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The North/South Korea Boundary Dispute in the Yellow (West) Sea

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Abstract

North and South Korea have clashed twice over their boundary in the Yellow (West) Sea. The issue is quite complicated, resulting from differences over the validity of the Northern Limit Line (NLL) and the appropriate maritime boundary, exacerbated by competition for valuable blue crab. This paper describes the incidents and the issues, analyzes the NLL and boundary disputes, and proposes possible solutions to this dangerous situation. Although the NLL is—or was—a useful temporary conflict avoidance device, treating it as a permanent maritime boundary is not supported by legal principles and precedents. Ways forward include creating a military-free joint fishing zone with an agreed code of conduct for fishing vessels operating there.
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Keywords: North/South Korea; Maritime boundary; Dispute; Yellow Sea

1. Introduction

North and South Korean armed vessels have engaged in two violent clashes in the Yellow (West) Sea, on June 15, 1999 and on June 29, 2002, and on November 20, 2002, a South Korean vessel fired a warning shot on a North Korean vessel that crossed their disputed maritime border. Given the high tension between the two Koreas stemming from the unresolved Korean War, these incidents were very serious and had international repercussions. Indeed, these incidents were generally viewed in South Korea and the United States as 'provocations' by a belligerent North Korea with a history of unreasonable maritime boundary claims. But these clashes are more complicated, resulting from differences over the validity of the Northern Limit Line (NLL) and the appropriate maritime boundary between the two Koreas, exacerbated by competition for the highly valued blue crab that congregates in the area in June to spawn. This paper describes the incidents and the issues, analyzes the dispute and each party's position, and proposes possible solutions to this dangerous situation.

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2. The incidents

The maritime boundary between North and South Korea in the West (Yellow) Sea is in dispute. South Korea claims that at least for the time being it should be the NLL, which was drawn unilaterally by the US-led United Nations Command on August 30, 1953. This line is between North Korea's coast and five small islands (Baekryeong-do, Daecheong-doe, Socheong-do, Yeonpyeong-do, and Woo-do) held by South Korea. Because the line is only 15 km from North Korea's coast, it leaves very little ocean space for North Korea in this area. At the time it was drawn the internationally recognized territorial sea limit was 3 nautical miles (nm) not the now almost universally recognized 12 nm. On September 2, 1999, North Korea claimed a very different maritime military demarcation line which approximates an equidistant line between the coasts of the two Koreas, ignoring the five small South Korean islands, and then runs well to the south of the NLL (Fig. 1).

The brief battle on June 15, 1999 began when a North Korean gunner opened fire on a South Korean boat that was ordered to ram a North Korean vessel (Table 1) [1]. At least 30 North Korean sailors were killed, and one of its torpedo boats was sunk. Four other North Korean vessels were damaged, and at least five South Korean patrol ships were damaged with nine sailors wounded.

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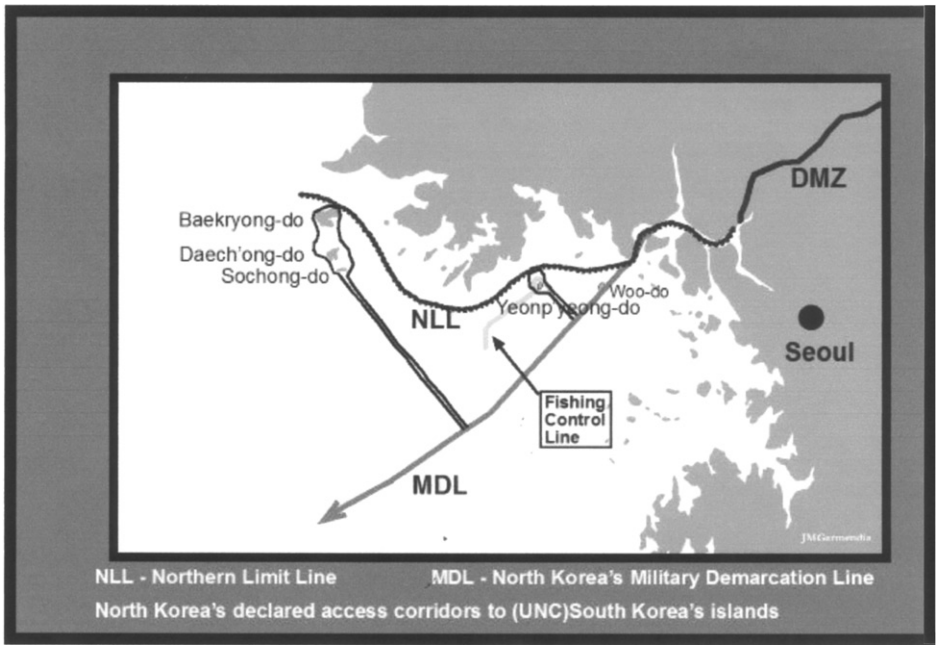

Fig. 1. North/South Korea Maritime Border Area in the Yellow (West) Sea (Sources: Map of Maritime Boundaries compiled by Beckee Morrison based on North Korean MDL declaration as reported in "Koreas" North rejects maritime border with South in West sea," *Central Broadcasting Station*, September 2, 1999; South Korean Defense Department reconstruction in *Chosun Daily News*, July 7, 2002; Ministry of National Defense, The Republic of Korea Position Regarding the Northern Limit Line, August 2002; "North Korea issues communiqué on navigation around Yellow Sea islands," *Central Broadcasting Station*, March 23, 2000.).

Table 1
Sequence of events regarding June 15, 1999 incident

June 15	Clash south of the NLL in which about 30 NK sailors were killed and an NK torpedo boat sunk. Analysts say the North is using the NLL as a pretext to test US resolve
June 16	South Korean fishers, who are losing money urge extension of fishing season[a]
June 18	South Korean Foreign Minister Hong Soon-Young indicates the government's willingness to discuss the maritime border, triggering hot debate between political parties in South. Hong backs down[b]
June 22	South Korea and North Korea resume talks after disagreeing for the past 14 months over such issues as the venue and the agenda. South Korea wants to reunite separated families and North Korea wants more aid
July 3	Talks between North and South Korea collapse. Former undersecretary of the UN, Yasushi Akashi, says North Korea told him of plans to test a missile
August 17	Talks between the UNC and North Korea. North Korea threatens to "take decisive measures" if the UNC refuses to discuss the NLL by the first week of September
September 1	North Korea calls for direct talks with the United States regarding the NLL. Generals from the UNC and North Korea meet in Panmunjom regarding Pyongyang's demand to redraw the maritime border. The US side says the matter must be discussed at the "North–South dialogue" and that meanwhile the NLL must be observed. South Korea says the NLL should be discussed at the proposed South–North joint military commission meeting
September 2	North Korea declares a new maritime border south of the NLL
September 7	The United States and North Korea hold talks in Berlin. The United States demands that North Korea abandon its missile program. North Korea warns it is ready to use force to defend its declared maritime border and the head of the North Korean delegation, Vice Foreign Minister Kim Gye-Gwan, says he will bring up the sea border issue at the US/North Korea talks
September 13	The United States says North Korea has agreed to observe a temporary freeze on missile testing, so the US may ease economic sanctions
September 17	North Korea pledges in Berlin talks not to test long-range missiles. The United States says it would ease sanctions on trade and travel links with North Korea

[a] "2000 crab fishermen facing bankruptcy." *South China Morning Post*, 16 June, 1999.
[b] "Hong's remark on maritime border sparks heated debate between parties." *The Korea Herald*, Seoul, 21 June, 1999; "A defensive slip of the tongue." *The Korea Herald*, 9 September, 1999.

On September 2, 1999, the North Korean People's Army General Staff issued a special communiqué declaring and defining its maritime military demarcation line in the West Sea and added that it would defend it with military force [2]. It denounced the unilaterally established NLL and declared it to be invalid. Four months later, North Korea announced that South Korean and US vessels will be allowed to move to and

from the five islands only through two designated sea routes and that any deviation from these routes would be regarded as a violation of North Korean territorial waters. Actually North Korea had first declared these provisions in December 1973, demanding that ships entering or leaving the five UN Command-held islands needed prior North Korean permission to do so [3].

