INTRODUCTION

Despite the global diffusion of a “post–Cold War” ambiance since the late 1980s, Northeast Asia has not been able to escape the lingering inertia of the Cold War. On the contrary, North Korea has become an even more dangerous regional spoiler with potential nuclear capabilities and their means for delivery, as reflected in the launch of its Daepo Dong II missile. Newly emerging tensions between China and the United States and the ongoing debate over Theatre Missile Defense (TMD) between the United States and its allies underscore the strategic instabilities deeply embedded in the region. These instabilities have fostered a new debate in South Korea over the country’s future military strategy and force structure.

Two schools of thought have dominated the debate. “Softliners,” inspired by the Kim Dae Jung government’s “sunshine policy” of seeking peaceful coexistence with North Korea through cooperation and exchange, call for a more reserved defense posture and the reso-
olution of regional strategic instability through multilateral diplomacy. “Hardliners,” on the other hand, criticize the government’s defense posture as being too idealistic—and even “appeasing” North Korea. Further asserting that “softliners” seriously underestimate newly emerging regional security threats in the post–Cold War era, they advocate a more assertive strategic planning effort and robust force structure.

What is missing in this “softliner-hardliner” debate is any causal chain of reasoning linking security environment, threat perception and assessment, strategies and tactics, force structure, defense planning, and weapons choice. For force structure, defense planning, and weapons acquisition are by their nature a function of overall security environments, threat assessments, and strategies and tactics. Deliberating on force structure and defense planning without a sound assessment of shifting security threats and effective formulation of military strategies and tactics is inconceivable (Bartlett 1986). The current debate on force structure, defense planning, and weapons choice in South Korea, however, appears to pay little attention to this causal chain of reasoning.

Against this backdrop, this chapter seeks to explore appropriate strategies and force structures for South Korea by analyzing shifting regional security environments and threats. The first part of the chapter examines four scenarios involving alternative future security environments surrounding South Korea. The second part assesses South Korea’s existing strategies and force structure in terms of a variety of regional and peninsular threats. Part three identifies alternative strategies and force structures to prepare for the 21st century. The chapter concludes by highlighting several implications for force structure and defense planning in South Korea.

II. THE KOREAN PENINSULA AND REGIONAL SECURITY ENVIRONMENT: STRUCTURE OF NEWLY EMERGING THREATS

South Korea’s security environment during the Cold War was relatively straightforward. Being dictated by the logic of bipolarity, extended deterrence between the Soviet Union and the United States was able to maintain strategic stability on the Korean peninsula.
Inter-Korean relations and subsequent threat perceptions were greatly influenced by strategic interactions between Moscow and Washington. As Kenneth Waltz (1979) aptly postulated, the bilateral alliance ties that were solidified through bipolar confrontation (e.g., South Korea–U.S., North Korea–USSR) facilitated the confluence of threat perception and complementarity of strategic interest among allies, resulting in unusual strategic stability on the Korean peninsula.

Since the end of the Cold War, however, the bipolar structure of world politics has rapidly evaporated, and the security environment surrounding South Korea has become more fluid than ever. Table 5.1 conceptually describes four major scenarios—each involving a different regional threat environment for the post–Cold War era—based on changes in the U.S. security commitment and policies of the major regional actors (Kwon and Chung 1998; Chung 1998; Bae 1998; Defense White Paper 1998).

The first scenario (I), which involves a basic continuation of the status quo, is based on two premises: the continuing presence of U.S. troops in the South; and a continuation of military threats from North Korea. This scenario also assumes that no major regional actor engages in hostile military action against South Korea. Thus, the scenario offers a portrait of the current security situation on the Korean peninsula. As long as the United States maintains its ground (2nd Division) and air force (the 7th Air Force) units in South Korea, and regional actors remain neutral or friendly, credible military deterrence can be maintained on the Korean peninsula. North Korea cannot easily prevail over the South, despite its quantitative superiority in conventional forces, adherence to the old revolutionary line of emancipating the South from American “imperialist rule” by force.

Table 5.1

<table>
<thead>
<tr>
<th>North Korean Threats</th>
<th>Regional Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. engagement</td>
<td>I</td>
</tr>
<tr>
<td>U.S. disengagement</td>
<td>III</td>
</tr>
</tbody>
</table>

II

IV
and potential threats of weapons of mass destruction. And North Korea’s delayed force modernization, questionable combat readiness, backward command, control, communication, and intelligence systems, and fragile logistics support will become major barriers to military adventurism. In this environment, therefore, North Korea is not likely to be in the position to stage an all-out military invasion (Defense White Paper 1998).

Under this scenario, however, other forms of military provocation by the North cannot be ruled out. One possibility is all-out or limited artillery and/or missile attacks. North Korea has forward-deployed an array of short and medium range artillery pieces and missiles along the DMZ, which can cover most of the Seoul metropolitan area. North Korea could stage artillery/missile attacks under two conditions. If South Korea, the United States, and Japan abandon a soft-landing or engagement policy and actively seek a hardline posture of containment and punishment, thereby threatening its regime and national security, North Korea could consider the use of artillery and missile attacks. In the event that negotiations over nonproliferation were to fail and the United States or South Korea were to undertake surgical strikes on suspected nuclear or biochemical weapons facilities, the North could also engage in such attacks in retaliation.

