

Since 1993, when the US government re-organized its Strategic Defense Initiative Organization (SDIO) into the Ballistic Missile Defense Organization (BMDO) and gave BMDO the mission of developing the Theater Missile Defense (TMD) program,² China has consistently opposed the program. This opposition has been even stronger than China's previous opposition to the SDI program,³ a result of the changing Asia-Pacific security environment of the post-Cold War era. China's focus of opposition has also evolved with time as a response to different policy priorities.

This viewpoint seeks both to explain and to critique China's concerns. It will argue that, contrary to China's fears, the TMD program will not necessarily lead to either an arms race in Northeast Asia nor the proliferation of surface-to-surface ballistic missiles in this region. To some extent, it may actually help to promote stability in the region.

The viewpoint is divided into three sections. The first section outlines China's concerns regarding both international and regional aspects of the TMD program. The second section assesses the validity of these concerns, and the third section discusses China's possible reactions to the TMD program. The viewpoint concludes by offering some overall observations on the security implications of TMD for China.

CHINA'S OPPOSITION TO TMD

China has expressed concerns about the impact of the TMD program on several areas: the strategic balance, space militarization, nonproliferation, and relations with Japan and Taiwan. Each is discussed below.

Strategic Balance

The two upper-tier missile defense systems that are being developed, the Theater High Altitude Area Defense (THAAD) and the Navy Theater Wide Defense (NTWD), are the focus of China's international security

concerns. Despite US claims that these systems are designed solely to intercept theater missiles, China believes that the two systems have the capability to intercept strategic ballistic missiles. This concern persists despite the September 26, 1997, US-Russian agreement delineating theater

and strategic missiles. This agreement defines theater missile defense using three criteria: (a) the velocity of the interceptor missile must not exceed three km/sec over any part of its flight trajectory; (b) the velocity of the target missile cannot exceed five km/sec over any part of its flight trajectory; and (c) the range of the target missile cannot exceed 3,500 km.⁴

China fears that the United States might over-design the capability of the TMD interceptor so that it can fly at greater speed. A high-speed TMD interceptor, in combination with the US-proposed National Missile Defense (NMD) system and powerful space-based surveillance and tracking systems,⁵ could substantially increase the footprint of the missile defense system and enable it to intercept strategic ballistic missiles. China has mobilized analysts to conduct simulations on the impact of TMD on China's limited strategic missile capability. Their analyses all indicate that the capability of TMD systems under the US-Russia demarcation agreement extends to strategic ballistic missiles, although they emphasize that simulation is different from a real-world situation.⁶

The Chinese government and Chinese security analysts are worried about three security impacts of TMD.

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First, they fear that persistent US efforts to develop a high-speed interceptor system despite Russia's protests⁷ may jeopardize the stability of strategic missile forces between the United States and Russia, a structure that has been in place for over 20 years (since the 1972 Anti-Ballistic Missile [ABM] Treaty). They expect that a new arms race or potential military conflict between the two former Cold War adversaries would endanger China's security.

Second, they worry that strategic force reduction talks between the United States and Russia may be put on hold. NATO's eastward expansion, persistent US efforts to develop missile defenses, and NATO's recent attack on Serbia may prompt the Duma not to ratify the START II treaty, which would reduce strategic force size to 3,500 warheads for each side. This would not help alleviate China's security concerns over the "strategic missile gap" between its arsenal and those of the leading nuclear powers.

