in the way of negotiating deep reductions in nuclear forces. The Americans kept their Soviet colleagues apprised of the fate of SDI in congressional deliberations, the astronomical cost estimates, and the technical critiques. They managed to persuade Gorbachev, sometimes in direct discussion, that the Soviet Union should 'unlink' the signing of a strategic weapons reduction treaty from U.S. pursuit of SDI.⁷⁶

Today, the ominous specter of a deliberate nuclear first-strike by the Soviet Union no longer sustains the climate of fear that made Cold War-style "duck and cover" drills part of daily routines in American schools. Yet other features of the Cold War are recycled through contemporary U.S. military initiatives such as BMD, which are buoyed by enemy threat inflation, insulated from scrutiny by secrecy, and function primarily to line the pockets of defense contractors and swell the campaign war chests of hawkish politicians. The interlocking constellation of

military, economic, and political interests that sustains Cold War policies in 21st century America is a formidable force. One of the most significant ways that cold warriors maintain control over foreign policy decision-making is by dominating military debates in the official public sphere. Advocates of massive defense spending dictate ground rules for argumentation, control the agenda for discussion, and co-opt critical themes raised by dissenters.

V. SUBTEXT: A QUESTION OF GOVERNANCE

Given the resiliency of missile defense advocacy campaigns through the years, it would appear that the trajectory of post-Cold War missile defense policy could only be influenced by arguments that challenge the underlying discursive norms that support Cold War logic as the controlling security paradigm in public spheres of deliberation. Communication professors Kathryn M. Olson and G. Thomas Goodnight discuss this sort of approach to public debate as a strategy of “discursive oppositional argument in social controversy,” which “deploys refutation of claims and moves further to dispute the implied norms of participation signaled by the communication.”⁷⁷

Evangelista’s analysis of the influence exerted by transnational peace movement activists in the U.S. and Russia during the late 1980s provides one concrete illustration of how energetic dissent can loosen the grip of the Cold War language game. Using what Olson and Goodnight call “discursive oppositional arguments,” American and Soviet anti-nuclear movements linked up to create, in Rita Felski’s terminology, a “counter-public sphere” that rejected the self-reinforcing logic of what Herbert York calls an “internal arms race.”⁷⁸ Bernd W. Kubbig, of the Peace Research Institute at Frankfurt, Germany, notes that scientists and scholars critical of the arms race “functioned as icebreakers during the Cold War,” working as an “epistemic community” with “an authoritative claim to policy-relevant knowledge.”⁷⁹ According to Evangelista, the successful efforts of transnational movement allies to shift the terms of public debate through “strategic use of norms, ideas, and information,” created conditions where the superpowers were coaxed to step back from the abyss of nuclear annihilation.⁸⁰

A similar opportunity presents itself today, with the Japan-U.S. TMD research project still in an embryonic stage. Recent official discourse on this project largely reflects Cold War themes and norms of argumentation. In Japan, Funabashi notes that so far, “government responses to questions on TMD” have been “provided at only a cursory level,” and that the TMD issue “is something that has been discussed only within an extremely small circle of security professionals—the so-called security high priests.”⁸¹ However, peace movement advocates in Japan and the U.S. could use the TMD issue to galvanize transnational counter-public spheres, opening up spaces for perennially excluded and co-opted

voices to gain traction in public debates on security policy. In such spaces, citizens from both nations could draw upon each other's experience to shape the tenor and substance of public discourse.