A second possible form of military provocation is infiltration of special command forces in the rear areas of South Korea. North Korea clearly has not yet given up its strategy of communizing the South by force (Han 1998:77). Recent submarine infiltration incidents, active covert operations, and unfailing co-optation of pro–North Korean sympathizers all demonstrate its ongoing commitment to unconventional warfare. Given this commitment, acute social, political, and economic instabilities in the South could provide a pretext for North Korean invasion.

Threats from the North are both real and present. They have not vanished yet. But threats involving either missile/artillery attacks or provocation through rear-area penetration are not insurmountable.

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2North Korea has forward-deployed SA-5 ground-to-air missiles with a range of 250km, FROG-5/7 ground-to-ground free rockets with ranges of 50–70 km, 170mm self-propelled artillery, and 240mm multiple rocket launchers (Defense White Paper 1998).
ROK-US combined forces are able to deter any major conventional military attacks from the North. If deterrence fails, they can invade North Korea, demolish its armed forces, and destroy its regime through a swift transition to war. South Korea’s improving diplomatic and economic cooperation with China and Russia should mitigate any threats from the regional theater. Japan will not pose any threats so long as security cooperation among Washington, Tokyo, and Seoul remains intact.

The second scenario (II) presupposes three conditions: continuing U.S. engagement; a Korea that is either unified or at peace with North Korea as a result of improved inter-Korean relations, whether through a peace treaty or significant confidence-building and arms control measures; and the advent of hostile regional actors (e.g., China as a regional spoiler, Japan’s remilitarization, and/or the revival of Russia’s Far East military power). Korea will not encounter the development of this scenario in the immediate future. But in the medium-to-long term, its possibility cannot be entirely ruled out.

In this scenario, China would be the most critical actor. Several factors could turn China into a malignant spoiler threatening regional strategic stability. Overt hegemonic rivalry between Beijing and Washington, an expanded Japanese role in regional defense through the new Japan-U.S. defense guidelines, and revival of a cross-strait crisis and U.S. defense of Taiwan could all drive China toward reactive spoilership. In such an event, Korea, unified or divided, would have to take a position. Korea’s alliance with the United States and/or Japan could easily antagonize China, straining Beijing-Seoul relations. Given the relatively long land border with China and Korean ethnic presence in China’s northeastern provinces, China and Korea could become military adversaries. Russia’s Far East military build-up will not resume soon, and there might not be any immediate sources of military tension between Russia and Korea. Thus, the Russian threat may not have to be taken into account in this scenario. Continuing U.S. engagement in the region would mitigate any overt conflicts between Japan and Korea, but Japan could still pose a potential threat. Two issues could complicate Japan-Korea relations. One is the unresolved dispute over Tokdo Island. The other is the Exclusive Economic Zone and related clashes over marine resources. Either of these could lead to conflict.
Scenario II posits an improved security environment for Korea, not only because threats from North Korea would end but also because of the continuing deterrent role of the United States. Maintenance of the Japan-Korea-U.S. alliance system will also serve to deter Chinese military moves, while preventing any major conflict between Japan and Korea. But this optimistic scenario could be derailed if a multiple threat structure emerges. If Korea still remains divided, for example, North Korea could form a much stronger alliance with China, posing added threats to South Korea. In this case (i.e., combination of scenarios I and II), the situation would get worse, further undermining South Korea’s security posture.

The third scenario (III) would unfold if the United States were to disengage from the Korean peninsula amidst military threats from North Korea (Lee, Chun-keun 1998; Seo, Jintai 1998; Cha 1998; Halloran 1999). This scenario also assumes that threats from regional actors remain minimal, owing to South Korea’s active diplomacy with China and Russia. Two conditions could make this scenario plausible. The first would be a major breakthrough in inter-Korean relations and establishment of de facto unification through an active implementation of the Basic Agreement on Reconciliation, Non-aggression, Cooperation and Exchanges. Reduced military tension on the Korean peninsula would in turn deprive the United States of a rationale for its continuing security commitment, fostering a reduction or withdrawal of U.S. forces from Korea. After U.S. disengagement, North Korea could again become aggressive, returning to its old posture. The second condition that could precipitate U.S. disengagement would be Balkanization of the Korean conflict. Failure to resolve the problems of North Korean weapons of mass destruction and missile systems, for example, could lead to an outbreak of limited but protracted conflict on the Korean peninsula. While such a development would ensure a short-term U.S. engagement, any prolongation involving large numbers of U.S. casualties would aggravate public opinion in the United States, eventually forcing its disengagement.

Threats from the North could be mixed under this scenario. Developments involving inter-Korean confidence building, arms control, and peace building could remove military tensions on the Korean peninsula, and threats from the North could be minimal. But the reverse developments would force South Korea to cope with
North Korean military threats by itself. Overall force assessments that include non-military dimensions reveal that South Korea would be superior to the North. But North Korea’s quantitative advantage and the offensive nature of its military capabilities would undercut the South’s overall superiority. The devastation ensuing from protracted military conflict would make both the North and the South ultimate losers.

The fourth scenario (IV) resembles late 19th century East Asia, when finite deterrence based on overlapping dyadic animosities and domination and subjugation prevailed (Kim and Moon 1997; Kim, Ki-Jung 1998). In this scenario, Korean unification could trigger U.S. disengagement from the Korean peninsula. Such a development would instantly lead to Japan’s remilitarization through amendment of Article 9 of its Constitution. The transformation of Japan into a “normal” state with full-fledged regular armed forces could precipitate a fierce arms race with China. Indeed, such an arms race would be unavoidable—not simply because of past historical memories but also because of the overall power transition and hegemonic ambitions in the region. While Japan has already amassed the potential for its regional dominance, it is simply a matter of time for China to leapfrog into a hegemonic position in view of its economic size and tempo of technological development. A competition for hegemony between the two regional giants could also entangle Russia in the regional security equation.