Third, China is concerned that a successfully developed and deployed TMD system may constitute a threat to its strategic security. China has a small number of strategic ballistic missiles, which they fear could be wiped out by a US first strike, thus eliminating China's second strike retaliation capability. Even if some of China's strategic missiles escaped a US first strike, its second strike capability could be neutralized by an effective TMD system, thereby discrediting China's minimum deterrence strategy.⁸

The Chinese leadership thus sees the TMD system as enhancing the capability of the US strategic missile force. Despite US reiteration that TMD is of a purely defensive nature, Chinese analysts see defensive capability as an integral part of an overall offensive design. In this view, TMD cannot be treated independently. This is particularly the case for the United States because of its massive offensive capability, which is further enhanced by the TMD system.⁹

Chinese analysts also argue that the operational elements of TMD are more threatening than those allowed by the ABM Treaty. They point out that the ABM Treaty requires that anti-ballistic missiles be deployed in certain sites, and that the size and capability of the deployed anti-ballistic missiles must be limited. The TMD system, whether land-based or sea-based, can be highly mobile, substantially enhancing overall US offensive capabilities.¹⁰

Chinese Arms Control Ambassador Sha Zukang's remarks at the UN First Committee reflected these concerns. He said, "The so-called TMD which certain countries are going all out to develop will in fact possess the capacity to intercept strategic missiles, thus breaking the limits imposed by the Anti-Ballistic Missile Treaty and rendering the treaty virtually meaningless."¹¹

Space Militarization and Weaponization

The Chinese leadership is also concerned that TMD will inevitably intensify competition in outer space. Their argument is, first, that TMD will lead to an arms race among major countries. In order to counter this trend and increase anti-ballistic missile capability, military equipment, such as surveillance devices, anti-satellite weapons, and even space-based interceptors, are likely to be deployed in outer space. If one country takes the lead in doing this, other countries will follow suit, leading to space weaponization.

Chinese analysts also argue that ballistic missile and anti-ballistic missile technology is convertible, leading to the proliferation of anti-satellite technology. A Chinese analyst with a missile technology background indicated this possibility: "development of the ballistic missile defense system can pave the technological basis for [an] anti-satellite system. When technology for ballistic missile defense is successfully upgraded, the anti-satellite system can also be easily developed."¹² Or as Chinese arms control official Fu Zhigang said at the UN First Committee on November 12, 1997:

China is concerned with the use of advanced technology for the development of weapons of mass destruction. An even greater concern to China is the use of advanced technology for the development of outer space weapons (such as anti-satellite weapons) and so-called theater missile defense (TMD) systems. From this perspective, the military use of science and technology is as significant in terms of conventional weapons as it is in terms of weapons of mass destruction.¹³

Impact on Nonproliferation

China also argues that the TMD system violates nonproliferation regulations. Chinese analysts reason that TMD contravenes the Missile Technology Control Re-

gime (MTCR). The MTCR places all components, production equipment, and technology of ballistic missiles, cruise missiles, or unmanned aerial vehicles capable of flying over 300 km with a warhead payload of above 500 kg under strict export control in order to avoid proliferation of weapons of mass destruction (WMD).

The operational capability of the TMD system is far beyond that allowed by the MTCR. This is particularly the case for the high altitude interceptor of the missile defense system. Taking the land-based THAAD as an example, a Chinese expert indicated, "the speed of the interceptor can reach over 2.6 km/sec, and this speed is equivalent to a flying range of 600 km or longer."¹⁴ China thus argues that if the United States sells the TMD system to Japan, South Korea, or Taiwan, or transfers relevant technologies, MTCR regulations will be violated, leading to WMD proliferation.¹⁵

The Chinese also argue that joint development programs, such as those between the United States and Japan, Israel, and Germany, will inevitably lead to proliferation of missile technology. Therefore, China opposes these programs.¹⁶

Chinese analysts further argue that sale of TMD or relevant technology transfer violates the ABM Treaty. A technology-trained security analyst indicated that the ninth clause of the treaty requires each signatory "not to transfer to other states, and not to deploy outside its national territory, ABM systems or components limited by this Treaty."¹⁷ Therefore, the analyst alleged that in the past 10 years, during which it deployed anti-missile systems in many regions, the United States violated the ABM Treaty.

