Evidence of Learning? Chinese Strategic Messaging Following the Missile Defense Intercept Test

James Mulvenon

China's 11 January 2010 test of a missile defense system offers some important examples of improved strategic communications, particularly when compared with the 2007 ASAT test. The Beijing government clearly had a strategic communications plan in place, issued immediate announcements, and followed them with a series of official and unofficial commentaries on the subject. This article explores the scope and scale of the strategic communications plan, with the goals of divining the government's intentions for the test as well as the accompanying perception-management campaign.

Oh No, They Didn't!

On 11 January 2010, China announced that it had successfully conducted a "missile defense intercept test." In contrast to the January 2007 anti-satellite (ASAT) test, the Beijing authority clearly had a strategic communications plan in place beforehand, including both official and unofficial commentary for dissemination to both domestic and foreign audiences. While this represented a positive evolution from the 12 days of silence and confusion of three years earlier, the content of the explanations was far from satisfying, generating more questions than answers. This article explores the scope and scale of the strategic communications plan, with the goals of divining the government's intentions for the test as well as the accompanying perception management campaign.

Official Commentary

On the day of the alleged test, Xinhua News Service issued the following terse announcement:

On January 11, 2010, China conducted a test on ground-based midcourse missile interception technology within its territory. The test has achieved the expected objective. The test is defensive in nature and is not targeted at any country.¹

This message, while devoid of details, was likely designed to preempt any foreign announcement of the test, as happened in January 2007, and to take control of the "message" from the outset. The emphasis on the "defensive" nature of the test was consistent with decades of prior Chinese public statements about its national defense strategies, policies, and equipment, exemplified in the biannual *Defense White Papers*.²

At the Foreign Ministry press conference the next day, spokeswoman Jiang Yu had prepared talking points on the test, in striking contrast to her predecessor's lack of brief after the ASAT test.³ While she reiterated the original Xinhua message about the defensive nature of the missile defense intercept ("this test is defensive in nature, is not targeted at any country, and is in compliance with the defensive national defense policy consistently pursued by China"), she also added a key new theme, insisting that the test "will not leave fragments in orbit or pose a threat to the safety of orbiting spacecraft." On its face, this is a somewhat incongruous comment, since missile defense tests are not often considered a source of potential space debris, but is understandable when viewed in the context of the international blowback from the space debris created by the January 2007 ASAT test. After these initial official statements, the Chinese government has not made any additional public comments.

Unofficial Commentary

The official government statements were accompanied by a robust set of public comments and articles by Chinese academics, former military officers, and "analysts." Some were quoted in official media, some were cited in PRC-affiliated media outlets in Hong Kong and Singapore, and others wrote opinion pieces for newspapers or online blogs. Given the sensitivity of the topic, it is tempting to assume that all of these comments by PRC nationals were either explicitly or implicitly sanctioned by the government, but the commercialization of the commentariat in China means that many security analysts augment their income through media appearances. As a result, the primary analytical challenge is separating the government-directed wheat from the self-aggrandizing chaff. While the "usual suspects" of familiar barbarian-handlers were quick to defend the decision to test, in line with the government's explanation, others with unclear backgrounds made unsubstantiated claims about the relative capabilities of the tested system and its implications for regional security.

The unofficial messages can be divided into three rough categories: (1) ideological defenses of the government test, often with little or no reference to the technical aspects of the issue; (2) "technical" assessments of the capabilities of the system, with little strategic or policy context; and (3) the rarest of all, strategic analysis of the motivations and implications of the test.