After these 1999 pronouncements, North Korean fishing and patrol boats continued to cross the NLL without causing any violent incidents [4–9], but the numbers of such events decreased. North Korean naval and commercial vessels crossed the NLL 50 times in 1998 and 70 times in 1999. The numbers decreased to 15 in 2000 and 16 in 2001. In 2002, up to June 20, 11 North Korean "crossings" were reported, 8 by patrol boats. Indeed, most of these crossings involved North Korean patrol boats giving warnings to Chinese fishing boats or to North Korean fishing boats that had strayed across the line, and the patrol boats soon returned to the north. On June 11, 2002, a North Korean navy boat crossed the border in what South Korea said was the seventh 'violation' that year, and was chased back across the line by South Korean navy ships. Then, on June 20, the South Korean Navy arrested three North Korean fishing boats for straying 11 mile south of the NLL in a fog. The boats and crew were returned to North Korea [10]. On June 21, the South Korean Navy detained and searched two North Korean fishing boats that accidentally strayed across the line [11]. Shortly before the June 29, 2002 clash, the South Korean Joint Chiefs of Staff stated that the "number of border violations by North Korean ships remarkably decreased since 1999 because the North stepped up measures to prevent its ships from crossing the border" [12].

South Korean fishing boats also frequently fished north of the NLL. On June 27, 2002, 12 fishing boats went over the line. The next day, June 28, 30 fishing boats crossed the line, and on June 29, some 50 South Korean fishing boats went over the line [13]. That was the day a major naval clash broke out between South and North Korean naval patrol boats (Table 2, Fig. 2). The clash occurred when two South Korean navy vessels tried to block two North Korean navy warships and some North Korean fishing boats that had ventured 4.8 km south of the NLL. According to South Korea, the North Korean boats fired first from a distance of 500 m. A North Korean navy boat with heavy caliber weapons sank a South Korean patrol boat killing five South Korean sailors and wounding 22 [14]. A North Korean warship was seen aflame, being towed north across the sea border.

The 21-minute clash was a blow to South Korean President Kim Dae-Jung's efforts to reconcile with North Korea, known as the "Sunshine Policy." South Korea blamed North Korea for the clash, arguing that it was a premeditated act designed to undermine South Korea's achievements at the World Cup. North Korea argued that it had never recognized the NLL, that it had no fishing boats in the area at the time, that it had not fired first, and that the South Korean boats 'intruded' into its claimed waters [15]. It further maintained that South Korea precipitated the clash by amassing twice as many warships in the area to mount a "surprise" attack. North Korea alleged that the South Korean military's motive was to undermine any chance of reconciliation and then to blame the North for the impasse. North Korea rejected the US-led UN command's proposal for military talks, stating that it would hold talks only to discuss the maritime border [16].

South Korea maintained that North Korea had recognized the NLL when it signed the 1992 Basic Agreement which stipulates that "the South–North demarcation line and the areas for non-aggression shall be identical with the Military Demarcation Line provided in the Military Armistice Agreement of July 27, 1953, and the areas that each side has exercised

Table 2
South Korean Defense Department Reconstruction of June 29, 2002 incident

9:37 p.m.–9:46 p.m.	A North Korean naval vessel begins moving south reaching Ugk island (9:37) and Deungsan Point (9:46)
6:30 a.m.	Six South Korean navy vessels station themselves at the South Korean declared fishing line
7:30 a.m.	Twenty of 56 South Korean fishing boats in the vicinity cross the same line
8:00 a.m.	One South Korean fishing vessel begins to withdraw south of the South Korean fishing line
9:54 a.m.	The North Korean naval vessel crosses the NLL and when two South Korean naval vessels block it, it returns north of the NLL at 10:14 a.m.
10:01 a.m.	Two North Korean naval vessels cross the NLL
10:15 a.m.	Two South Korean navy vessels block their path
10:25 a.m.	A North Korean naval vessel opens fire
10:26 a.m.	Two South Korean naval vessels initiate supporting fire
10:30 a.m.	South Korean helicopter air support is requested and helicopters prepare to engage
10:33 a.m.	A badly damaged South Korean patrol vessel is being towed south of Korean fishing line
10:43 a.m.	A larger South Korean patrol vessel opens fire
10:47 a.m.	A fourth South Korean patrol vessel opens fire; South Korean high speed boats ready to engage
10:51 a.m.	North Korean naval vessel on fire and begins to move north
10:59 a.m.	Damaged South Korean vessel sinks

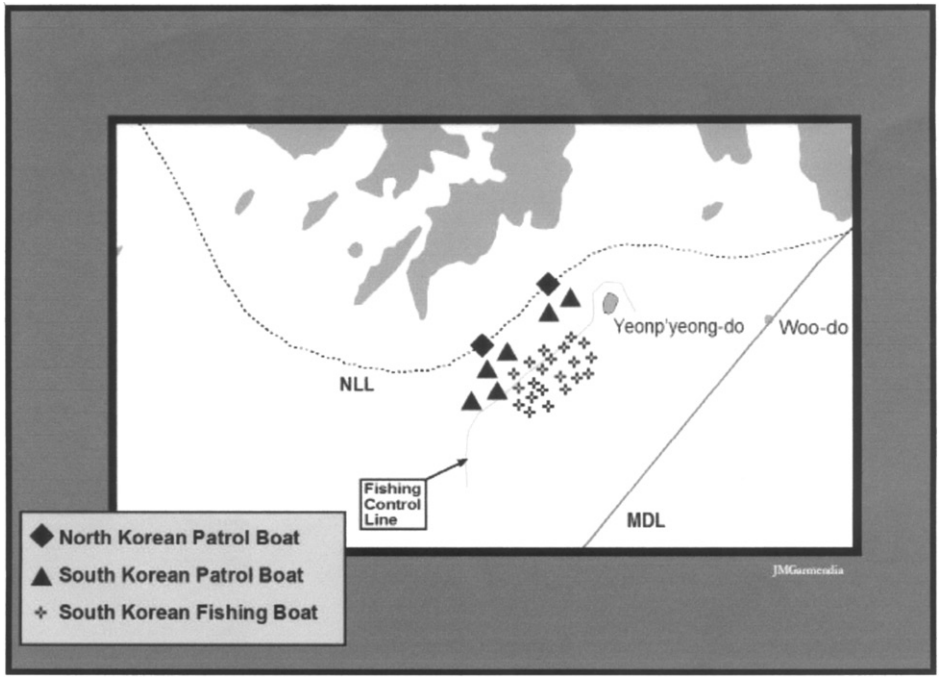

Fig. 2. June 29, 2002 clash between North and South Korean Naval Vessels in the Yellow (West) Sea (approximately 10:25 AM—See Table 2) (Source: South Korean Defense Department reconstruction in *Chosun Daily News*, July 7, 2002).

jurisdiction over until the present time'' [17]. South Korea further stated that it would maintain and defend the NLL as the *de facto* maritime border between the two Koreas.

The Commander-in-Chief of United States Forces Korea, General Leon La Porte, said he had offered US assistance to South Korea on the day of the incident. He said: ''This provocative act by North Korea is a serious violation of the Armistice Agreement and could have serious implications in many areas'' [18]. US Defense Secretary Donald Rumsfeld joined the fray by stating that he believed that North Korea had violated the Armistice Agreement and initiated the clash, although he demurred when asked if the North Korea ''intrusion'' south of the NLL was intentional or accidental [19].

South Korea then prepared to salvage its 156-t warship and combed the area for a missing sailor. Its armed forces remained on high alert 3 days after the incident and it increased F-16 fighter jet sorties over the area. But it found no signs of unusual activity by North Korean forces. Indeed, a few days after the incident, about 30 North Korean fishing boats were hauling in blue crabs a few kilometers north of the NLL. Although South Korea temporarily banned its fishing boats from operating around the five islands near the sea border, on July 3, 2002, about 60 South Korean fishing boats resumed operations in the area, escorted by four navy patrol vessels and two marine police cutters [20].

On July 7, North Korea denounced a new ''infiltration'' of two South Korean battleships as a move designed to provoke a new armed clash [21]. On the same day, the South Korean Joint Chiefs of Staff released a report escalating the political consequences for North Korea [22]. The report rejected theories that the sea battle was accidental or resulted from an overly quick response by a North Korean ship commander guarding fishing boats in the region. According to the report (and contradicting earlier South Korean reports), no North Korean fishing boats were in the area. Further it alleged that North Korean naval ships had repeatedly tested South Korea's response to incursions, and had tried to isolate a South Korean naval vessel for attack.