In this regard, Americans sorting through the missile defense issue have much to learn from Japanese nuclear abolition advocates, whose passionate opposition to nuclear weaponry is informed by the direct experience of Hiroshima and Nagasaki. According to Joseph Gerson, of the American Friends Service Committee, the "spirit and commitment" of the Japanese *hibakusha* (nuclear war survivors) are inspiring examples of the "will and steadfastness necessary to force governments to disarm and to return the nuclear genie back to its bottle."⁸² As the only nation to have ever been subjected to nuclear attack, Japan brings an important perspective to discussions of international security in a world bristling with weapons of mass destruction. Such perspective can help refocus missile defense debates in constructive ways on both sides of the Pacific. For example, as the recent report of the Tokyo Forum for Nuclear Non-Proliferation recommends, whatever the outcome of pending missile defense deployment decisions, nuclear disarmament should be a top priority in security policy: "Missile defenses should not be seen as an alternative to the norm of nuclear non-proliferation and disarmament."⁸³ The report further suggests that it is especially important to maintain this emphasis on disarmament even in the event of affirmative BMD deployment decisions, through establishment of clear exit strategies that codify conditions under which missile defenses would be removed: "Nations would be wise to leave open the possibility that defensive deployments could be scaled back, or even eliminated, if the sources of concern were reduced or removed."⁸⁴

In the other direction, Japanese citizens pondering the wisdom of spending billions of yen on American missile defense technology might reach more informed decisions by learning from the experience of American citizens, who have witnessed their government's numerous (and largely futile) attempts to engineer an effective missile shield since 1944, when the U.S. Army initiated Project Thumper, the nation's first BMD program. The history of U.S. missile defense is a trail littered with false promises, dashed expectations, and fraudulent science. Americans could do a service to their Japanese counterparts by sharing the details of this history, thereby putting missile defense advocates' shopworn claim that effective defense is "just around the corner" in proper perspective.

To the extent that reciprocal dialogue of this sort carves out deliberative spaces for citizens to participate more critically in public debates over missile defense, it has potential to challenge the hegemonic status of technocratic thinking as the basis of security policy. As security studies scholar Simon Dalby explains, the Cold War produced security discourses that "act to reduce the role of political discussion by recasting political issues in terms of technical problems." Such discourses "depoliticize issues by involving technical expertise in the place

of political decision-making.”⁸⁵ Today’s arguments for missile defense reflect this Cold War pattern of reasoning, with advocates prescribing the technical solution of defensive weapons as an elixir for the political problem of WMD proliferation. In this context, can dialogue and diplomacy really compete with the rhetorically delicious appeal of the missile defense tech-fix? The answer to this question hinges in large part on the efforts of scientists, scholars, and citizens to develop concrete security frameworks that provide credible alternatives to the technocratic model.

One promising initiative in this regard is the “Diplomacy First!” proposal recently announced by the Union of German Scientists (VDW). This proposal is remarkable for the way it indicts American calls for NMD and TMD by developing detailed alternatives for dealing politically with the problem of WMD proliferation. Such alternatives are founded on a “policy of prevention” that seeks to counter the spread of arms through means of “institutionalized dialogue.”⁸⁶ Kubbig’s Modernized, Mutually Minimizing Missile Threat Concept (“Quadruple M-TC”) represents one concrete expression of this strategy for achieving post-Cold War security through diplomacy, rather than technological dominance. Kubbig’s security blueprint may be of particular interest to Japanese officials and citizens, since it draws from recent successes in the North Korean case to illustrate the effectiveness of a “Diplomacy First!” approach.

Contemporary missile defense discussions are freighted with weighty subtexts that often fail to surface in technically oriented debates conducted in official spheres of deliberation. One such subtext can be cast as a question of governance.⁸⁷ Should hard choices on nuclear weapons policy be left to the security “high priests,”⁸⁸ who generally make decisions based on secret data churned through recycled Cold War models? If not, is the vision of a post-Cold War democracy dividend on security policy a workable alternative worth pursuing? These questions signal that missile defense deployment decisions not only present important choices regarding military strategy; as moments of collective judgment, they can also be seen as virtual referenda on the relative merits of technocratic versus democratic forms of governance. ■

NOTES

¹ Rita Felski notes how "critical oppositional forces" generated in moments of social movement mobilization can create "counter-public spheres" of discussion that "seek to define themselves against the homogenizing and universalizing logic of the global megaculture of modern mass communication as a debased pseudopublic sphere." See Rita Felski, *Beyond Feminist Aesthetics: Feminist Literature and Social Change* (Cambridge: Harvard University Press, 1989), 168.