1. Ideological Messages: My Country, Right or Wrong
A principal theme of Chinese commentary was a defensive tone about foreign criticism, highlighting the official announcements as evidence of Chinese transparency. Sun Yafei, in an article in China Youth Daily, made the core point:

Every instance of progress made by China in the field of military technology has invariably been followed by a new wave of rhetoric about the "China threat theory." There is absolutely no need for us to pay attention to this. There is nothing wrong with developing advanced national defense technologies to defend our core interests . . . And China's

timely release of information on the current antimissile test reflects China's growing transparency in national defense affairs.⁴

Wu Tianfu asserted that the test displayed "great transparency":

Issuing a press release on the same day the test was successfully conducted helped clarify the nature, purpose, policy stance, idea, and approach of China's missile interception test. Moreover, China proactively reported the results of the test and answered questions of concern to reporters about space debris and orbital effects through the timely use of the platform of fielding reporters' questions. This honest and credible approach and bold and decisive spirit have dispelled people's anxiety and unease.⁵

Shen Dingli compared the strategic messaging strategy of the missile defense test, which was purposeful, with that of the January 2007 ASAT test, which he insists was forced upon China after the fact:

Three years ago, it was also on 11 January when China first successfully conducted a "satellite experiment." However, China really did not want to announce that "experiment," but confirmed it because of the international public opinion environment. Three years later China has conducted an anti-missile test, which it actually reported ahead of other countries, so the increased military transparency is self-evident. Over these three years, there has been a marked change in China's attitude toward publicizing major national defense construction achievements, which is gratifying and auspicious.⁶

Zhao Chu explicitly asserted that China's transparency was actually a consequence of international calls for transparency: "We promptly issued an official notice worldwide, conforming to international wishes for transparency in China's national defense."⁷

Jin Canrong, vice president of the Chinese People's University School of International Studies, presented a second ideological theme that the decision to develop missile defenses was foisted upon China by the missile programs of other countries:

China should have, and has the right to have, its own antimissile system, because developing an antimissile system is entirely proper for China's modernization, and beyond that China's military modernization. This is an essential step in China's military modernization. Also, China faces an increasingly serious missile threat, and China is fully justified in developing an antimissile system to protect itself. Moreover, China always upholds a defensive military strategy, and developing a missile defense system not only does not change that national strategy, on the contrary it strengthens it . . . for the vast majority of the time in the past more than 100 years, China has pursued a strategy of defense of its national territory.

Moreover, China was always bullied by others. Now, as China's national power grows, China has acquired the ability to project and strike beyond its borders, and that ability is getting stronger and stronger. Having long since gotten used to China being bullied, it is quite normal that Western countries would feel that developments in China's military posture are not appropriate. China must remain calm in the face of Western criticism. Moreover, China must self-confidently develop its military power, because that is an inevitable outcome of the coordinated development of national defense and the economy, and not a warlike policy. China's military spending in recent years has been stabilized at no more than 1.5 percent of GDP, a proportion which—among the big powers—is only higher than that of Japan and lower than all the others.⁸

Dai Xu, a "Chinese military expert," told the *Global Times* that China developed missile defenses because other countries had failed to listen:

China opposed the idea of developing such weapons because they harm the global military balance. However, some countries ignored China's warning. They have been developing anti-ballistic missiles at the expense of global military balance. Their acts leave countries such as China with no choice but to develop similar weapons in order to achieve a new balance.⁹

Professor Pan Zhenqiang from the China Institute for International Studies explicitly laid the blame at the feet of the United States:

China will not engage in an arms race. In any case, it was the United States that started the research and development of antimissile systems. But as far as the United States is concerned, from now it must cope with the fact of the continual rise in China's comprehensive national power, which includes great military strength.¹⁰

Wu Tianfu even offered a slightly bizarre counterfactual:

Imagine if some Western major power had not been bent on building a strategic missile defense system, had not expedited the deployment of the system in strategic regions of the world, had not frequently conducted targeted antimissile tests and space war drills, and had not unjustifiably extended the depth of its strategic defense to the territories and airspace of the broad ranks of developing countries, China would absolutely have had no need to conduct a missile interception test. 11

Yet despite the successful test, Shen Dingli insisted that China still faced a significant disadvantage in both offensive and defensive capabilities:

China is fully aware that it has no way to keep other countries from developing advanced missile defense systems, and therefore it has decided to develop its own ground-based, midcourse missile intercept technology, and it is only for that reason that we have the current successful anti-missile test by China. Obviously, China has achieved a small measure of success in developing anti-missile [technology], but still, faced with the United States, which possesses marked offensive and defensive missile superiority, it is hard to say we are secure. However, in the field of national security, China has been consistent in its adherence to a realistic path: When the country faces a security threat with regard to weapons technology, we will first call on the international community to ban such weapons technology, otherwise China has no choice but to keep up with it. This is how it is with regard to nuclear weapons, and it is also this way with regard to missile defense technology. 12