3. Political repercussions

The June 2002 incident had political repercussions throughout the Korean Peninsula and Northeast Asia. Domestic critics in South Korea questioned the Defense Ministry's slow and restrained response saying it had failed to fulfill its duty to defend the nation [23]. The Ministry responded that it estimated that North Korea suffered more than 30 casualties and that South Korea had acted in a restrained manner to avoid an all-out war. It revealed that North Korea had activated radar during the incident to prepare for an anti-ship Styx missile attack.

North Korea could indeed have brought considerable force to bear in the situation. Two-to-four Styx missiles are deployed on each of 40 North Korean missile boats

and, with a range of 40 km, they pose a formidable threat to South Korea's Navy. One of the two umbrella units under the Navy Command, North Korea's West Sea Fleet (based in Nampo) consists of six battle groups, under which dozens of submarines, 420 torpedo boats, patrol ships, and fire support boats operate near the maritime border. In particular, North Korea's eighth battle group based at Sagot Point, 28 km north of the NLL, operates 80 high-speed patrol boats. Moreover, it has deployed an unspecified number of 95-km-range ground-to-ship Silkworm missiles at Tungsangot Point, and is able to launch anti-ship attacks to as far as Tokjok Island in the West Yellow Sea.

North Korea again blasted South Korea for crossing what it considers the proper maritime border in order to ignite a new naval clash [24,25]. According to North Korea, on July 10, 2002, two South Korean warships entered North Korea's territorial waters off Tungsangot Point and Kuwolbong Peak in South Hwanghae Province. North Korean media denounced the NLL, criticized the South Korean media for their biased reporting, and claimed a new violation of its waters. In response, South Korea repeated that the waters in question are under its control.

South Korea also reexamined the events of previous days and concluded that two similar incidents had occurred on June 27 and 28 to prepare for the armed provocation on June 29. Its actions of June 13 were also scrutinized after South Korean domestic critics charged that the military had covered up a serious incident for fear of a negative impact on the outcome of local elections [26]. The Defense Ministry had announced that a North Korean patrol boat crossed the NLL at 10:49 a.m. on June 13 and returned north after warnings by South Korean naval vessels. But it was now alleged that the North Korean ship reached 7.2 km south of the NLL and remained there for about 2 1/2 h, nearly resulting in an exchange of gunfire. Although the commander of the Second Navy Fleet reported the incident to his superior, the Joint Chiefs of Staff concluded that it was a "simple border violation to search for fishing boats," because the ship was moving slowly and showed no particular signs of hostile intent. The Ministry, however, admitted it could have been a probe designed to test the response in preparation for the June 29 attack. On July 10, 2002, 1000 South Korean war veterans rallied and marched in the eastern port of Sokcho, denouncing the North's action and demanding that the government stop the Mt. Kumgang joint tourism project with North Korea [27]. On July 11, President Kim Dae Jung abruptly dismissed his minister of defense and reshuffled his cabinet [28].

On October 6, 2002, it was reported that a South Korean army intelligence commander had been sacked because of his revelation that the military had ignored his warning of the deadly North Korean naval attack. His testimony sparked further political uproar [29]. In sum, the South Korean Navy essentially admitted that it mishandled the June 2002 encounter because of incorrect field command reports and fear of North Korea's anti-ship Styx missiles. The naval commander was accused of failing to step up security even though North Korean patrol boats had "violated" the NLL before the clash. Further, it was charged that the naval forces should have been more attentive to the fact that the North Korean patrol boats entered southern waters while North Korean fishing boats remained north of the NLL. Usually North Korean Navy boats only cross the NLL to escort or guide fishing boats back north above the NLL [30,31].

On the international front, the June 29 incident caused both South Korea and the United States to back away from contacts with Pyongyang see [22, supra note 17]. Specifically, the United States withdrew its offer to restart talks with North Korea which had been dormant since President Bush took office, and postponed plans to send James Kelly, Assistant Secretary of State for East Asian and Pacific Affairs to Pyongyang. Although South Korean President Kim said he would continue his "Sunshine" policy towards the North, he bluntly warned North Korea against any further such incidents. Moreover, he approved a more aggressive policy for the South Korean military in which they can open fire in encounters with North Korean ships after only one warning shot while blocking North Korean vessels [32].[1] He also canceled talks aimed at helping North Korea start a wireless phone system and suspended food aid as well.

South Korea also announced that it intended to raise the issue at the ASEAN Regional Forum on July 31, 2002, to ask for the co-operation of participating countries in resolving the issue [33]. President Kim Dae-Jung demanded that North Korea apologize for triggering the incident and promise to prevent a recurrence. South Korea and the US Forces Korea agreed to co-operate in salvaging the sunken boat and in other related measures [34,35]. The UN Command (UNC) again called the "surprise" attack on South Korean warships south of the NLL a violation of the Armistice Agreement and proposed a general grade officers meeting to discuss the activities of a special UNC Military Armistice Commission team to investigate the violation. The UNC said it would also observe the salvage operations by South Korea and enforce the Armistice Agreement. More ominously, the United States agreed to provide support to (protect) the South Korean Navy in its salvage effort [36].

Meanwhile on July 26, North Korea's Foreign Ministry warned that another inter-Korean naval clash

[1] In an article by Choe Won-sok entitled "South Korea navy's tactics in maritime clash with North viewed." *Choson Ilbo*, June 30, 2002, the blocking maneuver is characterized as dangerous.

is possible unless South Korea and the United States do something to change the "unfair" maritime boundary [37]. It referred to a recent "undesirable armed clash" and warned of the danger of more serious incidents in the future. The North Korean People's Army also demanded talks on a new sea border in the West (Yellow) Sea calling the existing line "illegal," because it had been drawn unilaterally by South Korea and the United States [38]. It also said that it was willing to allow South Korea to salvage the frigate sunk in the June 29 clash, but, to avoid a new conflict, it requested that South Korea inform it in advance of the date, time, place, vessels, equipment and scope of activity because "the sunk ship is in waters that our military controls". The sunken South Korean Navy vessel was situated about 5 mile south of the NLL and 14 mile west of Yeonpyeong Island. South Korea replied that North Korea had no business interfering in the salvage, and that South Korea's Navy would not tolerate any breach of the NLL [39].

South Korea saw North Korea's "offer" regarding the sunken vessel as a double-barreled ploy by North Korea. If South Korea accepted North Korea's request for prior notification, it would be acknowledging that the NLL is illegal and needs to be redrawn [40]. If it did not give prior notification, and a serious incident resulted, North Korea would blame it for causing the incident. The boat was salvaged in late July and was put on display at the second Naval Fleet Command in Pyongtaek on the west coast as evidence of South Korea's resolve to defend the NLL [41].

The South Korean Defense Minister then announced that the Ministry would soon promulgate firmer measures to deter South Korean fishing boats from crossing the Navy-drawn Fishing-Control Line, which lies 5.5 mile south of the NLL (Fig. 1) [42]. This decision was motivated by the fact that some South Korean fishing boats had violated this line only hours before the clash. Also, fishing traps set by residents of Yeonpyeong Island to catch blue crab had delayed the arrival of patrol boats at the battle site.

The situation was looking increasingly grim. Then suddenly, in late July 2002, North Korea surprisingly expressed its regret that the incident occurred and offered to restart talks with the South, and established a buffer zone to discourage its fishing vessels from crossing the NLL. It said: "Feeling regretful for the unforeseen armed clash that occurred in the West Sea recently, we are of the view that both sides should make joint efforts to prevent recurrence of similar incidents in future" [43]. South Korean views on the message were split, with some calling it "half-hearted." Nevertheless, in a flurry of activity precipitated by North Korea's apology:

1. The two Koreas agreed to reopen high level talks in a major effort to get their reconciliation process back on track [44].
2. North Korea also proposed a meeting between its military and the US-led UN Command, which had drawn the current sea border [45], to discuss the June 29 naval incident. North Korea noted that a military clash was inevitable if no change was made to the NLL and argued that an equidistance line was unfair if it limited its access to the sea [46].
3. North Korea's Foreign Minister Paek Nam-sun met US Secretary of State Colin Powell at the ASEAN Regional Forum and agreed to accept a visit by James Kelly, US Assistant Secretary of State for East Asian and Pacific Affairs [47].