² United States Department of Defense, "Report to Congress on Theater Missile Defense Architecture Options for Asia-Pacific Region," May 1999, on the Internet at <<http://www.nyu.edu/globalbeat/asia/DOD0599.html>>, accessed June 10, 2000.

³ "Rabbits' Ears and Dove's Dreams: The Theater Missile Defense Project," *Tokyo Mainichi Shimbun*, August 17, 1994, available in *Foreign Broadcast Information Service-East Asia* (hereafter cited as *FBIS-EAS*).

⁴ Quoted in "Security Issues Try Japan Military," *Electronic Engineering Times*, November 28, 1994.

⁵ Quoted in "Cold Peace: Choice of TMD; U.S. Shows Threat Scenario," *Tokyo Mainichi Shimbun*, March 17, 1995, available in *FBIS-EAS*.

⁶ *Ibid.*

⁷ *Ibid.*

⁸ Yoichi Funabashi, "Tokyo's Temperance," *The Washington Quarterly* 23 (Summer 2000): 135-136.

⁹ "Countdown: Japan Participates in the United States' Proposed Theater Missile Defense," *The Economist*, August 21, 1999.

¹⁰ This ambiguity between "theater" and "strategic" defense in the Japanese context sometimes results in interchangeable usage of the acronyms TMD and BMD.

¹¹ See F. J. Khergamvala, "U.S. to Help Japan Develop Missile Defense System," *The Hindu*, September 22, 1998.

¹² See Frances FitzGerald, *Way Out There in the Blue: Reagan, Star Wars, and the End of the Cold War* (New York: Simon and Schuster, 2000), 203-209.

¹³ "High Frontier: A New Option in Space," Proposed Plan for Project on BMD and Arms Control (NSR #46), labeled "not for release," copy on file with Carol Rosin. As Robert Bowman (Lt. Col. USAF, ret.) explains, "like the Pentagon Papers, [this report] was smuggled out of the Heritage Foundation by someone who was disenchanted with what they were doing. It got into the hands of Carol Rosin" (interview with the author, July 21, 1999). An aerospace industry insider, Rosin first worked with V-2 rocket inventor Wernher Von Braun and held the position of corporate manager at Fairchild Industries in Germantown, Maryland (1974-1977), then worked as a consultant with the Redondo Beach, California-based TRW, Inc. (1977-1979). In 1983, she founded the Institute for Security and Cooperation in Outer Space (ISCOS), a Washington, D.C. educational think tank. According to Rosin, shortly after this, "someone called me and said 'I need to give you a paper, and it's very important to your work, and I'm going to meet you on Connecticut Avenue and Massachusetts on the corner and I'll be in a trench coat.' ...I took this paper, and he said '[t]his is the Heritage Foundation plan of action for putting weapons into space'" (interview with the author, September 26, 1999). Rosin circulated the document, portions of which were subsequently published by Bowman and by author Patricia Mische. See Robert M. Bowman, "Star Wars and Arms Control," Institute for Space and Security Studies issue paper, January 1985, copy on file with the author; Patricia M. Mische, "Star Wars and the State of our Souls," in *Securing Our Planet*, ed. D. Carlson and C. Comstock (Los Angeles: Jeremy P. Tarcher, Inc., 1985), 210-235; and Patricia M. Mische, *Star Wars and the State of Our Souls* (Minneapolis: Winston Press, 1986). Recently, Mische followed up on the matter in July 1999: "I...called the Heritage Foundation to verify the information. They orally verified this as their position, but would not send me the original documents." (Letter to the author, July 17, 1999) Bowman also confirmed the existence of the report: "I saw the material. She [Rosin] had the material." (Interview with the author, July 21, 1999) While the "High Frontier" report is striking for the explicitness with which it lays out a rhetorical strategy for "stealing" the "language and cause" of the peace movement, it should be noted that similar prescriptions appeared publicly at roughly the same time, in material published by missile defense advocates with ties to the Heritage Foundation. See Daniel O. Graham, *The Non-Nuclear Defense of Cities: The High Frontier Space-Based Defense Against ICBM Attack* (Cambridge: Abt Books, 1983); Daniel O. Graham and Gregory A. Fossedal, *A Defense that Defends: Blocking Nuclear Attack* (Old Greenwich, Conn.: Devin-Adair Publishers, 1983).