A third ideological message theme addressed the issue of whether the test was a response to the recent U.S. decision to sell additional arms, including more Patriot-3 batteries and missiles, to Taiwan. Jin Canrong took a contrarian view, telling *China Daily* on 13 January that "the test should not be associated with the PAC-3 sale, because the weapon was defensive in nature." Hong Yuan, renowned military expert and a researcher at the Center for Arms Control and Non-Proliferation under the Chinese Academy of Social Sciences, admitted that it "may be this is just a coincidence" and "there is no way to tell whether there are any connections between the US arms sales to Taiwan and the PLA's recent anti-missile test." A Phoenix TV interview with "noted Beijing military expert Li Xiaoning" compared China's missile defense favorably with the more "limited" Patriot-3 system, seeking to tout the advances in PLA military modernization as being congruent with China's national objectives:

As to whether the release of such information at this time has anything to do with the United States selling Patriot-3 missiles to Taiwan, [Li] believed that this should not be a problem if analyzed from a purely military angle. He said the handful of people should cast away illusions and the myths they had been spreading for years, as China's defense capability will grow in future. ¹⁵

In an *Asia Weekly* article, "Beijing military critic" Song Xiaojun asserted that the link between the missile defense intercept test and the PAC-3 announcement "lacks foresight, is illogical and without great strategy," because "China has engaged in midcourse antimissile intercept technology for 10 or 20 years, this was not a response to the recent 'Taiwan weapon sales." Even if the United States did not sell Taiwan weapons, Song insisted, "China would still engage in such kind of test." Song then contradicted himself by opining that the test was "a political signal" rather than being motivated by "revenge." Regardless of whether there was a connection, however, Hong validated the logic of the connection, warning that "China has more trump cards of advanced weapons tests up its sleeve. China's strategic countermeasures against the United States will steadily intensify. The era when the United States can do what it wants and have its own way is gradually slipping away." 17

A fourth ideological theme reminded external observers that the test did not create debris or other potentially dangerous consequences, confirming the official announcement language from the Foreign Ministry. According to Tan Kaijia, "the test was conducted within China's territory, so the missile that intercepted the incoming target would not fly or fall into another country's territory."¹⁸

A final ideological theme sought to speculate about potential ideological consequences of China's test. Wu Tianfu's article laid out the following warning:

While we recognize the numerous positive effects mentioned above, we should also be aware of some attendant negative or adverse effects. For example, some major powers might seize this opportunity to impose more stringent technology controls and blockades on China and expedite the deployment of strategic missile defense systems with China and Russia as targets. They might mobilize Western opinion and media to escalate and ratchet up the "China threat theory"; seize this opportunity to drive a wedge between China and neighboring countries and regions; create crises, conflicts, and disputes between Western allies and China; incite and entice proxy countries (people) to confront China openly; and hold back China's military development. All the tricks that Western hostile forces customarily use will probably be reprised for some time in the wake of China's antimissile test. This calls for sufficient mental preparedness and necessary responses and precautions.¹⁹

2. "Technical Assessments"

Many Chinese commentaries offered a range of largely uninformed assessments of the technical aspects of the missile defense intercept test. The first group is simply a gang of cheerleaders, lauding "a breakthrough in the air defense capabilities of the nation's military." Yang Chengjun, "a senior military strategist of missile studies," told the *Global Times* that the test "ushered China into a new phase in terms of missile interception technologies." A *Liberation Daily* article asserted that, as a consequence of the test, "China's national defense strength and its strategic defense capability have ascended to a new and higher level."