The ideal way to prevent such a scenario from materializing would be to form a multilateral security cooperation regime in the region that can ensure transparency and crisis stability through intra-regional confidence-building measures. But if this does not work, a unified Korea, as a middle power, would have three options. One would be to take sides with the continental power, China, and deter Japanese military moves. Another would be to take sides with the maritime power, Japan, and counter Chinese expansion. The third would be for Korea to try to play the role of balancer. To perform as an effective balancer, Korea should satisfy one of the following two conditions: it must have a credible military capability to sustain its self-defense; or it must realign its international and regional status by declaring permanent neutrality. None of these options, however, would exempt Korea from regional threats. Indeed, the security environment postulated under the fourth scenario would be a nightmare
Emerging Threats, Force Structures, and the Role of Air Power in Korea

for a unified Korea. The combination of a divided Korea, American disengagement, and regional strategic instability would be even worse. In this event, South Korea would have to counter two sets of threats: one from the North and the other from regional powers.

Examination of these four plausible scenarios for the future regional security environment demonstrates that the advent of the post–Cold War order has neither diluted nor resolved South Korea’s security dilemma. On the contrary, South Korea’s security environment can deteriorate significantly, depending on the strategic moves by the United States and regional powers. In the short run, it seems likely that the United States will remain engaged in South Korea and the region, and threats to South Korea will be confined largely to North Korea. In the medium and long run, however, South Korea or a unified Korea could encounter a much more precarious and uncertain security environment. It might have to be able to deal with multiple threats from a hegemonic China, remilitarized Japan, and potentially unstable Russian Far East. In addition, unresolved territorial disputes (e.g., Tokdo, Mt. Baikdu), the Exclusive Economic Zones (EEZ), and new disputes over resources, including the continental shelf, and safety over the sea lanes of communication can all become volatile flash points for major conflicts in East Asia.

ASSESSING MILITARY STRATEGIES AND FORCE STRUCTURE

Can South Korea cope with this diverse inter-Korean and regional threat structure? To answer this question, it is essential to look into South Korea’s existing military strategies and force structure.

Traditional military strategy in South Korea is composed of three major elements (Defense White Paper 1998). The first is defensive deterrence through the acquisition of visible combat capability. Since North Korea is seen as the primary source of military threats, deterring its military aggression and, if deterrence fails, winning the

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3The Republic of Korea has not declared any official strategic doctrines. But the Defense White Paper, which is published annually, presents a general contour of its strategic posture. The National Security Council had a plan to publish an annual president’s national strategy report, but it was aborted due to the Taepo Dong II launch by North Korea in 1998.
war has constituted the ultimate objectives of South Korea’s military strategy. During the Cold War, Russia and China were also considered additional threats. Since the late 1980s, however, South Korea has normalized diplomatic ties with both countries and no longer regards either as a potential threat. And although Japan is often portrayed as a potential source of threat in the near future, Japanese diplomatic protests have induced South Korea to delete Japan from its list of future threats. In this sense, South Korea’s military strategy can be described as being geared toward deterring offensive military moves by North Korea.

The second element is coalition warfare through the bilateral alliance with the United States. Under the ROK-US Mutual Defense Treaty, the two countries have cultivated a strong bilateral alliance, as exemplified by the formation and operation of the ROK-US Combined Forces Command (CFC). As the “trip wire” analogy implies, North Korea’s military aggression will automatically activate U.S. involvement. In the event of a major military conflict with the North, the United States will be a direct party in two ways: by exercising command and control of all South Korean forces; and by engaging U.S. combat forces in immediate defense of the ROK. At the same time, reinforcements from U.S. military assets in Japan (the 5th Air Force and the 7th Fleet) and the mainland United States by massive air and sea lift will further strengthen ROK-US combined forces. It is the combined forces of the two countries that will generate credible deterrent and defense capability against North Korea (McLaurin and Moon 1989; Lee, Chun-keun 1998).

The third element of South Korea’s traditional military strategy is active or offensive defense (Defense White Paper 1998). The concept of offensive defense goes beyond the traditional notion of quick response. If deterrence fails, the combined forces of South Korea and the United States will shift to a wartime footing, seize the initiative, and carry the fight to the enemy territory, terminating the conflict on terms favorable to South Korea. Such a war fighting strategy implies that any failure of deterrence will be linked automatically to winning the war and occupying the North, which can expedite the process of unification. Although U.S. pressures prevent the ROK from adopting a strategic doctrine of preemptive or offensive deterrence during peacetime, South Korea will become much more flexible in maneuvering its strategy during wartime.
South Korean forces have been structured to carry out these three elements of ROK military strategy. The most striking aspect of South Korea’s force structure is the primacy of ground forces. At present, ground forces account for more than 90 percent of South Korea’s total military manpower. They have also been given top priority in the allocation of resources. During the Yulgok force modernization and improvement program, which was initiated in 1974, more than 50 percent of total investment was poured into the ground forces (Ministry of National Defense 1995:149–151). The lion’s share of the Yulgok project has gone to improvement of the operational capability of 40 combat divisions, equipment modernization focusing on armored vehicles and antitank capability, and modernization of artillery fire power and ground-based air defense. Modernization and improvement of air and naval power remained largely secondary to those of ground forces. More important, most commanding posts—including Defense Minister and Chairman of the Joint Chiefs of Staff, as well as the strategic planning posts—have been monopolized by army personnel, furthering the asymmetric development of South Korea’s force structure (Suh 1998).