Regional Situation: Japan and Taiwan

Beijing is also concerned that deployment of TMD would make the Asia-Pacific region unstable. Japan is the first factor of this concern. Beijing worries that the joint research and technology-sharing arrangements between the United States and Japan might prompt Japan to take a more aggressive approach towards its neighbors.¹⁸ The Chinese argue that Japan already has the strongest military force and the most advanced weapon systems in Asia. Japan's annual defense budget is ranked as the second largest in the world, and it has switched its strategic focus from the north to the west since the end of the Cold War.¹⁹ If Japan deploys the TMD system,

China fears, an illusory feeling of security may boost militarist forces within Japan.

China is worried that the joint development of TMD with the United States will provide Japan sufficient potential to become a nuclear power.²⁰ After decades of hard work, Japan has developed a whole range of rocket industry capabilities, including material, propellant, guidance, remote control, and nozzle technologies. Japan has also launched many space investigation rockets. Despite the fact that Japan's development of the rocket industry is for commercial and civilian purposes, China has been concerned that Japan's experience and capabilities could be converted into manufacturing long-range and even inter-continental missiles. Japan has also stored large quantities of plutonium, and with this raw nuclear material, Japan could easily build nuclear weapons. Under these circumstances, Chinese analysts are concerned about Japan's joining the TMD program.²¹ They believe that the procurement of the land-based Patriot Advanced Capability (PAC)-2/3 system, sea-based Aegis destroyers, and AWACS aircraft has allowed Japan sufficient capability to defend against the possibility of a North Korean ballistic missile attack. They therefore suspect that Japan's intention to deploy TMD is aimed at China rather than North Korea.

Chinese analysts argue that Japanese criticism of the North Korean test launches of Nodong and Taepodong missiles was but an excuse for Japan's expansion of its military forces. In commenting on the TMD system, Chinese government spokesman Zhu Bangzao said that China opposed any group taking advantage of the August 1998 North Korean launch of a Taepodong missile to seek its own military interests, thereby destabilizing the region. Relevant parties, he said, should refrain from doing anything that would lead to regional tension and another round of arms racing in the region.²²

Some Chinese analysts claim that Japan's joining the TMD program has an additional political purpose. They reason that Japan relies heavily upon sea-line communication from the South China Sea to meet its energy needs. Taiwan is located at a very important position for this sea-line communication, controlling the choke point from the Bering Sea in the north to the South China Sea in the south. These analysts thus argue that the main purpose for Japan's military expansion is control of Taiwan²³ and the South China Sea, protecting Japan's economic security.²⁴

In brief, in the Chinese view, Japan's joining the TMD program goes far beyond Japan's legitimate self-defense needs. If Japan were equipped with a missile defense capability, along with potential nuclear capability, Japan would be more confident in itself, and would be able to transform its military power into political power. Moreover, China feels that Japan is taking advantage of its importance in US defense strategy in the Asia-Pacific region to get US help in expanding its influence southward, enabling Japan to play a more influential role in the region.²⁵

Following its March 1996 military exercise, Beijing started to shift its attention towards the possibility of Taiwan joining the TMD program. China's concern focuses on one point: the impact of TMD upon reunification. First, China worries that if Taiwan were allowed to join the TMD program, Taiwan's confidence would be boosted, strengthening Taiwan's will to pursue independence. Sha Zukang raised this point, saying:

China's opposition to US transfers of TMD to Taiwan is also based on another major concern, namely, its adverse impact on China's reunification. TMD in Taiwan will give the pro-independence forces in Taiwan a false sense of security, which may incite them to reckless moves.²⁶

The role of the United States in the Taiwan Strait is another of China's concerns. The Chinese leadership worries that Taiwan's inclusion in the TMD program will symbolize a revival of a quasi-alliance relationship between Taiwan and the United States, through the sharing of intelligence and command and communication. This will create a scenario that Beijing cannot accept and adamantly opposes: allowing the United States to make a formal step forward in cross-Strait relations. This also implies that, in the context of strengthening the US position in the Asia-Pacific region, the Taiwan issue will become more and more internationalized.²⁷