¹⁴ Rosin, interview with the author.

¹⁵ "High Frontier," 1.

¹⁶ *Ibid.*, 1-2, emphasis in original.

¹⁷ *Ibid.*, 10.

¹⁸ Quoted in "U.S. and Japan to Join in Missile Defense to Meet Pyongyang Threat," *International Herald Tribune*, July 29, 1999.

¹⁹ "Japan/defense," Voice of America Correspondent Report, March 17 1999, VOA transcript #2-246738.

²⁰ "Report Says TMD 'Defensive,' Dismisses China's Concerns," Kyodo World News Service, March 8, 2000, on the Internet at <<http://home.kyodo.co.jp/cgi-bin/kws.concisestory?id=20000308842>>, accessed June 2, 2000.

²¹ "Critical Technologies at Core of U.S.-Japan Collaboration on Missile Defense—Pact Sets Sights on 'Hit to Kill,'" *Electronic Engineering Times*, September 20, 1999.

²² Michael J. Green, "State of the Field Report: Research on Japanese Security Policy," *AccessAsia Review 2* (September 1998), on the Internet at <<http://www.nyu.edu/globalbeat/asia/green0998.html>>, accessed May 15, 2000.

²³ Quoted in "TMD 'an Obstacle' to Nuke-free Zone," Asahi News Service, October 12, 1999, available in LEXIS News Library.

²⁴ Quoted in "The Ploy that Fell to Earth: Star Wars Suffers Another Blow with Charges that an Antimissile Test was Faked," *Time*, August 30, 1993.

²⁵ "Disinformation," *Aviation Week and Space Technology*, July 28, 1986; see also Gordon R. Mitchell, "Another Strategic Deception Initiative," *Bulletin of the Atomic Scientists* 53 (March/April 1997): 22-23.

²⁶ Kevin O'Neill, "Building the Bomb," in *Atomic Audit: The Costs and Consequences of U.S. Nuclear Weapons Policy Since 1940*, Stephen I. Schwartz, ed. (Washington, D.C.: Brookings Institution Press, 1998), 82.

²⁷ See Gordon R. Mitchell, "Placebo Defense: The Rhetoric of Patriot Missile Accuracy in the 1991 Persian Gulf War," *Quarterly Journal of Speech* 86 (May 2000): 121-145; John Conyers, "The Patriot Myth: Caveat Emptor," *Arms Control Today* 22 (1992): 3-10; and Theodore A. Postol, "Improper Use of the Classification System to Suppress Public Debate on the Gulf War Performance of the Patriot Air-Defense System," in House Committee on Government Oversight, House Hearings, *Government Secrecy After the Cold War*, 102d Cong., 2d sess., March 18, 1992 (Washington, D.C.: Government Printing Office), 38-62.

²⁸ See Gordon R. Mitchell, "Whose Shoe Fits Best? Dubious Physics and Power Politics in the TMD Footprint Controversy," *Science, Technology, and Human Values* 25 (Winter 2000): 52-86; and Richard L. Garwin, "Theater Missile Defense, National ABM Systems, and the Future of Deterrence," in *Post-Cold War Conflict Deterrence*, National Research Council (Washington, D.C.: National Academy Press, 1997): 182-200.

²⁹ See William J. Broad, "Antimissile Testing is Rigged to Hide a Flaw, Critics Say," *The New York Times*, June 9, 2000; Gordon R. Mitchell, "The National Missile Defense Fallacy," *Pittsburgh Post-Gazette*, April 29, 2000; William J. Broad, "Ex-Employee Says Contractor Faked Results of Missile Tests," *The New York Times*, March 7, 2000; Roy Danckick, Declaration Filed under Civil Action CV96-3065, United States District Court, Central District of California, May 18, 1999, on the Internet at <<http://www.fas.org/spp.starwars/program/news00/000203-trw.htm>>, accessed May 15, 2000; and William Hartung and Michelle Ciarrocca, "Star Wars II: Here We Go Again," *The Nation*, June 19, 2000.