US Secretary of State Colin Powell said he was encouraged by North Korea's positive statements, particularly its "apology" and its proposal to both resume talks with the South and accept the visit of a US special envoy [48]. On July 31, North Korea accused the South Korean military of sending naval ships into its waters in a bid to derail talks [49], but South Korea accepted the proposal for talks in early August [50]. North Korea also promised not to interfere with the UNC investigation into the incident [51]. On August 6, 2002, the UNC and North Korean military discussed ways to prevent such clashes including improved communications and regular staff-officer meetings and procedures in search and rescue [52,53]. On the same day, at Mt. Kumgang, North and South Korea negotiators essentially restarted the stalled process of inter-Korean *rapprochement* [54].

4. Analysis of the June 29, 2002 incident

Because of the confrontational and seemingly unpredictable behavior of North Korea that preceded the incidents, South Korean and US media and political leaders were quick to condemn its action as just another tactic in its negotiations with the United States over aid, nuclear capability, and missile testing. But this dispute has particular complexities and should not be analyzed only from a one-dimensional or ideological perspective. These clashes are a result of a dispute over the location of the maritime boundary coupled with intense competition for a valuable resource—blue crab.

The blue crab (*Portunus trituberculatus*) is the only fishing resource in this region that both the North and South are interested in, and the peak fishing season is very short, extending from May 1 to July 15. Fishing is prohibited from July 15 to September 30. Two to three tons of crab can be worth up to US $70,000 [55]. Competition for the lucrative crab catch might well have been a trigger for this clash. The North Korean patrol gunboats were escorting fishing boats that compete with South Korean vessels for these crabs along the sea boundary, which North Korea does not recognize [56].

South Korea catches 3300 tons of crab or one-third of its total crab catch near Yeonpyeong Island. Indeed it has historically been the main industry of Yeonpyeong islanders. Until 1968, Seoul allowed these fishers to fish right up to the NLL, and many boats continue to do so. Blue crab fishing in the West Sea is also one of the cash-strapped North's major sources of hard currency. Thus, North Korean naval vessels have crossed the NLL frequently to protect North Korean fishing boats [16]. The sea battle on June 15, 1999 happened in the same waters, also in the June crab season, as fishing vessels jockeyed for position protected by their navies.

North Korea is increasingly dependent on fisheries. In 2001, North Korea exported 47,977 t of sea products to China, a tenfold increase over the 4047 t exported in 2000. These exports included 1879 t of crab worth $7.88 million US in 2001, a steep rise from 210 t in 1999 and 381 t in 2000. It also exported 7483 t of crab and shrimp worth $15.62 million US to Japan last year, compared to 3819 t in 1999 and 5038 t in 2000. Clearly, North Korea has encouraged marine fisheries as strategic export items.

One theory regarding the immediate cause of the incident is that the North Korean vessel that opened fire had been damaged by the South Korean Navy during the 1999 clash. The North Korean warship Tungsangot No. 684, which was heavily damaged in the clash in 1999, "took the lead in breaking up the formation of South Korea's fleet of patrol boats and fired a 85-mm gun at the steering room of one of them at point-blank range" [57]. According to this theory, when the South Korean naval vessels performed their blocking maneuver and (may or may not have) fired a warning shot, the captain of the North Korean vessel fired directly at the South Korean vessel because of his experience in the previous clash. This means the North Korean motive for the 2002 incident may have been revenge for its losses in the 1999 clash or that the captain may have reacted too hastily because of his experience with the blocking maneuver and the loss of a North Korean boat in 1999. Also, South Korean fishing vessels had been venturing north of the South Korean fishing line (the Fishing Control Line) (Fig. 1) this year before and on the day of the clash, because the crab fishing was particularly poor south of the line.

5. Analysis of the dispute

The dispute centers on the validity of the NLL and whether it is or should be the maritime boundary between the two Koreas.

When signing the Inter-Korean Armistice Agreement on May 27, 1953, the UNC and the North Korean army established a Military Demarcation Line (MDL) on land but did not extend it to maritime areas. The seaward extension or NLL was drawn by then UNC Commander Mark Clarke on August 30, 1953 [58]. Its purpose was to prevent a clash between military vessels and aircraft of both sides. Ironically, it was primarily intended to prevent South Korea naval vessels and military aircraft from going north. But now, it prevents North Korean fishing and naval ships and military aircraft from venturing south. Thus it is now economically and strategically advantageous to South Korea. It has become controversial, in part because it was declared unilaterally, and in part because it has been increasingly viewed by North Korea as an infringement on its sovereignty and legitimate access to the sea and its resources. Further, the NLL is not specifically mentioned in the text of the Armistice Agreement itself, making its status and that of the waters in the area even more contentious.

Seoul argues (1) that North Korea did not object to the NLL until October 1973 [3]; (2) that North Korea implicitly recognized the NLL several times; (3) that the Basic Agreement stipulates (Article11) that "the South–North demarcation line and areas for non-aggression shall be identical with areas that have been under the jurisdiction of each side until the present time" and that the Protocol on Non-aggression states (Article 10) that "the South–North sea non-aggression demarcation line shall continue to be discussed in the future. Until the sea non-aggression demarcation has been settled, the sea non-aggression zones shall be identical with those that have been under the jurisdiction of each side until the present time"; (4) that the NLL is the legal sea demarcation line between South and North Korea; and (5) that the NLL cannot be unilaterally challenged or discussed except in a comprehensive agreement to bring permanent peace to the Korean peninsula. The United States concurs that the 1992 Basic Agreement between North and South Korea stipulates that both Koreas must respect the line until a new agreement can be reached.

North Korea counters that when the NLL was drawn, the UN Command did not inform Pyongyang, which neither acknowledged nor accepted it. It argues that it has challenged the line on many occasions (e.g., in 1955, 1973, 1989 and 1999) particularly as the value of the blue crab catch in the area has become more apparent.[2] It also argues that its vessels have regularly fished in the waters claimed by the South, and that since March 1955 it has claimed under customary international law a 12-nautical-mile territorial sea from its coast, which extends well south of the NLL. Since the line veers sharply to the north after leaving land, Pyongyang claims that it unfairly gives too much ocean space to South Korea.

[2] DPRK Committee for Peaceful Reunification of Fatherland Secretariat issues White Paper rejecting NLL. KPP20020801000117 Pyongyang KCNA English 2148 GMT 1 August 02; [3].

Although its legality is arguable, the NLL has clearly served a useful purpose as a line of military control, and should continue in place until the two Koreas can agree either to end their state of war or at least on a new boundary.

6. The issue of the maritime boundary

In order to understand the validity of the positions taken by North and South Korea regarding the NLL as a maritime boundary, and to assist the agreements that have yet to be made in their boundary delimitation, it is useful to summarize the principles that have emerged from recent judicial and arbitral decisions on boundary disputes. Articles 74 (on the exclusive economic zone) and 83 (on the continental shelf) of the 1982 UN. Convention on the Law of the Sea[3] both state that maritime boundary delimitations are to be "effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution." This reference to "an equitable solution" mirrors the original statement promulgated by the United States when it claimed sovereignty over its continental shelf in 1945 and stated that: "In cases where the continental shelf extends to the shore of another State, or is shared with an adjacent State, the boundary shall be determined by the United States and the state concerned in accordance with equitable principles".[4]

The first case to address the role of islands in detail involved the English Channel, and this decision has particular relevance to the Korean dispute. After several years of unsuccessful negotiations, the governments of France and the United Kingdom agreed to submit the issue of continental shelf delimitation between the two countries to a Court of Arbitration.[5] France argued that the Channel Islands, under the jurisdiction of the United Kingdom but located close to the French coast, were a "special circumstance" that would have to be taken into account in order to achieve an "equitable" result (see footnote 5, paras 6–8, 18 I.L.M. at 402–403). The court agreed and decided that the islands were indeed a "special circumstance" and "a circumstance creative of inequity" within the meaning of article 6 of the 1958 Convention on the Continental Shelf.[6] The Court thus delimited the boundary along the median line drawn through the English Channel ignoring the Channel Islands. The court gave the Channel Islands an "enclave" measured 12 mile seaward from their coasts, over which they could regulate fishing and other resource exploitation (see also footnote 5, paras 201–02, 18 I. L. M. at 444–45). The Channel Islands played no role whatsoever in determining the maritime boundary because they were on the "wrong side of the equidistance line between the main land areas of the two countries. The tribunal also gave only "half-effect" to the British Scilly Isles in the Atlantic, thus reinforcing its views that islands have only limited effect on maritime boundary delimitation.