China thus sees the TMD program as foreign interference in its sovereignty. Sha Zukang said: "this [transfer of the TMD to Taiwan] will constitute a severe interference to China's sovereignty and territorial integration, it will also constitute a severe provocation by the US toward the Chinese people. This will bring severe consequences."²⁸ The Chinese military expressed its discontent in its newspaper, the *Liberation Army Daily*, saying:

Now, some sectors in the US insist to include Taiwan in the TMD system. The Chinese government, Chinese people and Chinese military absolutely cannot accept this. Any country transferring arms, including the TMD, to Taiwan Province of China constitutes a severe interference to China's sovereignty and territorial integration, and will be adamantly opposed by the Chinese people. On this issue, the US should abide by the three joint communiqués and the relevant commitments, not to transfer the TMD and its technologies to Taiwan in any format.²⁹

Beijing is also concerned that TMD would limit its options for military action against Taiwan. The high-altitude interception capability, combined with a powerful surveillance/tracking system deployed in space, may make a ballistic attack problematic, forcing China to make a difficult choice between launching no missiles against Taiwan or launching an all-out ballistic missile attack. China does not want to make this awkward choice, and therefore must block Taiwan from receiving any intercepting capability. This calculation by Beijing was vividly illustrated in a journal article, which said:

...under the US leadership, when land-based and sea-based TMD systems deployed in South Korea, Japan, and Taiwan move close to the Chinese mainland, an area of eastern China, and the southeast coast will be covered. Any of China's flying platforms in the area will become targets. Being the case, the TMD system will not only substantially lower the effectiveness of China's theater and tactical ballistic missiles, but also in a broader sense, contain Chinese military strength directly.³⁰

A CRITIQUE OF CHINA'S CONCERNS

Many of China's arguments for opposing TMD are problematic. First, in terms of regional stability, China has alleged that TMD would create regional instability. In fact, this is not the case. A missile defense system, if successfully developed, can help accomplish regional stability. Protected by a TMD system, countries that might otherwise feel the need to develop ballistic missiles to protect themselves will be less inclined to proliferate.

In any case North Korea, not China, is the target of the TMD system.³¹ Beginning in the late 1980s, the United States has gradually shifted its attention to the proliferation of ballistic missiles. The creation of the Missile Technology Control Regime was one of these efforts to curb proliferation. After the 1991 Gulf War, the United States further realized the potential threat WMD posed to international security and began to utilize both nonproliferation and counterproliferation³² approaches to handle relevant problems.

North Korea is the only such concern for the United States in East Asia. North Korea is the least transparent country in the world, and its regime is unstable. It secretly developed nuclear weapons and started to test-fly ballistic missiles, while at the same time threatening to withdraw from the international nonproliferation regime. North Korea also exported missile-related components and technologies to Iran and other rogue states.

North Korea's Taepodong missile test on August 31, 1998, was a shock to the United States, South Korea, and Japan. It was particularly disturbing for the United States and Japan, because this test vividly indicated that North Korea has the capability to use solid propellant to launch a missile of intercontinental range.³³ It was speculated that North Korea's ballistic missile is now able to hit Alaska, at least.

North Korea's test might thus have negative proliferation consequences in Northeast Asia. South Korea, while turning down the US offer of the TMD program, has asked for US help in developing a ballistic missile of over 180 km in range. Japan has started to discuss the idea of launching a preemptive strike against any adversary suspected of planning to launch a missile against Japan.

Beijing's March 1996 military exercise has created a further dilemma for US policymakers. On the one hand, they face congressional pressure to deploy the TMD system in the region to protect Taiwan and other US allies. This pressure, however, has in turn caused difficulties in US-China relations.

Beijing's missile exercise generated mixed responses in Taiwan. It spurred calls for introducing a missile defense system, but others instead advocated that Taiwan develop a surface-to-surface missile able to hit China's major cities.³⁴ This latter proposal, it should be noted, was supported by politicians across the political spectrum.