The primacy of ground forces was an unavoidable outcome of conventional threat assessments and strategic planning. As noted above, South Korea has long perceived North Korean threats in terms of all-out ground attacks across the DMZ, as was seen during the Korean War. The North’s blitzkrieg strategy has been based primarily on ground forces in which artillery power and tanks constitute the twin pillars of attack forces. Furthermore, 60 percent of North’s ground forces is forward deployed below Pyongyang and Wonsan (Defense White Paper 1998:38; Lee, Youngho, 1996). Pyongyang’s strategic posture and force structure have shaped the primacy of ground forces in South Korea’s strategic planning. Along with this, the active or offensive defense doctrine of carrying the war to the enemy’s territory and terminating the war on terms favorable to South Korea has offered an additional rationale for the centrality of ground forces. Neither the navy nor air force can carry out the tasks of penetrating and occupying the enemy’s territory.

Another salient feature of South Korea’s force structure is the strategic and tactical division of labor with the United States in force planning and deployment. The primacy of South Korea’s ground forces has led the United States to assume a greater role in air and
Changing Threat Environment, Force Structure, and Defense Planning 99

Naval defense. South Korea’s naval and air forces have long been regarded as a supplementary “holding force” to defend the South from the first North Korean attack until U.S. reinforcements (Suh 1997:27–28). According to this formula, the United States is to assume the role of command and control, strategic surveillance, and naval and air defense, while South Korea is to be responsible for ground defense and tactical surveillance (Han 1998; Kim, Haengbok 1998). Such a division of labor has bred an asymmetric force structure in South Korea, impairing modernization and improvement of both naval and air forces.

Finally, South Korea’s force structure is framed around conventional forces. Despite serious attempts throughout the 1970s, South Korea was not able to engage in the development of nuclear weapons and their delivery vehicles. It has not deliberated on biochemical weapons either. Thus, conventional forces have constituted the mainstay of South Korea’s force structure. Two factors have impeded its venture into strategic weapons. While cost and technology factors have posed major challenges to domestic research and development, U.S. opposition to South Korea’s development of strategic weapons has been a larger factor. Washington’s stringent nonproliferation policy on weapons of mass destruction and delivery vehicles was the primary stumbling block to an alternative force structure that combines both conventional and strategic weapons.

Can South Korea’s strategy and force structure deal with new inter-Korean and regional threats adequately? It is highly unlikely that South Korea can effectively cope with contingencies originating from the four different scenarios described above. The existing strategy and force structure have been shaped under the strategic logic of the Cold War, and, to a great extent, they fail to address the shifting nature of security threats in the post–Cold War era. Whether they can even successfully deter North Korean attacks under Scenario I alone has become increasingly questionable.

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4 Cost factor has also undercut modernization and improvement of naval and air forces. Both naval and air forces involve the acquisition of capital-intensive weapons and equipment.

5 Former president Park Chung-hee initiated and pushed hard programs on nuclear weapons and missiles. But U.S. pressures aborted his attempt.
An examination of the force structures of, and newly emerging threats from, North Korea and the regional powers underscores the weakness of the existing strategy and force structure. The nature of these threats has undergone a profound transformation. Threats from the North, for example, are no longer limited to conventional ground forces. As Table 5.2 shows, the North has amassed a formidable arsenal of medium- to long-range artillery firepower and ballistic missiles, while slowing down its build-up of conventional ground forces. The launch of the Taepo Dong II missile on August 31, 1998, which alarmed the entire world, highlights the strengthened position of its strategic forces. In addition, North Korea is also known to be capable of building nuclear and biochemical warheads. The North’s transition to a nonconventional force structure and its subsequent amplified threats warrant a critical reexamination of South Korea’s strategy and force structure. This is because a mix of conventional weapons (e.g., 270mm multiple rocket launchers) and tactical missiles (e.g., SCUD B/C) could threaten more than 75 percent of the South Korean population.

Under Scenarios II and IV, Korea, unified or divided, would be subject to a wide window of vulnerability. China and Japan have signifi-