Since this case, a number of tribunals have addressed boundary disputes. Although some commentators have argued that the term "equitable" has no definite meaning, fairly specific "equitable principles" have emerged during the past three decades:[7]

The equidistance approach can be used as an aid to analysis, but it is not to be used as a binding or mandatory principle: In the *Libya/Malta Case*,[8] the *Gulf of Maine Case*,[9] and the *Jan Mayen Case*,[10] the International Court of Justice (ICJ) examined the equidistance line as an aid to its preliminary analysis, but then adjusted the line in light of the differences in the length of the coastlines of the contending parties [60]. The Court has made it clear in all these cases that the equidistance line is *not* mandatory or binding.

The proportionality of coasts must be examined to determine if a maritime boundary delimitation is "equitable": It has now become well established that an essential element of a boundary delimitation is the calculation of the relative lengths of the relevant coastlines. If this ratio is not roughly comparable to the ratio of the provisionally delimited relevant water areas, then the tribunal will generally make an adjustment to bring the ratios into line with each other[11]. In the *Libya/Malta Case,* for instance, the ICJ started with the median lines between the countries, but then adjusted the line northward through 18′ of latitude to

[3] United Nations Convention on the Law of the Sea, Dec. 10, 1982. UN Doc. A/CONF.62/122, 1982; *reprinted in The Law of the Sea: Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index*, UN Sales No. E.83.V.5, 1983 and 21 IL.M. 1261, 1982.

[4] Proclamation No. 2667 (usually referred to as the Truman Proclamation). Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf, 10 Fed. Reg. 12,303, 1945.

[5] *Arbitration between the United Kingdom of Great Britain and Northern Ireland and the French Republic on the Delimitation of the Continental Shelf* (1977–78), reprinted in 18 International Legal Materials 1979; 397.

[6] Convention on the Continental Shelf, April. 29, 1958, 15 UST. 1606, T.I.A.S. No. 5639, 516 U.N.T.S. 205 (see footnote 5, *supra* note 53, paras 196–197, 18 I.L.M. at 444).

[7] The material that follows is adapted and updated from [59].

[8] *Continental Shelf (Libya/Malta)*, 1985 I.C.J. 13.

[9] *Case Concerning Delimitation of the Maritime Boundary in Gulf of Maine Area (US v. Canada)*, 1984 I.C.J. 246.

[10] *Case Concerning Maritime Delimitation in the Area Between Greenland and Jan Mayen (Den. v. Nor.)*, 1993 I.C.J. 38.

[11] This approach has been used in the *Gulf of Maine* and the *Libya-Malta* cases, (see footnotes 8 and 9) and has been used more recently in the *Jan Mayen Case*, *supra* note 10, and the *Delimitation of the Maritime Areas Between Canada and France (St. Pierre and Miquelon)*, 31 I.L.M. 1149 (1992). *See generally* [60 at 241–43].

take account of the "very marked difference in coastal lengths" (see footnote 8 supra, 1985 ICJ at 49 para, 66) between the two countries. The Court then confirmed the appropriateness of this solution by examining the "proportionality" of the length of the coastlines of the two countries (see footnote 8, para 74, p. 53) and the "equitableness of the result".[12] In the *Jan Mayen Case,* the ICJ determined that the ratio of the relevant coasts of Jan Mayen (Norway) to Greenland (Denmark) was 1:9, and ruled that this dramatic difference required a departure from reliance on the equidistance line. The final result was perhaps a compromise between an equidistance approach and a proportionality-of-the-coasts approach, with Denmark (Greenland) receiving three times as much maritime space as Norway (Jan Mayen).[13]

Geographical considerations will govern maritime boundary delimitations and non-geographic considerations will only rarely have any relevance:[14] *The Gulf of Maine* case was perhaps the most dramatic example of the Court rejecting submissions made by the parties regarding non-geographic considerations, such as the economic dependence of coastal communities on a fishery, population disparities fisheries management issues, and ecological data. The concept of the continental shelf as a "natural prolongation" of the adjacent continent is a geographical notion acknowledged in Article 76 of the 1982 Law of the Sea Convention, but it has not received prominence in recent decisions.[15] To some extent, the Principle of Non-Encroachment, discussed next, has taken the place of the natural-prolongation idea.

The principle of non-encroachment: This principle is expressed explicitly in Article 7(6) of the Law of the Sea Convention, which says that no state can use a system of straight baselines "in such a manner as to cut off the territorial sea of another State from the high seas or an exclusive economic zone". It was relied upon more expansively in the *Jan Mayen Case*, where the Court emphasized the importance of avoiding cutting-off the extension of a coastal state's entry into the sea. Even though Norway's tiny Jan Mayen island was minuscule in comparison with Denmark's Greenland, Norway was allocated a maritime zone sufficient to give it equitable access to the important capelin fishery which lies between the two land features.[16]

The unusual 16 nautical-mile-wide and 200-nautical-mile-long corridor drawn in the *St. Pierre and Miquelon* case also appears to have been based on a desire to avoid cutting off these islands' coastal fronts into the sea.[17] But, at the same time, the arbitral tribunal accepted Canada's argument that the French islands should not be permitted to cut off the access of Canada's Newfoundland coast to the open ocean.

The principle of maximum reach: This principle first emerged in the *North Sea Continental Shelf Case*,[18] where Germany received a pie-shaped wedge to the equidistant point even though this wedge cut into the claimed zones of Denmark and the Netherlands. Professor Charney explained that this approach has been followed in all the later cases: "No subsequent award or judgment has had the effect of fully cutting off a disputant's access to the seaward limit of any zone" (see [60] at 247). In the *Gulf of Fonseca* case, the Court recognized the existence of an undivided condominium regime in order to give all parties access to the maritime zone and its resources,[19] and in the *St. Pierre and Miquelon Case* France was given a narrow corridor connecting its territorial sea with the outlying high seas (see footnote 11, *supra* 31 I.L.M. at 1169-71 paras. 66-74).

The geographical configuration in the *Jan Mayen Case* presented different issues, but even there the Court gave Norway more than it "deserved" given the small coastline and tiny size of Jan Mayen Island, apparently to enable it to have at least "limited geographical access to the middle of the disputed area"(see [60] at 248), which contained a valuable fishery. There are several interests that are served by the Maximum Reach Principle—"status" (by recognizing that even geographically disadvantaged countries have rights to maritime resources), the right "to participate in international arrangements as an equal," navigational freedoms, and

[12] See footnote 8, *supra*, para. 75. In the *Delimitation of the Maritime Boundary between Guinea and Guinea-Bissau*, 25 I.L.M. 252 (1986), the arbitral tribunal also evaluated the "proportionality" of the coasts to determine whether an "equitable solution" had been achieved by the boundary line chosen.

[13] *See also* the *Eritrea-Yemen Arbitration*, http://www.pca-cpa.org (1998–99), where the Tribunal relied upon the test of "a reasonable degree of proportionality" to determine the equitableness the boundary line; the tribunal was satisfied that this test was met, in light of the Eritrea-Yemen coastal length ratio (measured in terms of their general direction) of 1:1.31 and the ratio of their water areas of 1:1.09. 1999 Award, paras. 20, 39–43, 117, and 165–68.

[14] *See* [60] at 236.

[15] The natural prolongation claim was recognized in the *North Sea Continental Shelf Case (Fed. Rep. of Germany v. Denmark; F.R.G. v. Netherlands)*, 1969 I.C.J. 3, but it appears to have been rejected in the *Case Concerning the Continental Shelf (Tunisia v. Libya)*, 1982 I.C.J. 18, *in Libya/Malta*, footnote 8 and *Gulf of Maine* case, *supra* note 9. In *St. Pierre and Miquelon*, footnote 11, the tribunal stated that the continental shelf was generated by both Canada's and France's land territories, and thus that it was not a "natural prolongation" of one country as opposed to the other.