Under these circumstances, TMD can be a useful security umbrella. It indicates the strong commitment of the United States to maintain peace and stability in this region, so that regional countries need not develop their own offensive ballistic missiles. A TMD system can thus also enable regional countries to allocate more resources to economic development.

In fact, contrary to Beijing's expectations, the *absence* of TMD might lead to an arms race. Without TMD, Japan may drop diplomatic³⁵ and economic efforts (such as the establishment of the Korean Peninsula Energy Development Organization, KEDO), and convert its commerce-oriented satellite program to military purposes. China would then become more suspicious of Japan's motivations, triggering further instability in Northeast Asia.

China should also envision the possible consequences of a cancellation of TMD on its own security. North Korea's ballistic missiles constitute a threat not only to the United States, Japan, and South Korea, but also, in the long term, to China, although North Korea currently relies heavily on Beijing.

Chinese concerns about proliferation on the basis of technology transfer and technology conversion are also groundless. The United States has always imposed very strict regulations and restrictions on exported technology and finished systems, so that recipient countries will not be able to convert, re-export, or re-design these technologies without prior US consent. These restrictions have been vigorously and persistently enforced in all arms transfers to Taiwan. Coupled with the US policy of allowing Taiwan only a limited edge over the Chinese People's Liberation Army, such restrictions make it virtually impossible for Taiwan to convert TMD technology from defensive to offensive purposes. It is also inconceivable that the United States would allow Taiwan to indigenously develop any surface-to-surface missiles able to hit China's major cities.

The same logic can be applied to Japan. On the one hand, Japan already has the indigenous capability to produce intercontinental ballistic missiles. Chinese analysts argue that if Japan joins with the United States to develop the TMD system, Japan will be able to develop offensive ballistic missiles. In fact, China's own research has shown that Japan already has the technology to build rockets, which it uses to launch indigenously manufactured satellites.³⁶ There is no need for Japan to import

such technology from the United States. In fact, Japan's technology will be exported to the United States for the development of TMD.³⁷

Further, the United States does impose restrictions on technology to be exported to Japan. A typical case is that of the FSX jet fighter. The jet fighter was a product of a joint project incorporating US and Japanese technologies to meet Japan's air defense needs. In the end, little technology was exported to Japan, while the United States was able to absorb many of Japan's aviation technologies.³⁸ With this precedent, it is hard to believe that the US transfer of TMD-related technology to Japan will result in proliferation.

In fact, continued US commitment to Japan's security has allowed Japan to focus exclusively on the commercial rocket industry, rather than converting its capabilities to military purposes.³⁹ Joint development and deployment of TMD would enhance Japan's security assurance, thus dissuading Japan from undertaking military expansion and going nuclear even in the context of China's rapid military modernization.

China's allegation that Japan is already going nuclear is also groundless. Japan's import of a large amount of plutonium and building of fast-breed reactors did concern some countries. However, Japan, aware of this concern, is quite transparent in its nuclear material policy. Japan is a signatory member of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and is under IAEA oversight. When importing plutonium, Japan has been quite transparent in order to alleviate neighboring countries' concern.⁴⁰

China is in any case prepared for any effects TMD might have upon international security. The US congressional Cox Report alleges that China has stolen many US nuclear and other technologies. China recently flight-tested its new generation of intercontinental ballistic missile, the DF-31, which can be mobile-launched from a railway with solid propellant, and has a flight range of 8,000 km—meaning it is able to hit the west coast of the United States. Western sources also claim that China is developing another intercontinental ballistic missile, the DF-41, which, with a flight range of 12,000 km, will be able to hit any part of the United States. It, too, has mobile capability.⁴¹

China has also claimed to have built up its nuclear arsenal. As a rebuff to the Cox Report, China announced that it has been enhancing its nuclear capabilities ever

since China made the decision to go nuclear in the late 1950s, and that it has a neutron bomb. In addition, China's decision to sign the Comprehensive Nuclear-Test-Ban Treaty implies that China has the capability to build a miniature nuclear warhead. It is hard to believe that TMD will seriously neutralize these nuclear capabilities.