Table 5.2
A Survey of North Korean Missile Profiles

<table>
<thead>
<tr>
<th>Name</th>
<th>Max Range (km)</th>
<th>Warhead (kg)</th>
<th>Boost Stage</th>
<th>Length (m)</th>
<th>Diameter (m)</th>
<th>Weight (ton)</th>
<th>IOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>DF-61</td>
<td>600</td>
<td>1,000</td>
<td>1</td>
<td>9.0</td>
<td>1.0</td>
<td>6.0</td>
<td>NA</td>
</tr>
<tr>
<td>SCUD B (R-17E)</td>
<td>600</td>
<td>1,000</td>
<td>1</td>
<td>11.164</td>
<td>.884</td>
<td>5.86</td>
<td>1981</td>
</tr>
<tr>
<td>SCUD Mod. A</td>
<td>400</td>
<td>1,000</td>
<td>1</td>
<td>11.164</td>
<td>.884</td>
<td>5.86</td>
<td>1984</td>
</tr>
<tr>
<td>SCUD B</td>
<td>320–340</td>
<td>1,000</td>
<td>1</td>
<td>11.164</td>
<td>.884</td>
<td>5.86</td>
<td>1987</td>
</tr>
<tr>
<td>SCUD C, SCUD PIP</td>
<td>500</td>
<td>700–800</td>
<td>1</td>
<td>11.3</td>
<td>.884</td>
<td>1989</td>
<td></td>
</tr>
<tr>
<td>SCUD D, No Dong I</td>
<td>1,000–1,300</td>
<td>700–800</td>
<td>1</td>
<td>15.4</td>
<td>1.2</td>
<td>1997</td>
<td></td>
</tr>
<tr>
<td>No Dong II, Scud X</td>
<td>1,500–2,000</td>
<td>1,000</td>
<td>2</td>
<td>32.0</td>
<td>1999</td>
<td>00–05</td>
<td></td>
</tr>
<tr>
<td>No Dong III</td>
<td>4,000–6,000</td>
<td>1,000</td>
<td>2</td>
<td>32.0</td>
<td>2000</td>
<td>00–05</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: www.as.org/nuke/guide/dprk/missile/index.html
cantly upgraded their respective force structures since the mid-1980s, with a focus on naval and air power. China realigned its strategic doctrine from a ground forces–based “people’s war” to limited war, which encouraged the development of a power projection capability and expedited the process of military modernization. As a result, China’s military capability has improved significantly (see Table 5.3). China is building a “blue water” navy framed around carrier battle groups. As part of this effort, it is scheduled to complete a carrier by the year 2000. Air power has drawn even greater attention in its force modernization. It is estimated that China will acquire about 250 Su-27s by the year 2002. Along with this, China plans to operate AWACs starting from 2002, which will employ Israeli-made phased array radar on the Russian-made Il-78 (Noh 1998:242–243). In addition to the strategic surveillance system, China is the third largest nuclear power in the world in terms of warheads and delivery vehicles. Given the pace of its economic and technological development, Beijing is likely to accelerate the modernization and improvement of both its conventional and strategic forces.

As Table 5.4 suggests, Japan has already achieved military superiority in several areas despite its constitutional restrictions (Defense White Paper 1998:29). Since 1976, Japan has consistently improved its air power. It now possesses 189 F-15J/DJ air fighters and has completed the production and deployment of the F-2, which is a Japanese ver-

Table 5.3

Chinese Military Capability

<table>
<thead>
<tr>
<th>Classification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total troops</td>
<td>2,840,000 (Reserve forces: 1,200,000)</td>
</tr>
<tr>
<td>Ground forces</td>
<td>Divisions: 107  Tanks: 8,500  Armored vehicles: 5,500</td>
</tr>
<tr>
<td></td>
<td>Field artillery: 14,500  Helicopters: 116</td>
</tr>
<tr>
<td>Naval forces</td>
<td>Submarines: 61  Surface combatants: 51  Minesweepers: 121</td>
</tr>
<tr>
<td></td>
<td>Landing craft: 71  Aircraft: 535  Helicopters: 194</td>
</tr>
<tr>
<td>Air forces</td>
<td>Fighters: 3,740  Transport planes: 403  Others: 290</td>
</tr>
<tr>
<td>Nuclear forces</td>
<td>ICBMs: 17  IRBMs: 63</td>
</tr>
</tbody>
</table>

Table 5.4
Japanese Military Capability

<table>
<thead>
<tr>
<th>Classification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total troops</td>
<td>235,600 (Reserve forces: 46,000)</td>
</tr>
<tr>
<td>GSDF(^a)</td>
<td>Divisions: 13 Tanks: 1,100 Armored vehicles: 950</td>
</tr>
<tr>
<td></td>
<td>Helicopters: 463 Field Artillery: 800</td>
</tr>
<tr>
<td>MSDF(^b)</td>
<td>Submarines: 16 Surface combatants: 58 Minesweepers: 35</td>
</tr>
<tr>
<td>ASDF(^c)</td>
<td>Fighters: 368 Transport planes: 42 Others: 182</td>
</tr>
</tbody>
</table>

\(^a\)Ground Self-Defense Force.
\(^b\)Maritime Self-Defense Force.
\(^c\)Air Self-Defense Force.

sion of the F-16 manufactured by Mitsubishi Heavy Industry. The F-2 is known to be a cutting-edge fighter/bomber with such advanced avionics and control systems as fly by wire. On top of these programs, Japan plans to acquire air refueling planes, which can substantially improve its air fighting capability given its extended radius and flying time. The current combat radius of the F-15 is 1,500 km, but once refueling planes become operational, the radius can be extended to 3,000 km, enhancing Japan’s power projection capability significantly. Japan has already put four AWACS (E-767) into operation, which can cover a radius of 400 km. Thus, it might not be an exaggeration to say that Japan has already achieved air superiority in the region (Han, Kye-ok 1994:278–279). With the acquisition of AEGIS destroyers, the Japanese navy has also significantly improved its naval surveillance and power projection capability. But what is really worrisome is not simply Japan’s current military capability, but its potential power projection capability. Japan has both the financial and technological means to transform its military into powerful strategic forces in a relatively short span of time. Absent a U.S. presence, Japan may well attempt to fill the power vacuum by becoming a major hegemonic contestant in the region.

Since the dissolution of the Soviet Union, Russia’s military power in general and combat capabilities in the Far East in particular have eroded considerably. Poor financial support, demoralization of military personnel, and most important, lack of purpose have all con-
tributed to the erosion of Moscow’s military capability in the Far East. Furthermore, Russia may not pose any immediate or medium-term threats to South Korea. However, Russia’s military potential should not be treated lightly. It is still the second largest nuclear power in the world. Gradual erosion notwithstanding, its military deployment in the Russian Far East is quite formidable, with 762 ICBMs, 25 SSBNs, and 69 strategic bombers. And the total number of forces currently deployed in the area is substantial: manpower figures are over 225,000, 300,000, and 420,000 for naval, air, and ground forces respectively. In the event of major contingencies, Russia can swiftly prepare for combat (Defense White Paper 1998:33; Yon 1996).