A second set of analyses provided more-detailed technical discussions, although these were bereft of actual test details and relied largely on comparable information from foreign missile defense programs. Li Bin, a former researcher at one of China's nuclear weapons institutes (Institute for Applied Physics and Computational Mathematics) and an expert known for providing RAND-like technical and policy analysis of strategic weapons and doctrine, did not offer comments on China's political or military motivations, but confined himself to technical commentary on the challenges of developing missile defense systems and China's relative progress in this area.²³ A 15 January article in *China Youth Daily* explored the same technical issues, concluding:

The successful test means that China's antimissile technology has been greatly enhanced. The successful midcourse missile interception test signifies not only a new stage of antimissile technology, including information processing, reconnaissance, early warning, interception weapons, precision guidance, and rapid reaction, but also the elevation of our overall national defense power and strategic defense capabilities.²⁴

Professor Pan Zhenqiang of the China Institute for International Studies highlighted that "the mid-phase interception success shows that the modernization of China's national defense power has taken an important step forward."²⁵

One technical point of debate among these experts involved speculation on the identification of the actual Chinese missile defense system. A 12 January CCTV missile defense—related broadcast that showed stock photos of China's Hongqi-9 (Red Flag-9, hereafter referred to as HQ-9) air defense system, and two Chinese military enthusiast websites (sinodefence.com and the online *Kanwa Defense Review*) published parallel commentary positing the role of HQ-9 in the test. Yet a number of researchers who were clearly not privy to the actual details of the test questioned on technical grounds whether the HQ-9 was in fact part of the test. On Phoenix TV, commentator Ma Dingsheng pointed out that the missile defense test

reached a level higher than what the Red Flag 9 can achieve. Since it is a midcourse [interception] and midcourse is outside the atmosphere, which is probably 200–300 kilometers high, much higher than the scores of kilometers capable of being reached by ordinary air defense missiles.²⁶

"Noted missile and rocket expert" Li Wei concurred, agreeing that because of its limited range, "ordinary models" of the Hongqi-9 could not have been used.²⁷

A final set of commentaries compared the technical capabilities of the missile defense test with the January 2007 ASAT test. General Xu Guangyu, "a retired officer at the PLA's General Staff Headquarters," asserted that the anti-satellite test was "low-tech" compared with the missile defense intercept test. Xu pointed out that "the satellite's mass and orbit were already known," "it had no defense system," and "was also unable to make any emergency maneuvers." Compared with a previous test of anti-satellite technologies, Yang Chengjun asserts, "the missile interception system is more advanced as the targets are moving objects and the satellite was flying within a preplanned orbit." 29

3. The Strategic View

An important minority of commentaries on the missile defense intercept test addressed the strategic implications of the test. One important theme centered on offense-defense balance issues, particularly the asymmetry of Chinese offensive systems facing adversaries like the United States with both offensive and defensive systems. In an *Asia Weekly*, Song Xiaojun opined that a Chinese missile defense intercept capability would "generate a balancing effect" in global missile defenses. At the same time, he insisted that "China needs to develop its own early warning satellite" because its reconnaissance capabilities "are still relatively backward," but once China possesses this technology, "it

will certainly break the current world's military equilibrium."³⁰ Sun Yafei in *China Youth Daily* made a similar defense of strategic defensive capabilities:

Strategic defense capabilities are the foundation of future national defense capabilities. With a new revolution in military affairs around the world gathering pace over the past 20 years, the strategic shields based on nuclear weapons of the Cold War have been losing their effectiveness. Possessing nuclear weapons without strategic defense capabilities is like missing a leg. For this reason, midcourse interception is a means of counterbalancing the strategic offensive weapons of an enemy country; it is also a sign that a country's strategic defense capabilities have reached a certain level.³¹

Tan Kaijia was even more blunt, arguing that "if the ballistic missile is regarded as a spear, now we have succeeded in building a shield for self-defense." ³²

Wu Tianfu described a much more ambitious future posture, insisting that

a strategic missile defense system with Chinese characteristics needs to be built, so as to accelerate the move from active defense to effective defense and from full-scale defense to systemwide defense, achieve functionally complementary forces and systems, and lay a solid foundation for applying strategic power for defensive and counteroffensive purposes at an early date.³³

In addition, Wu asserted that Beijing's development of a missile defense system would actually aid in global arms-control negotiations:

It will help increase leverage in nuclear arms control and disarmament talks, link missile defense systems with strategic nuclear arms reductions, and secure the initiative for developing countries in global nuclear arms control talks.³⁴

But Wu makes an important, if somewhat ambiguous differentiation between the United States' and China's development of offense *and* defense systems, asserting that China's pursuit of both systems was moral while the United States' program was hegemonic:

The pursuit of an offensive or a defensive military strategy has now become an important dividing line between a country that pursues hegemony and a country that behaves morally. The development of strategic offensive weapons and missile defense systems in pursuit of a country's hegemonic interests will only bring more turmoil, instability, agony, and misery to human society, whereas the development of strategic defensive weapons in pursuit of peaceful purposes will create more

choices for strategic checks and balances. This is good news for preserving peace and stability for mankind."³⁵

The most comprehensive strategic explanation of the test was written by well-known barbarian-handler and arms-control gadfly Shen Dingli, who insists that China was drawn into offense-defense racing by the destabilizing strategic weapons policies of the United States:

On the 11th, the Chinese government announced that on that day China had successfully conducted a test of ground-based, midcourse missile intercept technology. Over a decade ago, we vigorously opposed the development by the United States of theater missile defense (TMD) and national missile defense (NMD) technology, but we were not successful. Accordingly, we have also developed our own missile defense technology. In a certain sense, at that time we had no need to oppose it, because after all this was defensive technology. If the United States faces a missile threat, naturally it would want to develop missile-defense technology. The threat that the United States perceives might include China's missile offensive/counterattack capabilities. China has no intention of posing an active threat to the United States, and our development of limited offensive missile capabilities is entirely for self-defense. However, China's limited self-defense capabilities may still be perceived by the United States as posing a threat to its restraint of China.³⁶

Shen, given his academic background in strategic weapons, naturally compares China's decision to develop missile defenses with Beijing's earlier decision to develop nuclear weapons in the face of "nuclear blackmail" from the West:

When the United States came to possess nuclear weapons and, in the 1950s, used them to threaten China, China was then forced to develop its own nuclear weapons (this is also the logic behind North Korea's development of nuclear weapons). And when the United States continues to possess nuclear weapons and, at present, continues to threaten China (including the mainland and Taiwan) by selling weapons to Taiwan, China's central government has also decided to continue to possess nuclear weapons (and this is also the reason why North Korea is unwilling to give up its nuclear programs).³⁷

Like Wu, Shen makes a moral argument about missile defense, arguing that China will use its system to increase security while the United States uses missile defense to pursue aggressive, hegemonist behavior:

The missile defense capabilities of the United States will help the United States in daring to interfere while not being too worried about being subject to retaliation. When missile defense which originally seemed reasonable is integrated with an aggressive foreign strategy, people's

understanding of the complexity of missile defense will deepen—missile defense can not only increase the chances of countries which possess it to resist missile invasions and improve national security, it can also be integrated with an offensive foreign strategy and prompt those who have missile defense systems to dare to take risks and adopt foreign policies that are highly aggressive.³⁸

Lest outside observers assume that China's decision to test signals a change in its policy of "no first use" or significantly increases the size of its offensive forces, Shen wrote:

We will exercise restraint in the development of offensive capabilities, and furthermore will not be the first to resort to force, but we should not just criticize the development of defense by other countries while not developing such ourselves.³⁹

Conclusions and Implications

Beijing's management of the 11 January 2010 missile defense test shows a clear maturation and evolution of the regime's strategic communications capability, which must be viewed as a positive development in Sino-U.S. bilateral relations as well as the process of China's broader emergence as a world power. But the logistics of messaging is only one part of effective strategic communications. The *content* of the regime's official and unofficial explanations for the missile defense test leaves much to be desired, raising a host of questions about the country's strategic intentions, the continuing relevance of the PRC's traditional approaches to arms control and missile defense, and the potential for offense-defense racing in the future. As a result, the communications surrounding the missile defense test have generated the same strategic confusion and cognitive dissonance as the 2007 ASAT test.