³⁰ William Burr, Thomas S. Blanton, and Stephen I. Schwartz, "The Costs and Consequences of Nuclear Secrecy," in *Atomic Audit: The Costs and Consequences of U.S. Nuclear Weapons Since 1940*, Stephen I. Schwartz, ed., (Washington, D.C.: Brookings Institute Press, 1998), 480.

³¹ *Ibid.*

³² Preston J. Truman, letter to Rep. Howard Wolpe, printed in House Committee on Science, Space, and Technology, House Hearings, *The Development of Nuclear Thermal Propulsion Technology for Use in Space*, 102nd Cong. 2d sess., October 1, 1992 (Washington, D.C.: Government Printing Office): 333; see also Karl Grossman, *The Wrong Stuff: The Space Program's Nuclear Threat to Our Planet* (Monroe, Maine: Common Courage Press, 1997), 126-128.

³³ See Inge Sellevåg, "Vardo Exposed," *Bulletin of the Atomic Scientists* 56 (March/April 2000): 26-29.

³⁴ Quoted in *Ibid.*, 28.

³⁵ Theodore A. Postol, "National Missile Defense: The Target is Russia," *Bulletin of the Atomic Scientists* 56 (March/April 2000): 30-35.

³⁶ "High Frontier," 2.

³⁷ *Ibid.*, 1.

³⁸ *Ibid.*, 2.

³⁹ Quoted in "U.S. and Japan Agree."

⁴⁰ "Defense Technology—Theater Missile Defense," *Tokyo Nikkei Sangyo Shimbun*, May 8, 1995, available in the *FBIS-EAS*.

⁴¹ Quoted in "Weak by Design, Japan Ponders its Missile Gap," *Christian Science Monitor*, September 2, 1998.

⁴² "Countdown: Japan Participates."

⁴³ Nira Schwartz, Third Amended Complaint for Violation of False Claims Act 31, USC 3729, Civil Action CV96-3065, United States District Court, Central District of California, September 21, 1999; see also Broad, "Ex-Employee Says Contractor Faked."

⁴⁴ See Theodore A. Postol, letter to John Podesta, May 11, 2000, on the Internet at <http://www.fas.org/spp/starwars/program/news00/postol_051100.html>, accessed December 15, 2000; and Samuel W. Reed, Defense Investigative Service report to Keith Englander (DCIS/DOD-IG), February 1, 1999, on the Internet at <<http://www.fas.org/spp/starwars/program/news00/000203-trw.htm>>, accessed December 15, 2000. In September 2000, the U.S. Federal Bureau of Investigation launched a "preliminary inquiry" into Schwartz's charges. See John M. Donnelly, "FBI Official Confirms 'Preliminary Inquiry' into TRW Charges," *Jane's Defense Week*, September 18, 2000.

⁴⁵ In June 2000, the U.S. State Department announced that it would drop the phrase "rogue states" from its diplomatic vocabulary, using "states of concern" instead to describe nations that pose substantial security threats. Some commentators saw this rhetorical shift as a response to easing tensions on the Korean peninsula and growing moderation of Iranian leadership, yet questioned its significance as a substantial change in U.S. foreign policy. See e.g. "Suddenly, No More Rogues," *Japan Times*, June 22, 2000.

⁴⁶ See Gordon R. Mitchell, *Strategic Deception: Rhetoric, Science, and Politics in Missile Defense Advocacy* (East Lansing: Michigan State University Press, 2000), 241-243.

⁴⁷ Yuan Hong, "The Implication of TMD System in Japan to China's Security," Nuclear Policy Project Special Report, August 4, 1999, on the Internet at <<http://www.nyu.edu/globalbeat/asia/Yuan0899.html>>, accessed May 22, 2000.