Similarly, force structures in Northeast Asia are undergoing rapid changes. A noticeable common trend is a movement toward preparation for high-tech wars. The Gulf War appears to have provided a critical impetus for such transformation in which a greater emphasis is now being placed on strategic and nonconventional (nuclear and biochemical) forces. North Korea presents a classic example in this regard. Another striking aspect is renewed attention to air and space power. Aiming higher and longer has become a new motto for defense planning for China, Japan, and Russia (see Table 5.5). Realizing

<table>
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<th>Table 5.5</th>
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<tr>
<td>Comparative Overview of Air Power and Strategic Arms in Northeast Asia</td>
</tr>
<tr>
<td>Troops</td>
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<tr>
<td>Air Power</td>
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<td></td>
</tr>
<tr>
<td>Strategic bombers</td>
</tr>
<tr>
<td>Ballistic missiles</td>
</tr>
<tr>
<td>Nuclear weapons</td>
</tr>
</tbody>
</table>

that air superiority cannot be achieved without acquiring reconnaissance/surveillance, control, and strike capability (Fogleman 1999). East Asian countries have been strengthening C4ISR components (Chung 1998:27–41). Unfortunately, existing strategies and force structures are not likely to cope with this new trend in the region. A fundamental realignment seems inevitable (Suh 1998; KIDA 1998).

Equally critical is the potential ambiguity of the U.S. security commitment to South Korea. As long as this commitment remains stable and U.S. troops are stationed in South Korea (Scenarios I and II), strategic stability can be ensured and there will be no need for any extensive force structure realignment. But there is no guarantee of a permanent U.S. security commitment. A gradual reduction and eventual disengagement of U.S. troops might not be avoidable. Several developments could influence such a decision. One would be a major breakthrough in inter-Korean relations and accommodation of North Korean demands, possibly in a North Korea-U.S. peace treaty. Another would be major disasters and heavy casualties of U.S. forces elsewhere, with mounting domestic pressures for the withdrawal of overseas troops including from South Korea. A third would be significant deterioration of public opinion as a result of protracted disputes over “burden sharing” with U.S. allies or of leadership change associated with the rise to political power by the Vietnamese war generation (Halloran 1999). A gradual or sudden realignment of the U.S. security commitment to South Korea would have a range of catastrophic effects on South Korea’s force structure. These include a paralysis of command, control, communication and intelligence systems, a void in strategic surveillance, and ultimately a vacuum in naval and air power (Lee, Chun-keun 1998 and Cha 1998). South Korea might be able to deal with North Korean threats, but it will be virtually impossible to ensure military deterrence against regional powers.

Another critical flaw is that South Korea’s existing strategy and force structure cannot realize its intended political and military objectives. Effective deterrence rests on three elements: the ability of the deterrent power to prevent or resist an attack; sufficient capabilities to exact a cost that outweighs any potential benefits of attacking; and the will to carry out the intentions of deterrence and resist attacks (Robert Jervis 1976). The core of deterrence is credible retaliatory or second-strike capabilities. Neither ground forces nor naval forces
can provide instant second-strike capabilities. Ground forces are useful in resisting initial attacks and occupying the enemy’s territory, while naval forces are effective in denying sea penetration, detecting and attacking submarine infiltration, and ensuring safety of sea lanes of communication. The ultimate second-strike capabilities exist in air power, including attack aircraft and missiles (Suh 1998: 39–40).

Based on the above observations, South Korea’s existing force structure is defective on three accounts. First, it is not adequately equipped to deal with both present and future threats arising from nonconventional and high-tech war scenarios in the region. Preoccupation with the Cold War force structure has fundamentally undermined defense preparedness for newly emerging contingencies. Second, structural dependency on U.S. forces in the areas of command, control, communication, intelligence, reconnaissance and surveillance as well as naval and air power could deal a critical blow to South Korea’s security posture in the event of an abrupt reduction or withdrawal of U.S. forces. Finally, the current ground force–based structure cannot ensure effective deterrence because it lacks a credible second-strike capability.

REFLECTIONS ON ALTERNATIVE STRATEGIES AND FORCE STRUCTURE

This chapter has argued that South Korea’s existing strategy and force structure are not appropriate in preparing for future contingencies. What would then be a desirable strategy and force structure? Strategic choices and force structures are contingent upon perceptions of the security environment and patterns of future war scenarios. Thus, it is inconceivable to devise a single strategy and force structure. Table 5.6 presents four possible alternatives, one for each scenario.