What were China's strategic intentions in conducting the test? The evidence suggests at least four:

- 1. Conduct a successful advanced technology demonstration of a defense R&D program to fulfill domestic programmatic requirements
- 2. Carry out an announced demonstration of a limited missile-intercept capability against incoming adversary missiles (though the lack of data about the target missiles prevents easy assessment of its effectiveness against specific foreign systems)
- **3.** Possibly achieve a successful second proxy test of the technologies associated with the ASAT program (see OPERATION BURNT FROST in 2008, when elements of the U.S. missile defense architecture were used to destroy a descending crippled satellite, US-193⁴⁰)
- **4.** Suggest that China is moving away from its historical preference for offensive retaliatory systems and traditional rejection of strategic defensive systems

What were China's strategic objectives in its accompanying perception-management campaign? One can infer at least eight messages:

- 1. The test was "defensive" in nature.
- 2. The test was "consistent" with China's traditional national defense strategy.
- **3.** The test was "not aimed at any country."
- **4.** The test did not create space debris.
- **5.** The test was "forced upon" China after years of advocating against strategic defensive systems.
- **6.** China's public announcement of the test shows that its military modernization programs are "transparent."
- 7. The test was not a direct response to the U.S. sale of PAC-3 systems to Taiwan, but China's increasing military capabilities are a deterrent to U.S. intervention.
- **8.** Despite the demonstration of missile defense capabilities, China will not use its combination of offensive and defensive systems to coerce other countries but will instead maintain a defensive posture.

What was the net effect of China's missile defense intercept test? Rather than clarify, the exercise has increased the ambiguity surrounding China's strategic warfare programs. For example, it is difficult to envision a missile defense scenario in which a small midcourse system would be appropriate or effective, unless it is aimed at "rogue" launches from a nearby country, such as North Korea. Instead, it is more intriguing to think of the test as a proxy follow-on for the January 2007 ASAT test, which presents a more clear, asymmetric threat to U.S. reliance on space platforms for military operations. In painting the exercise as a missile defense test, though, the Chinese may have unintentionally opened up a can of worms. Three important Chinese developments in recent years (the achievement of an "assured retaliation" capability with the road-mobile DF-31 ICBM, the successful ASAT test, and now this missile defense intercept test) are causing many strategic experts to take a hard look at China's long-term trajectory in the strategic weapons arena. Whereas ambiguity about its strategic program in previous years actually aided Chinese deterrence, the growing maturity and size of PRC weapons programs now calls for greater clarity and high-level dialogue, lest worst-case advocates fall into the easy trap of offense-defense racing. This is particularly relevant as the U.S. Government debates the forthcoming Nuclear Posture Review, which will reportedly include deeper cuts in deployed U.S. offensive forces. One can at least imagine a scenario in 10 years where Chinese, Russian, and U.S. offensive forces are converging in the hundreds of warheads, combined with missile defenses and anti-satellite programs of varying capabilities. Such a world is terra incognita for the strategic warfare community ("trilateral deterrence"?!), and it is incumbent upon both official and unofficial actors to take a more proactive, rather than reactive, approach to addressing these trends and their implications.