CHINA'S POSSIBLE RESPONSES

Despite these facts, some Chinese analysts argue that China is the only real target of the TMD system. They reason that except for a few long-range strategic missiles, most of China's ballistic missiles are of medium range, with a flying range within the US-defined "theater." Further, no third world country other than China has ballistic missiles with a flying range over 2,700 km. Therefore, they argue, the real purpose of TMD is not to cope with looming proliferation, but to make preparations against China.⁴²

Coping with the TMD challenge is a serious issue for China, which it can approach in one or more of at least eight possible ways:

- (1) China may choose to watch the technical development of the TMD system closely. In the 1980s, the United States poured enormous resources into the development of the Strategic Defense Initiative program, but the program failed because of immature technology and was aborted in the end. China is aware that the TMD program, as well, is based on domestic politics between conservatives in the Congress and the executive branch rather than on mature and feasible technology. China may therefore decide to watch the technological development of the TMD program before jumping into a conflict with the United States.
- (2) Another response may be to conduct arms control negotiations. China's arms control ambassador, Sha Zukang, recently proposed linking the MTCR, the TMD system, and the ABM Treaty in one negotiation.⁴³ If the three issues can be linked together in this way, and if the MTCR and the ABM Treaty can broaden their membership to become international conventions, China may be able to prevent the United States, Japan, and Taiwan from developing and deploying the TMD system. However, this approach will take time to accomplish, and it will meet resistance from the United States.

China might instead opt for partial arms control. Sha Zukang also indicated this direction. China will not

dispute the TMD system if its scope is limited, he said. What Beijing adamantly opposes is an anti-ballistic theater missile system with the potential capability of defending against strategic missiles. In other words, China may pursue a compromise.⁴⁴

(3) China may use formal participation in the MTCR as leverage. Although China has observed the MTCR, it has made no official commitment because it says the MTCR is discriminatory in that it is not based on universal membership. China has accordingly requested expansion of MTCR membership. China may use formal membership to pressure the United States not to sell TMD to Taiwan and not to develop an upper-tier missile defense system.

(4) China may selectively develop technologies to counter the TMD system. A recent US Department of Defense report indicated that China is developing some critical capabilities, such as technology able to track satellites, ground-based laser technology able to destroy satellites in outer space, and technology able to jam the US Global Positioning Satellite system. Further, China is developing technology able to destroy satellite optical sensors.⁴⁵ This shows that China is aware of the critical role of satellites in modern warfare, and is trying to develop technologies to counter the potential US threat.

(5) China may work to develop other means as a countermeasure. These include increasing the size of its missile arsenal, developing MIRVed missiles, improving the penetration capability of its missiles, and shortening the time of its missile boost phase. Although there are also reports that China is developing its own missile defense capability,⁴⁶ China may take the view that developing such capability will be more costly than developing an offense, and choose to focus its limited resources on improving offensive capabilities. China is also reportedly developing a long-range cruise missile like the US Tomahawk, because this kind of missile is able to escape interception by the TMD system.

(6) China may take a non-cooperative attitude toward the United States. For example, China may proliferate some sensitive technologies to the Middle East, a region in which the United States has critical interests. China may also adopt a non-cooperation policy toward the talks on the Fissile Material Cut-off Treaty (FMCT). However, these non-cooperation policies are risky. Third-world countries, which wish to

achieve total global nuclear disarmament, may complain if China does not participate actively in the FMCT talks. Also, China has to be very prudent in its Middle East policy, because it now relies heavily upon crude oil imported from that region.