The alternative strategy suggested for Scenario I dovetails with the current one, both because operational command and control during wartime rests with the United States and because it will be difficult for South Korea to adopt new strategic doctrines—such as offensive deterrence—in opposition to U.S. preferences. Coalition warfare
Table 5.6

Alternative Strategies by Scenario

<table>
<thead>
<tr>
<th></th>
<th>North Korean Threats</th>
<th>Regional Threats</th>
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<tr>
<td>U.S. engagement I</td>
<td>defensive deterrence/</td>
<td>defensive deterrence/</td>
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<tr>
<td></td>
<td>coalition warfare/</td>
<td>limited coalition warfare/</td>
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<td></td>
<td>offensive defense</td>
<td>strategic denial and</td>
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<td></td>
<td></td>
<td>second-strike capability</td>
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<tr>
<td>U.S. disengagement III</td>
<td>military self-help/</td>
<td>military self-help/</td>
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<tr>
<td></td>
<td>offensive deterrence/</td>
<td>strategic denial/</td>
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<tr>
<td></td>
<td>retaliatory capability</td>
<td>credible deterrence/</td>
</tr>
<tr>
<td></td>
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<td>middle power and balancer</td>
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through US-ROK combined forces will also constitute another pronounced element of the strategy, with the 7th Air Force playing a pivotal role in ensuring defensive deterrence through its strategic surveillance and air fighting capabilities (72 F-16s, 18 A-10/OA-10 air-to-surface attack fighters, and one squadron of F-15E) (Feb. 13, 1998, *Chosun Ilbo*). Sequential offensive defense, which is designed to carry the fighting into North Korean territory and destroy and occupy the North if deterrence fails, should also be retained. But the alternative strategy advocates a more assertive strategic posture by not only going beyond a simple quick response, but also ensuring a viable deterrence through credible retaliatory capability.

Scenario II assumes a situation in which limited conflicts over territorial or resource issues could occur with regional powers. The posture of defensive deterrence should be maintained under this scenario, but the complicated nature of potential conflicts will diminish chances for coalition warfare with the United States. Even if U.S. troops are stationed on the Korean peninsula, the United States will be more likely to facilitate conflict resolution than to side with South Korea over other regional actors. Thus, a greater degree of military self-help needs to be incorporated into the new strategic posture. Moreover, since regional powers possess strategic capabilities, Korea, unified or divided, should consider adopting a doctrine of strategic denial, which can preempt potential enemies’ moves. An improved second-strike capability also seems essential.
Scenario III posits a situation in which U.S. forces in the South are either substantially reduced or withdrawn, while the North Korean threats remain. In this scenario, military self-help should replace coalition warfare. The transfer of command and control to South Korean authorities during both peacetime and wartime will make South Korea more flexible in realigning its strategic doctrine. As a way of demonstrating its intentions, capability, and will, South Korea could adopt offensive, rather than defensive, deterrence through forward deployment of military forces and acquisition of powerful retaliatory assets (McLaurin and Moon 1989).

Scenario IV would place Korea, unified or divided, under the most difficult security situation. While American troops are being withdrawn, Korea has to cope with potential military conflicts with three major regional powers. Given the asymmetry of military power, Korea needs to avoid offensive deterrence or power projection capability. Credible defensive deterrence through military self-help must be a logical step. Especially, a strategic denial capability should constitute an integral part of the defensive deterrence strategy. A powerful second-strike capability with deep penetration into the enemy’s territory should be combined with strategic denial in order to make defensive deterrence effective. The proposed strategy to cope with Scenario IV, therefore, presupposes a considerable military build-up on the part of Korea. But the size, strategic capability, and upgrading of regional powers’ force structures will fundamentally limit the scope of military maneuverability by Korea. For that reason, effective alliance management through prudent diplomacy, be it a maritime, continental, or balancer form, should be incorporated into the new military strategy.

What kinds of force structures are desirable in carrying out these diverse strategies? Defense planners should pay attention to three common denominators in making decisions on South Korea’s future force structure. First is the centrality of air power. No matter how much they are improved, ground forces cannot serve as an effective deterrent or second-strike power. Strategic denial is also beyond its purview—particularly in the case of regional powers. Naval forces can be a reliable support element in facilitating counter-penetration and strategic denial. Expansion of the navy into a blue water navy with the acquisition of carrier battle groups could be a credible strategic alternative. But it is less viable not only because of the cost
factor but also because of its power projection implications, which entail instantly antagonistic reactions from regional powers. The only remaining option is the modernization and improvement of air power. It may not be an exaggeration to say that the future of Korean security depends on air power since it can offer the most credible deterrence, strategic denial, and second-strike capability without necessarily posing an offensive or power projection posture (Suh 1998; Hallion 1997; Fogleman 1999; Moon and Lee 1999).

A critical issue here is how to enhance air power. Needless to say, fighter planes are the mainstay of air power, since air superiority is ultimately determined by their qualitative nature. A debate is currently taking place in South Korea over the choice of next generation fighters. While the Ministry of Industry and Resources, the aerospace industry, the Ministry of Finance and Economy, and even the Ministry of National Defense favor the continuation of the F-16 for budgetary and industrial policy reasons, the ROK Air Force has called for foreign acquisition of next generation fighters such as F-15E, EF-2000, Su-35, and Rafael (May 12, 1999, *News Plus*:36). There are several qualitative differences between the two. After fierce bureaucratic battles, both parties reached a compromise in which production of a limited number of F-16s and foreign acquisition of next generation fighters are to be simultaneously pursued without undercutting air force budgets. The decision could strengthen not only the air power component of South Korea’s future force structure but also the aerospace industry. This is a positive development.