⁴⁸ "Smoke Alarm," *Newsweek International*, March 29, 1999.

⁴⁹ As Senator Smith explains on his official U.S. government website, "Some papers call me 'Spaceman Smith,' but, as a United States Senator, I have a sworn responsibility to defend this nation. Space is absolutely critical to future war fighting!... 'Spaceman' is a name I will always be proud of." Bob Smith, "The Future of Space in the Military," U.S. Senate press release, May 15, 2000, on the Internet at <<http://www.senate.gov/~smith/Releases/Releases/05152000.HTM>>, accessed June 6, 2000.

⁵⁰ *Ibid.*

⁵¹ Frank Bařnaby, *The Automated Battlefield* (London: Sidgwick & Jackson, 1986), 116.

⁵² For discussion of "Death Star" technologies, see Cherub Study Group, "Return of the 'Death Star?'" Federation of American Scientists E-print, July 31, 1998, on the Internet at <<http://www.fas.org/spp/eprint/980731-ds.htm>>, accessed June 10, 2000; and Robert M. Bowman, *Star Wars: A Defense Insider's Case Against SDI* (Los Angeles: Tarcher Press), 115.

⁵³ Quoted in "Toward International Security: The Role of Space Weapons, Anti-Satellite Weapons, and National Missile Defense," United Nations NGO Committee on Disarmament panel discussion, October 21, 1999, on the Internet at <<http://www.igc.org/disarm/spacep99.html>>, accessed May 24, 2000. According to Bowman, "Star wars battle stations, orbiting 300 miles above the Soviet Union, even if they turned out to be totally ineffective against ballistic missiles, would be very effective against satellites of all kinds (including opposing star wars systems). Some proposed star wars systems would even have offensive capabilities against targets on land, including populations." See Robert M. Bowman, "Why the Soviet Union is so Concerned about Star Wars," *Christian Science Monitor*, January 10, 1985, emphasis in original.

⁵⁴ James E. Oberg, *Space Power Theory* (Washington, D.C.: U.S. Space Command, 1999), on the Internet at <<http://www.spacecom.af.mil/usspace/SPT/overview.htm>>, accessed June 2, 2000.

⁵⁵ *Ibid.*

⁵⁶ United States Space Command, "Vision for 2020" (Washington, D.C.: U.S. Space Command, 1997), on the Internet at <<http://www.spacecom.af.mil/usspace/visbook.pdf>>, accessed June 2, 2000.

⁵⁷ *Ibid.*

⁵⁸ Thomas D. Bell, "Weaponization Of Space: Understanding Strategic and Technological Inevitabilities," Air War College Center for Strategy and Technology, occasional paper no. 6, on the Internet at <<http://www.au.af.mil/au/awc/awcgate/cst/occcpr06.htm>>, accessed April 24, 2000.

⁵⁹ Quoted in "Space Critical to Warfighting Capacity," *Space Daily*, June 10, 2000.

⁶⁰ Karl Grossman, "Master of Space," *The Progressive* 64 (January 2000): 27.

⁶¹ Frank Umbach, quoted in "World Gets Wise to Pyongyang's Nuclear Blackmail—Part Two," *Jane's Intelligence Review*, October 1, 1999; see also "Next Stage in U.S.-Japan Military Relations," *Singapore Straits Times*, November 7, 1999, available in LEXIS-NEXIS Allnws file.

⁶² Smith, *The Future of Space*.

⁶³ Bell, "Weaponization of Space"; see also Grossman, *Wrong Stuff*, 103-113.

⁶⁴ Charles S. Robb, "Star Wars II," *The Washington Quarterly* 22 (1999): 86.

⁶⁵ Oberg, *Space Power Theory*.

⁶⁶ Charles Perrow, *Normal Accidents: Living with High-Risk Technologies* (New York: Basic Books, 1984), 5.

⁶⁷ Bowman, *Star Wars*, 115.