(7) China may form a closer coalition with Russia.⁴⁷ Russian-Chinese collaboration against the US TMD program is not likely, but the possibility exists. Russia has displayed strong dissatisfaction with many US policies, including the bombing of Yugoslavia and NATO's eastward expansion. Russia might sell some advanced technologies to China, both to pressure the United States and to improve its stagnant economy.⁴⁸

(8) Finally, China may sever relations with the United States. This is particularly possible if Taiwan is included in the TMD system.⁴⁹ China may acquiesce to the United States and Japan jointly developing TMD,⁵⁰ but because of strong nationalism and a highly complicated calculus of domestic politics among the top elite, Chinese political leaders cannot make concessions regarding Taiwan.

Beijing can take certain actions before actually severing relations with the United States, such as taking every opportunity to pressure the United States diplomatically and informing the United States about the possibly unfavorable consequences of including Taiwan in the TMD system. At the same time, China can present warnings in its officially controlled domestic media.

In general, the US TMD program does not pose an imminent security threat to China. The upper-tier TMD system is still under development and it will take at least a decade to accomplish the goal originally set. During this period, China can try to improve relations with its neighboring countries, thwarting any US attempt to contain China.

Also, the potential for the United States to strengthen its leadership in the East Asian region through the TMD system should not be exaggerated. South Korea, at least, will not want to offend China by joining any US-led coalition in which Taiwan is included, and the southeast Asian countries will follow South Korea's lead so as not to confront China. Finally and most importantly, it is still uncertain whether the TMD system can be technically perfected to defend against ballistic missile attack, so that whether the United States can achieve a regional missile defense alliance remains to be seen.

CONCLUSION

Based on the above analysis, some conclusions can be reached. The first is that TMD will not necessarily be a negative factor in the Asia-Pacific security environment. It will psychologically demonstrate the United States' firm commitment to regional stability, consequently deterring rogue states from taking provocative actions, and enhancing regional countries' confidence. Regional stability can be improved accordingly. If TMD is successfully developed and deployed, by providing physical protection to regional countries, it may dissuade these countries from developing their own offensive weapons, thus avoiding a pernicious arms race and proliferation.

The second conclusion is that China's opposition to TMD, especially regarding Japan, is without solid basis and largely a residue of a bitter political and historical legacy. Since the end of the Cold War, Japan's strategic role in containing Soviet expansion has lost its importance to China. Yet the uncertain security order in the region, particularly after China's military exercise of March 1996, and US desires to buttress the US-Japan security alliance, have spurred Japan to strengthen, not reduce, its security commitment.

Other factors have also contributed to delicate changes in relations between China and Japan. Different views on Japan's apology for criminal behavior during World War II; Japan's domestic political shift from the Liberal Democratic Party's monopoly of power to an uncertain coalition among political parties; and Japan's dissatisfaction with China's lack of progress toward democracy, despite Japan's long-term trade and investment efforts, have all damaged Japan-China relations.⁵¹

The third conclusion is that China's security has not been substantively affected by the TMD program. The deployment of TMD is at least ten years away, while China has persistently improved and upgraded its nuclear and overall military capabilities. Also, despite the arguments of many Chinese analysts that TMD will lead to a "little NATO" in East Asia, it is unlikely that East Asian countries will form a TMD alliance against China because of the many different national interests involved.

¹ The author thanks two anonymous reviewers for their comments.

² For the content of the TMD program, please see Ballistic Missile Defense Organization, "Theater Missile Defense Programs," <<http://www.acq.osd.mil/bmdo/bmdolink/html/tmd.html>>. It should be noted that the ballistic missile defense program includes National Missile Defense, Theater Missile Defense, and Advanced Missile Defense Technologies.

³ For analyses of China's concern over the SDI program, see John W. Garret, "China's Response to the Strategic Defense Initiative," *Asian Survey* 26 (November 1986), pp. 1220-1239, and Bonnie S. Glaser and Banning N. Garrett, "The SDI and China's National Interests," in Jae Kyu Park and Byung-Joo Ahn, eds., *The Strategic Defense Initiative: Its Implications for Asia and the Pacific* (Boulder, CO: Westview Press, 1987), pp. 99-117. The Soviet threat was the main reason that China's opposition to the SDI was less strenuous.