[16] 1993 I.C.J. 38, 69 para. 70, 79-81 para. 92.

[17] *Delimitation of the Maritime Area Between Canada and France (St. Pierre and Miquelon)*, 31 I.L.M 1149 (1992).

[18] *North Sea Continental Shelf Case, supra* note 15, 1969 I.C.J. at 45 para. 81.

[19] *Land, Island and Maritime Frontier Dispute (El Salvador/Honduras; Nicaragua intervening)*, 1992 I.C.J. 351, 606–09 paras. 415–20.

"security interests in transportation and mobility" (see [60] at 249).

Each competing country is allocated some maritime area: This principle is similar to the Non-Encroachment and Maximum Reach Principles, but must be restated in this form to emphasize how the ICJ has operated in recent years. Although the Court has attempted to articulate consistent governing principles, its approach to each dispute submitted to it has, in fact, been more akin to the approach of an arbitrator than that of a judge. Instead of applying principles uniformly without regard to the result they produce, the Court has tried to find a solution that gives each competing country some of what it has sought, and that each country can live with[20] [61]. In that sense, the Court has operated like a court of equity, or as a court that has been asked to give a decision *ex aequo et bono*.[21] Perhaps such an approach is inevitable, and even desirable, given that the goal of a maritime boundary delimitation is to reach an "equitable solution."

Islands have a limited role in resolving maritime boundary disputes. Islands can generate maritime zones,[22] but they do not generate full zones when they are competing directly against continental land areas or substantially larger islands. This conclusion has been reached consistently by the Court and arbitral tribunals in the *North Sea Continental Shelf Case*,[23] the *Anglo-French Arbitration*, the *Libya/Tunisia Case*, the *Libya/Malta Case*, the *Gulf of Maine Case*, the *Guinea/Guinea-Bissau Case*, the *Jan Mayen Case*, and the *St. Pierre and Miquelon Arbitration* (see [62]).[24]

With regard to small islands, tribunals have not given them full power to generate maritime zones if the outcome of such generation would be to limit the zones created by adjacent or opposite continental land masses or larger islands. Tiny islets are frequently ignored altogether,[25] but even some substantial islands are given less power to generate zones than their location would warrant.[26] This approach was followed once again in the recent *Eritrea-Yemen* arbitration, where the tribunal gave no effect whatsoever to the Yemenese island of Jabal al-Tayr and to those in the al-Zubayr group, because their "barren and inhospitable nature and their position well out to sea...mean that they should not be taken into consideration in computing the boundary line."[27]

Similarly, in the recent *Qatar-Bahrain* case, the International Court of Justice ignored completely the presence of the small, uninhabited, and barren Bahraini islet of Qit'at Jaradah, situated about midway between the main island of Bahrain and the Qatar peninsula,

[20] This point is developed in more detail in Mark B. Feldman, *International Maritime Boundary Delimitation: Law and Practice; from the Gulf of Maine to the Aegean Sea, Aegean Issues—Legal*. In: *Problems and Political Matrix*, (Seÿfi Taşhan ed. Foreign Policy Institute (Ankara), 1995). Mr. Feldman states that tribunals adjudicating international maritime boundary cases "never award a party the whole of its claim. The result is always a compromise of one form or other."

[21] Normally the Court will issue a decision *ex aequo et bono* only "if the parties agree thereto…"I.C.J. Statute, art. 38 (2).

[22] Law of the Sea Convention, *supra* note 3, art. 121; the I.C.J. ruled in the *Jan Mayen Case* that Jan Mayen could generate an exclusive economic zone and continental shelf even though this barren island has never sustained a permanent population. *Jan Mayen Case, supra* note 10, 1993 I.C.J. at 69, 73–74 paras. 70, 80.

[23] *North Sea Continental Shelf Case, supra* note 15, at para. 101(d) ("the presence of islets, rocks, and minor coastal projections, the disproportionality distorting effects of which can be eliminated by other means" should be ignored in continental shelf delimitations).

[24] In *Delimitation of the Maritime Boundary Between Guinea and Guinea-Bissau*, 25 I.L.M. 252 (1986), the arbitration tribunal gave no role to Guinea's small islet of Alcatraz in affecting the maritime boundary. In *Jan Mayen, supra* note 10, the Court allowed the barren island of Jan Mayen to generate a zone, but did not give it a full zone because of its small size in comparison to the opposite land mass — Greenland. And in *St. Pierre and Miquelon, supra* note 11, the tribunal gave the small islands only an enclave and a corridor to the high seas because of its limited size in comparison to Newfoundland.

[25] This approach was first utilized in the *North Sea Continental Shelf Case, supra* note 15, 1969 I.C.J. 3, para. 101(d), where the Court said that "the presence of islets, rocks and minor coastal projections, the disproportionality distorting effects of which can be eliminated by other means," should be ignored in continental shelf delimitation. As explained in the text above, in the *Anglo-French Arbitration*, the tribunal did not allow the Channel Islands, which were on the "wrong side" of the median line drawn between the French mainland and England, to affect the delimitation at all (giving them 12-nautical-mile territorial sea enclaves), and gave only "half effect" to Britain's Scilly Isles, located off the British Coast near Land's End. Half effect was also given to Seal and Mud Islands in the *Gulf of Maine Case, supra* note 9, at para. 222. (Seal Island is $2\frac{1}{2}$ mile long and is inhabited year round.) And in *Libya/Malta* footnote 8 *supra*, at 48 para. 64, the Court ruled that equitable principles required that the uninhabited tiny island of Filfla (belonging to Malta, 5 km south of the main island) should not be considered at all in delimiting the boundary between the two countries.

[26] In *Tunisia/Libya* footnote 15, *supra* at para. 129, the Court gave only half-effect to Tunisia's Kerkennah Islands, even though the main island is 180 km^2 and then had a population of 15,000, and completely disregarded the island of Jerba, an inhabited island of considerable size, in assessing the general direction of the coastline. Even more significantly, in *Libya/Malta* footnote 8 *supra*, the Court refused to give full effect to Malta's main island, which is the size of Washington, DC, and contains hundreds of thousands of individuals, and adjusted the median line northward because of the greater power of the Libyan coast to generate a maritime zone.

[27] *Eritrea-Yemen* arbitration, *supra* note 13, 1999 Award, paras. 147–48. The tribunal also gave the Yemenese islands in the Zuqar-Hanish group less power to affect the placement of the delimitation line than they would have had if they had been continental landmasses. These islets, located near the middle of the Bab el Mandeb Strait at the entrance to the Red Sea, are given territorial seas, but the median line that would otherwise be drawn between the continental territory of the two countries is adjusted only slightly to give Yemen the full territorial sea around these islets. The tribunal did not, therefore, view these islets as constituting a separate and distinct area of land from which a median or equidistant line should be measured, illustrating once again that small islands do not have the same power to generate maritime zones as do continental land masses.

because it would be inappropriate to allow such an insignificant maritime feature to have a disproportionate effect on a maritime delimitation line.[28] The Court also decided to ignore completely the "sizeable maritime feature" of Fasht al Jarim located well out to sea in Bahrain's territorial waters, which Qatar characterized as a low-tide elevation and Bahrain called an island, and about which the tribunal said "at most a minute part is above water at high tide" (see footnote 28, paras. 245-48). Even if it cannot be classified as an "island," the Court noted, as a low-tide elevation it could serve as a baseline from which the territorial sea, exclusive economic zone, and continental shelf could be measured (see footnote 28, para. 245). But using the feature as such a baseline would "distort the boundary and have disproportionate effects" (see footnote 28, para. 247)," and, in order to avoid that undesirable result, the Court decided to ignore the feature altogether.