¹Notes

- ¹ "PRC Conducts Missile Intercept Test," Xinhua, 11 January 2010.
- ² See http://www.china.org.cn.
- ³ "China's Antimissile Interception Test 'Not Posing Threat'," Xinhua, 12 January 2010.
- ⁴ Sun Yefei, "Ground-Based Missile Interception Test Enhances Liberation Army's Homeland Defense Capabilities," *Zhongguo qingnian bao*, 15 January 2010.
- ⁵ Wu Tianfu, "Deciphering China's Missile Interception Technology Test," *Liaowang*, 18 January 2010, no. 3, pp. 48–49.
- ⁶ Shen Dingli, "Understanding the Logic of China's Anti-Missile Test," *Dongfang zaobao*, 15 January 2010.
- ⁷ Liao Qin and Yang Liqun, "Antimissile Interception Succeeds, China's National Defense Strength Leaps," *Jiefang ribao*, 13 January 2010.
- ⁸ Huanqiu shibao, 12 January 2010.
- ⁹ "Missile Launch Solely a Defense Test: China," *Global Times Online*, 15 January 2010.
- ¹⁰ Liao Qin and Yang Liqun, "Antimissile Interception Succeeds, China's National Defense Strength Leaps," *Jiefang ribao*, 13 January 2010.
- Wu Tianfu, "Deciphering China's Missile Interception Technology Test," *Liaowang*, 18 January 2010, no. 3, pp. 48–49.
- ¹² Shen Dingli, "Understanding the Logic of China's Anti-Missile Test," *Dongfang zaobao*, 15 January 2010.
- ¹³ "Row Over Missile Sales to Taiwan Tamed," *China Daily*, 13 January 2010.
- ¹⁴ Liu Ning-che, "China Tests Anti-Missile System for the First Time, More Trump Cards To Follow," *Wen wei po*, 13 January 2010.
- ¹⁵ Chia Lei, "Anti-Missile System Builds Up 'China Shield'," *Ta kung pao*, 13 January 2010.
- ¹⁶ Jiang Xun, "In High Profile, China Shows Its Missile Intercept Success," *Yazhou zhoukan*, 24 January 2010, no. 4.
- ¹⁷ Liu Ning-che, "China Tests Anti-Missile System for the First Time, More Trump Cards To Follow," Wen wei po, 13 January 2010.
- ¹⁸ "Anti-Missile Interception Builds Shield for China's Defense," Xinhua, 14 January 2010.
- ¹⁹ Wu Tianfu, "Deciphering China's Missile Interception Technology Test," *Liaowang*, 18 January 2010, no. 3, pp. 48–49.
- ²⁰ Kang Juan, "China Test-Fires Interceptor," *Global Times Online*, 12 January 2010.
- ²¹ Ibid
- ²² Liao Qin and Yang Liqun, "Antimissile Interception Succeeds, China's National Defense Strength Leaps," *Jiefang ribao*, 13 January 2010.
- ²³ Yu Mu, "Arms Control Expert Point Outs that China's Missile Interception Test Does Not Represent Actual Combat Power," *Zhongguo tongxun she*, 13 January 2010.
- ²⁴ Sun Yefei, "Ground-Based Missile Interception Test Enhances Liberation Army's Homeland Defense Capabilities," *Zhongguo qingnian bao*, 15 January 2010.
- ²⁵ Liao Qin and Yang Liqun, "Antimissile Interception Succeeds, China's National Defense Strength Leaps," *Jiefang ribao*, 13 January 2010.
- ²⁶ "China's Anti-Missile Interception Test Draws Attention Because of Sensitive Timing," *Zhongguo tongxun she*, 12 January 2010.
- ²⁷ "PLA Expert Interprets Land-Based Mid-Phase Antimissile Test," *Qingnian Cankao*, 15 January 2010. ²⁸ Stephen Chen, "Mid-Space Missile Test Marks Milestone for Defence Strategy," *South China Morning*
- *Post*, 13 January 2010. ²⁹ Kang Juan, "China Test-Fires Interceptor," *Global Times*, 12 January 2010, http://military.globaltimes.cn/china/2010-01/497765.html.
- ³⁰ Jiang Xun, "In High Profile, China Shows Its Missile Intercept Success," *Yazhou zhoukan*, 24 January 2010. No. 4.
- ³¹ Sun Yefei, "Ground-Based Missile Interception Test Enhances Liberation Army's Homeland Defense Capabilities," *Zhongguo qingnian bao*, 15 January 2010.
- ³² "Anti-Missile Interception Builds Shield for China's Defense," Xinhua, 14 January 2010.

³³ Wu Tianfu, "Deciphering China's Missile Interception Technology Test," *Liaowang*, 18 January 2010, no. 3, pp. 48–49.

34 Ibid.

35 Ibid.

36 Ibid.

37 Shen Dingli, "Understanding the Logic of China's Anti-Missile Test," *Dongfang zaobao*, 15 January

<sup>2010.

38</sup> Ibid.

39 Ibid.

40 http://en.wikipedia.org/wiki/Burnt_Frost#Destruction