⁴ "First Agreed Statement Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972," September 26, 1997, <http://www.acda.gov/factshee/missdef/abm_scc1.htm>.

⁵ For an analysis of the problem of deploying surveillance and tracking systems in space, see Richard A. Falkenrath, "Theater Missile Defense and the Anti-Ballistic Missile Treaty," *Survival* 36 (Winter 1994-1995), pp. 140-160.

⁶ For a relevant simulation report, see He Yingbo, "THAAD Interceptor and ABM Demarcation Agreement: Does Velocity Limitation on Target Missile Make Sense?" paper delivered to the 6th China-ISODARCO Conference on Arms Control, sponsored by the ISODARCO and China Institute for Contemporary International Relations, Shanghai, October 28-November 1, 1998.

⁷ See Andrei Kortunov and Andrei Shoumikhin, "Current Russian Objections to US NMD and ABM Treaty Revision," *Comparative Strategy* 16 (April-June 1997), pp. 157-165.

⁸ Many relevant articles have been published in China. For instance, Zou Yunhua, "Zhanqu daodan fangyu yu quanqiu he diqu anquan (TMD and Global and Regional Security)," *Guoji wenti yanjiu (International Studies)* 1 (1998), pp. 27-29. See also Huang Zuwei, "TMD and Global/Regional Stability;" Liu Er-xun, "The New Development of Ballistic Missile Defence and Its Influence;" Liu Min and Li Feizhi, "The Effect of the Development of TMD on the Arms Control Structure," and He Yingbo, "The Potential Capability of BMD System and Its Possible Effects on International Security," all papers delivered to the 5th China-ISODARCO Conference on Arms Control, sponsored by the ISODARCO and China Institute for Contemporary International Relations, Chengdu, Sichuan Province, November 11-16, 1996.

⁹ Yan Xuetong, "Theater Missile Defense and Northeast Asian Security," *The Nonproliferation Review* 6 (Spring-Summer 1999), p. 67.

¹⁰ Yan Xuetong, "Impact of the TMD on Northeast Asian Security," unpublished paper, December 1998, p. 2.

¹¹ Beijing Xinhua News Agency, "PRC: Disarmament Envoy Urges End to Theater Missile Defense System," October 18, 1996, in FBIS-Chi-96-204.

¹² Liu Er-xun, "The New Development," p. 3.

¹³ Center for Nonproliferation Studies (CNS), "China's Attitude toward Outer Space/Space Weapons," <<http://cns.miis.edu/db/china/spacepos.htm>>, p. 1.

¹⁴ Huang Zuwei, "TMD and Global/Regional Stability," p. 3.

¹⁵ This argument assumes that there is common ground between ballistic missiles and anti-ballistic missiles in terms of technology and production equipment, enabling the conversion of anti-ballistic missiles into ballistic missiles. See Sha Zukang, "Some Thoughts on Non-Proliferation," speech delivered to the 7th Carnegie International Nonproliferation Conference, Washington, DC, January 11-12, 1999.

¹⁶ *Ibid.*

¹⁷ Liu Er-xun, "The New Development," pp. 1-2.

¹⁸ "Sha Zukang: Global Arms Control and China's Mission—Exclusive Interview with Director of the Foreign Ministry's Arms Control Department," *Wen Wei Po* (Hong Kong), November 7, 1998, in FBIS-Chi-98-321.

¹⁹ For Chinese analysts' views and criticisms of Japanese defense development, see Yu Julang, ed., *Riben junqing liaowang* (Overview of Japanese Defense) (Beijing: National Defense University, 1998).

- ²⁰ Fang Tung, "A Warning against Japan's Rising Nuclear Missile Might," *Commilit* (Xiandai junshi) 250 (November 11, 1997), pp. 10-13, in FBIS-Chi-98-006.
- ²¹ Huang Zuwei, "TMD and Global/Regional Stability," p. 3; Zou Yunhua, "TMD and Global and Regional Security," p. 28.
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