The vital security interests of each nation must be protected: This principle was recognized, for instance, in the *Jan Mayen Case*, where the Court refused to allow the maritime boundary to be too close to Jan Mayen Island (see *Jan Mayen Case*, *supra* note 10 at para. 81), and it can be found in the background of all the recent decisions. The refusal of tribunals to adopt an "all-or-nothing" solution in any of these cases illustrates their sensitivity to the need to protect the vital security interests of each nation. The unusual decision of the ICJ Chamber in the *El Salvador-Honduras Maritime Frontier Dispute,* concluding that El Salvador, Honduras, and Nicaragua hold undivided interests in the maritime zones seaward of the closing line across the Gulf of Fonseca [1992 I.C.J. 351, 606–09 paras. 415–20], illustrates how sensitive tribunals are to the need to protect the interests of all countries. It has also become increasingly common for countries to establish joint development areas in disputed maritime regions [63].[29]

North Korea has a history of extreme and unreasonable maritime boundary claims. First, North Korea has never clarified the position of its baselines [64] and it appears to claim a long baseline closing East Korea Bay that does not conform to the length and configuration requirements of the 1982 Convention on the Law of the Sea and customary international law. Second it claims a 50-mile military security zone in the Yellow (West) Sea as well as in the Japan (East) Sea. Both of these claims are unacceptable under the 1982 Convention—which neither North Korea (nor the United States) have ratified. These extreme claims may have prejudiced the judgment of US and South Korean policy makers regarding this dispute.

However, if the two Koreas were independent countries, the NLL would probably not stand as a legitimate maritime boundary under the "equitable principles" described above, because the NLL denies North Korea legitimate access to its adjacent sea areas. The NLL sharply limits North Korea's access to ocean resources, running very close to North Korea's Onjin Peninsula, and is thus contrary to the principle of "non-encroachment" because it blocks North Korean's access to the ocean in this region. As explained above, small islands do not generally have an equal capacity with land masses to create maritime zones, nor do they command equal strength with an opposing continental area or land mass.

Using the Anglo-French analogy, a territorial sea enclave could be drawn around the five South Korean islands, but the islands themselves would be ignored in drawing the main maritime boundary. Also following this analogy, it appears that the NLL was drawn too close to the south side of the Onjin peninsula. Adjustments should be made which would take into account a legitimate maritime zone around South Korea's outlying islands but not in such a way as to block North Korea's access to its territorial sea and its EEZ beyond.

In sum, all recent decisions of the ICJ have reflected two fundamental principles of international law: land trumps islands in terms of coastal states' access to the territorial sea, and each state must have at least some access, and, if necessary, share such access in the interests of an equitable remedy. Treating the NLL as a permanent maritime boundary does not give credence to these principles. But, the North Korean contention that it is automatically entitled to a 12-nautical-mile-territorial sea from its baseline in this area is also unsupported. The 12-nautical-mile limit is not automatic where the territorial sea claim of another state overlaps it, but must be adjusted by mutual agreement.

7. Breadth of the territorial sea

A central issue in the maritime boundary dispute between the Koreas is the breadth of territorial sea that can be drawn around South Korea's five small islands that are adjacent to North Korea's coast. Article 3 of the 1982 UN Law of the Sea Convention[30] allows countries

[28] *Qatar-Bahrain Maritime Delimitation and Territorial Questions,* Decision of March 13, 2001, http://www.icjcij.org/icjwww/idocket/iq...ment_20010316/iqb_ijudgment_20010316.htm, paras. 219 (citing *North Sea Continental Shelf*, *supra* note 18, para. 57, and *Libyal Malta, supra* note 8, para. 64, for the position that "the Court has sometimes been led to eliminate the disproportionate effect of small islands"). The Court reached this conclusion even though it asserted, in paragraph 185, that Article 121(2) of the Law of the Sea Convention "reflects customary international law" and that "islands, regardless of their size, in this respect enjoy the same status, and therefore generate the same maritime rights, as other land territory."

[29] *See generally The South China Sea: Hydrocarbon Potential and Possibilities of Joint Development* (Mark Valencia, editor, 1981).

[30] Law of the Sea Convention, *supra* note 3.

to claim territorial seas of 12 nautical miles, but in some congested ocean areas, countries have claimed smaller territorial seas out of recognition of the legitimate interests of their neighbors. In the Aegean Sea, for instance, Greece and Turkey have claimed territorial seas of six nautical miles, in order to preserve navigational freedoms and permit some shared use of this sea[31]. Other examples where states have agreed to establish territorial seas of less than 12 nautical miles around islands that are in cramped locations or are on the "wrong" side of the median line include the Venezuelan island of Isla Patos (between Venezuela and Trinidad and Tobago) [65], the Abu Dhabi island of Dayyinah (between Abu Dhabi and Qatar) (see [65], at 437), and the Australian islands in the Torres Strait (between Australia and Papua New Guinea) (see [65], at 441, 455, and 485), all of which have been given only three nautical miles of territorial sea. Another intriguing example is found in the 1984 agreement between Argentina and Chile, where these two countries limited their territorial sea claim *in relation to each other* to three nautical miles, but claimed 12-nautical-mile-territorial sea with regard to all other countries [66].[32]

A relevant geographical analogy can be found in the Gulf of Finland, where the important Russian port of St. Petersburg (formerly Leningrad) sits at the eastern end, wedged in between Finland in the north and Estonia in the south.[33] Finland has claimed a 12-nautical-mile-territorial sea generally, but has limited its claim to three nautical miles in the Gulf of Finland to enable Russia to have a corridor for unimpeded access to the Baltic Sea.[34]

Another analogy closer to home is in the straits of Northeast Asia, where Japan—which asserts a 12-nautical-mile-territorial sea in general—claims only a three-nautical-mile territorial sea in the Soya Strait, the Tsugaru Strait, the eastern and western channels of the Tsushima Strait, and the Osumi Strait.[35] In fact, both South Korea and Japan have limited their territorial-sea claims around the land areas adjacent to the Korean Strait to three nautical miles, in order to permit unimpeded passage through this area (see [67]).[36] Similarly, Belize has defined its territorial sea as extending 12 nautical miles from its coast, but has limited the claim to only three nautical miles between the mouth of the Sarstoon River and Ranguana Caye in order to give Guatemala a corridor for unimpeded transit into the Caribbean Sea, pending further negotiations.[37]

These varied examples illustrate that the 12-nautical-mile-territorial sea is not sacred or written on tablets. Countries have been flexible in asserting such claims in order to accommodate the interests of their neighbors—and to permit free passage in general—through congested areas. It may be, therefore, that it would be inappropriate for South Korea to insist on its right to claim 12-nautical-mile-territorial sea around its five small islands off of North Korea's coastline.

8. Possible ways forward

Right now all is relatively quiet on the West Sea front. But when the blue crab season rolls around next May and June, more clashes can be expected unless a mutually satisfactory formula can be found for negotiations. At present, the two sides cannot even agree on who should discuss the issue and in what forum. Nevertheless, the Armistice Agreement stipulates that both sides should resolve problems through negotiations and clearly Pyongyang wants to renegotiate a new boundary.

The first step toward the peaceful settlement of conflict is the creation of a sense of community [69]. The creation of such a community presupposes at least the mitigation and minimization of conflict, so that shared interests and common needs outweigh the factors that separate the parties. A functional approach can help the growth of positive and constructive common work and of common habits and interests, decreasing the significance of artificial boundaries and barriers by overlaying them with a natural growth of common activities and administrative agencies. The challenge

[31] Greece claimed six nautical miles in Law No. 230 of Sept. 17, 1936, *Official Gazette (Greece)*, vol. A. No. 450/1936. Turkey extended its Aegean territorial sea to six nautical miles in 1964. Statement of Ambassador Namik Yolga, at the Aegean Issues Conference, Istanbul, Jan. 20, 1995. Greece has stated periodically that it may extend its territorial sea to 12 nautical miles, and said, for instance, in Article 2 of Greek Law 2321/1995, which ratified the Law of the Sea Convention that "Greece has the inalienable right, in application of Article 3 of the Convention which is being ratified, to extend at any time the breadth of its territorial sea up to a distance of 12 nautical miles." Turkey has regularly responded that such an extension would be a *casus belli* because it would convert most of the Aegean into Greek territorial waters and restrict freedom of movement of the ships and planes of Turkey and other nations.

[32] See also Papal Proposal in the Beagle Channel Dispute Proposal of the Mediator (Dec. 12, 1980), art. 9,24 I.L.M. 1, 13 (1985).