A second important requirement for future force planning is the enhancement of South Korea’s antiballistic missile capability. As noted above, both North Korean and regional threats have increasingly gravitated toward conventional and ballistic missiles. For example, North Korea’s FROG-7s (70km range) alone can hit 55 percent of the South Korean populace. If SCUD-Bs (300km range) are added, 75 percent of South Korea’s population falls into its target range (Kim

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6Samsung Aerospace, Daewoo Heavy Machinery, and Hyundai Aerospace have formed a consortium to undertake the production of F-16 under the Korea Fighters Program (KFP). But KFP is scheduled to be terminated in 1999 as ROK Air Force favors FX. This could deal a critical blow to the aerospace industry with underutilization of production capacity. It is this industrial policy consideration that was instrumental for reviving KFP. But budget appropriation for both programs could be problematic.
Chang-hyun 1996:142–143). North Korea can pose serious threats to the South even without going into nuclear weapons. China and Russia also possess a full range of strategic, tactical, and conventional missiles. South Korea is not prepared to cope with such threats. Although U.S. forces in South Korea have deployed an advanced version of the Patriot PAC-2 antimissile system, this is for its own defense, not for the defense of South Korea.

As the Gulf War experiences reveal, intercepting incoming missiles through *Patriot* PAC-2 or other antimissile systems could be extremely difficult. But acquisition of such systems could also serve as a credible deterrent force. In a similar vein, South Korea might have to rethink participating in the Theater Missile Defense (TMD) project. Since TMD involves defensive, not offensive, maneuvers, it may not invite the strong opposition from China and North Korea that government officials currently anticipate. More important, participation in the TMD project itself can offer South Korea additional bargaining leverage in dealing with the North and reducing its missile threats. Joining the TMD venture could be very expensive, and South Korea has not yet escaped from the trauma of economic crisis. Thus, the cost factor should be taken into account. But there could be several niches in which South Korea could still participate with minimum costs.

A caveat is in order, however. Antimissile systems are good for preventive and defensive deterrence, but they do not provide a second-strike capability, which South Korea could desperately need. U.S. pressure virtually demolished missile development programs during the Chun Doo-Hwan government. But the launch of the Taepo Dong II missile by North Korea in 1998 is reviving policymakers’ interest in missile sovereignty, fostering new negotiations with the United States on the development of longer-range missiles as well as a greater research and development investment in this area. Development of long range (e.g., over 1,000 km) missiles could antagonize China, Japan, and even Russia, but developing medium-range (e.g., 500–1,000 km) missiles could enhance South Korea’s national security interests by allowing it to have a credible strategic denial and second-strike capability.

Finally, it seems essential for South Korea to prepare for building early warning and both tactical and strategic surveillance systems. At
present, South Korea depends heavily on the United States for tactical and strategic intelligence. If the United States expedites its disengagement from the Korean peninsula, however, South Korea could find itself confronted with an intelligence, reconnaissance, and surveillance blackout. Such developments would severely jeopardize South Korea’s security posture, particularly because of changing concepts of future battle. In light of the global information revolution, control, communication, and information assets will determine the ultimate outcomes of future wars. Japan, China, and Russia have been moving into the strengthening of C4ISR capabilities. Because of the short technological cycle in the areas of information and communication, it might be too late to develop such capabilities after the United States has disengaged from the Korean peninsula. Therefore, South Korea’s force structure needs to be realigned in the direction of strengthening C4ISR. In this regard, acquisition of AWACs, which was suspended due to the economic crisis and emphasis on fiscal austerity, needs to be reactivated. At the same time, more active investments in C4ISR should be undertaken. The current effort by defense planners in South Korea to reinvent the Korean military by moving into cutting-edge technology forces that can fully utilize the information revolution is very welcome.

CONCLUSION

The advent of the post–Cold War era has not brought peace and security to South Korea. But it has been something like opening Pandora’s box. The lifting of the Cold War overlay has brought back to the surface the specter of finite deterrence in the region, which was shaped through the historical dynamics of domination, subjugation, and suspicion but repressed throughout the period of Cold War bipolarity (Kim and Moon 1997). South Koreans feel the burden of the historical irony more strongly than anyone else. The expanded scope of peninsular and regional threats, qualitative changes in threats from conventional to nonconventional and strategic, and growing uncertainties over continuing U.S. engagement on the Korean peninsula are likely to haunt South Korea, compelling a fundamental rethinking of its strategy, force structure, and defense planning. Continued preoccupation with the traditional elements of defensive deterrence, coalition warfare through an alliance with the United States, and active defense might not be suited for ensuring
peace and security on the Korean peninsula. This preoccupation is more suitable for the Cold War setting than for post–Cold War strategic instabilities. The traditional force structure, which combines the primacy of ground forces with American support and conventional forces, is also inadequate to meet South Korea’s strategic objectives in the new era.

For these reasons, a radical paradigm shift in strategic and force planning is needed. Military strategy needs to be more future-oriented than inertia-driven. It also has to be more flexible than rigid. Accurate forecasting of future war scenarios and sound threat assessments, not bureaucratic interests and political gridlock, should guide strategic planning and force restructuring. The lessons of recent wars also indicate that force restructuring should be more extensive than incremental in order to secure timely and effective combat capability corresponding to changing battle concepts. Air power should draw utmost attention in this restructuring, since it is through air power that credible preventive deterrence, strategic denial, and second-strike capability can be assured (Cordesman and Wagner 1990; Fogleman 1999). Along with this emphasis, renewed efforts to strengthen antimissile systems and related retaliatory capability—as well as to prepare for upgrading surveillance and reconnaissance capability—are required. Moving into the new force structure could be an expensive enterprise. But in the age of high-tech wars, preparing for war and securing peace necessarily is expensive. After all, national security does not have a price tag. Finally, defense planning should be guided by worst-case contingencies, not by wishful thinking. In the arena of national security, prudent pessimism is always better than unguarded optimism.
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