⁶⁸ David Langford, *War in 2080: The Future of Military Technology* (Devon, UK: Newton Abbot, 1979), 140.

⁶⁹ See Mitchell, *Strategic Deception*, 10-11, 70-72.

⁷⁰ See Mitchell, "Placebo Defense," 134-137.

⁷¹ For an example of this argument, see Robert McFarlane, "Consider What Star Wars Accomplished," *The New York Times*, August 24, 1993. For commentary, see Daniel C. Deudney and G. John Ikenberry, "Who Won the Cold War?," *Foreign Policy* 87 (1992), 123-138.

⁷² See Mitchell, *Strategic Deception*, 87-93.

⁷³ "Theater Missile Defense Threatens to Set Off Arms Race," Asahi News Service, January 19, 2000, available in LEXIS News Library.

⁷⁴ See Joseph Cirincione, "The Asian Nuclear Reaction Chain," *Foreign Policy* 118 (Spring 2000): 120-138; Digli Shen, "What Missile Defense Says to China," *Bulletin of the Atomic Scientists* 56 (July 2000): 20-21; and Brad Roberts, Robert A. Manning & Ronald N. Montaperto, "China: The Forgotten Nuclear Power," *Foreign Affairs* 79 (July/August 2000): 53-63.

⁷⁵ John Pike, "Strategic 'Deception' Initiative," *Arms Control Today* 23 (1993): 4.

⁷⁶ Matthew Evangelista, *Unarmed Forces: The Trans-National Movement to End the Cold War* (Ithaca, NY: Cornell University Press, 1999), 383-384, emphasis added; see also David Cortright, "The Peace Movement Role in Ending the Cold War," in *Why The Cold War Ended: A Range of Interpretations*, Ralph Summy and Michael E. Salla, eds., (Westport: Greenwood Press, 1995), 81-90; and John Tirman, "How We Ended the Cold War," *The Nation*, November 1, 1999.

⁷⁷ Kathryn M. Olson and G. Thomas Goodnight, "Entanglements of Consumption, Cruelty, Privacy, and Fashion: The Social Controversy Over Fur," *Quarterly Journal of Speech* 80 (August 1994): 251.

⁷⁸ During the Cold War, momentum for this "internal arms race" was created by American scientists set against each other in an interlocking offense-defense cycle of research breakthroughs. See Herbert F. York, "Deterrence by Means of Mass Destruction," *Bulletin of the Atomic Scientists*, 30 (1974): 4-9; "Controlling the Qualitative Arms Race," *Bulletin of the Atomic Scientists* 29 (1973): 4-8.

⁷⁹ Quoted in Mike Moore, "Forty Years of Pugwash," *Bulletin of the Atomic Scientists* 53 (1997): 42.

⁸⁰ Evangelista, *Unarmed Forces*, 388-389.

⁸¹ Funabashi, "Tokyo's Temperance."

⁸² Joseph Gerson, *With Hiroshima Eyes: Atomic War, Nuclear Extortion, and Moral Imagination* (Philadelphia: New Society Publishers, 1995), 180.

⁸³ Japan Ministry of Foreign Affairs, "Facing Nuclear Dangers: An Action Plan for the 21st Century," Report of the Tokyo Forum for Nuclear Non-Proliferation and Disarmament, July 25, 1999, on the Internet at <<http://www.fas.org/news/japan/report-4.htm>>, accessed October 10, 2000.

⁸⁴ *Ibid.*

⁸⁵ Simon Dalby, "Geopolitical Discourse: The Soviet Union as Other," *Alternatives* 13 (1988): 421-422.

⁸⁶ See Anton-Andreas Guha, "Europe Plans to Rein in American Missile Defense Plans with Diplomacy," *Frankfurter Rundschau Online*, November 20, 2000, on the Internet at <<http://www.fr-aktuell.de/english/index.htm>>, accessed December 15, 2000.

⁸⁷ For further discussion on this theme, see Mitchell, *Strategic Deception*, 227-231, 266-277.

⁸⁸ Funabashi, "Tokyo's Temperance."