[33] This example and most of those that follow were provided by J. Ashley Roach, of the Office of the Legal Adviser, US Department of State, April 7, 2000.

[34] For the Finnish legislation, *see* 29 United Nations Law of the Sea Bulletin 56.

[35] Japanese Law on the Territorial Sea No. 30 of May 2, 1977, listed in *National Legislation on the Territorial Sea, the Right of Innocent Passage and the Contiguous Zone* 177–82 (U.N. Sales No. E.95.V.7, 1995); *see also* US Dept. of State, *Limits in the Sea No. 120, Straight Baseline and Territorial Sea Claims: Japan* (1998).

[36] One informed commentator has written that the same approach of claiming limited three-nautical-mile territorial seas utilized by Japan and Korea to allow navigational freedom has also been used by "Germany and Denmark, and by Denmark, Sweden and Finland" [68].

[37] The Belize legislation is at 21 U.N. Law of the Sea Bulletin 3.

then for the Koreas is to develop a variety of bilateral arrangements that will demonstrate that a habit of dialogue and working together can build common—and eventually—co-operative security. Tactical learning—in which the behavior of the Koreas towards co-operation is changed—must give way to complex learning in which values and beliefs about reaching goals through co-operation are changed.

Already the two Koreas have agreed to permit the passage of each side's ships through the other's territorial waters and to cooperate in safety and rescue operations [70]. In this context, co-operation in fisheries can be a means of building confidence and forging a unified national spirit. It can also reduce tension and eliminate points of conflict. For example, the immediate cause of the June 1999 North–South confrontation in the West Sea was the concentration of valuable blue crabs south of the NLL and a consequent sharp increase in the frequency of both South and North Korean vessels crossing the NLL to catch crabs. Moreover, the North Korean fishing boats were ever more frequently accompanied by North Korean naval vessels. The fishing zone around the five South Korean islands and the boundaries of the North Korean EEZ remain undefined. An agreed *modus operandi* with a tentative allocation of catch or limits on boats could help to avoid further conflict in this area. These measures would be necessary to avoid an open access fishery leading to over-fishing particularly with a reduced military presence.

Co-operation in aquaculture and fisheries has already been tried [71]. Taeyong Fisheries and Parawoo Fisheries received licenses from the South Korean Ministry of National Unification to invest in a joint project with North Korea. Taeyong Fisheries invested $2 million US to grow scallops in Wonsan and Rajin-Sonbong in North Korea, with plans to export to Taiwan and Japan. But the project was suspended because North Korea is presently more interested in large foreign-exchange-earning projects like Hyundai's investment in Mt. Kumgang tourism. In February 2000, South and North Korean nongovernmental fisheries associations negotiated a landmark fisheries accord, which would allow South Korean fishing in North Korea's EEZ in the East Sea to 2005, with profits to be shared equally [72]. The agreement, with some additions, was subsequently endorsed by the South Korean government. About 400 South Korean squid vessels were expected to operate in the designated area. Another variant discussed was the leasing of South Korean fishing boats to the North in exchange for a share of the fish catch. But the agreement has not been implemented.

In October 2002, the two Koreas agreed to hold further talks to implement this arrangement [73]. The initial step will be joint surveys and test-fishing. Subjects for discussion include exchange of personnel, operational guarantees, and policing of the fishing grounds, as well as the establishment of a joint committee to manage the arrangement. But it is not expected that the North Korean fishing grounds will be opened to South Korean fishers anytime soon.

West sea joint fishing zone: Some South Korean experts have suggested that South and North Korea designate a joint fishing area in the West Sea to prevent armed conflicts between the two sides (see [74]) (Fig. 3). The two Koreas could work on developing the maritime

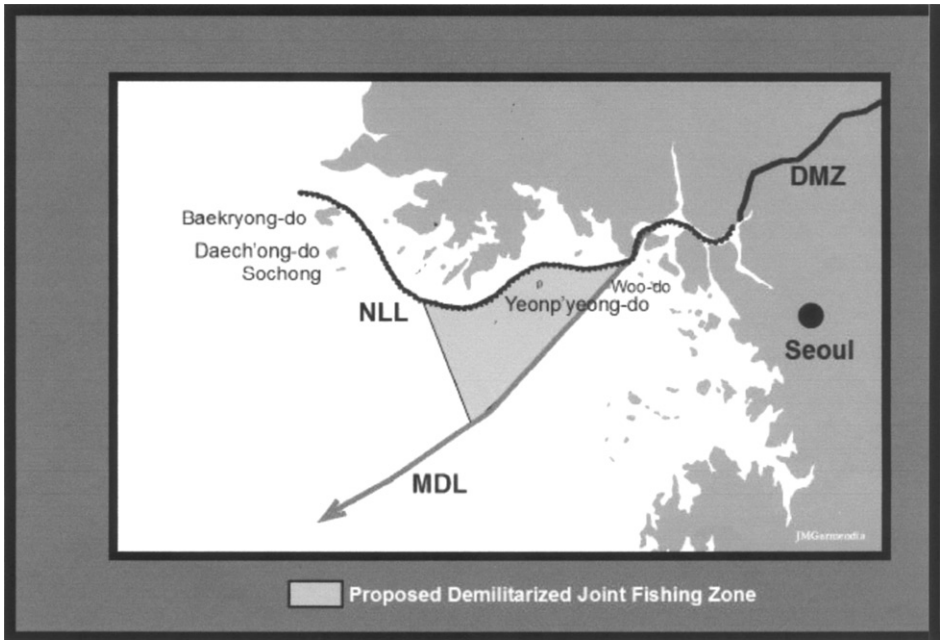

Fig. 3. Proposed North/South Korea demilitarized joint fishing or conservation zone in the Yellow (West) Sea.

border as a buffer zone where neither Korean navy could enter, and then designate the area as a free fishing and joint management zone. This zone might extend from the NLL in the North to the North Korean declared MDL in the south, excluding the waters within, say, three nautical miles of the five South Korean islands. However, one consideration in establishing a "free fishing zone" may be that the fishing gear used by North and South Korea may be different. If the South is using more sophisticated equipment, e.g., traps, it may complicate the negotiations, especially regarding allocation of access to boats.

Implementation should be in stages. First a "free zone" should be created for at least one season with an agreed "code of conduct" for both fishing and naval vessels of both sides. Joint marine research during this period would focus on the size of crab stock, its habitat, and ecosystem interactions. Initially, the management tool would be a total catch limit no higher than last years' totals and with shares based on previous catches. If this initial stage is successful and obtains the necessary data for more sophisticated management, then more "realistic" catch limits and allocation thereof can be negotiated.

Joint access to special maritime zones: Another possibility is for South and North Korea to establish joint fishing zones in the Special Maritime Zones offshore the DMZ (Fig. 4). Current fisheries issues there include shared stocks, depletion of stocks, and the lack of an agreed boundary, all of which lead to inefficient use of the resources and potential conflict. Target species in the joint fishing zone would be, in order of descending catch and value: Alaska pollack, squid, saury, crab, shrimp, mackerel, and sardine. If a joint fishing zone were established, North Korea could catch squid, sardine, saury and mackerel on the South Korean side, while South Korea could fish the highly desirable and increasingly scarce Alaska pollack on the North Korean side. The wider advantages of a joint fishing zone between the two Koreas would be the rational use of the resources, increased benefits to fishers, a stable fishing environment, and strengthened relations between the two Koreas.

More specifically, North and South Korea could agree on a single merged zone with a single license providing equal access to all waters of the joint zone [75]. The East Sea Special Maritime Zone should be the initial target because of its richer fish stocks and less complex boundary problems. The zone could extend 30 mile north and south from an agreed extension of the Armistice Line, and between 12 and 200 nautical miles out to sea. South Korea already has a Special Maritime Zone in the area approximating its half of such a joint zone.

Territorial waters should be excluded to decrease security concerns. North Korea would have to make an exception to its 50-nautical-mile Military Warning Zone, which would overlap the area. And both South and North Korea should exclude others like Japan and Russia from fishing in the Zone to reduce complexities in its management. A scientific body could assess fish stocks and report to a Joint Commission, which would promulgate regulations. The Commission could also set quotas for each species for each party, as well as the number and size of vessels authorized to fish in the zone. Before entering and leaving the zone, all fishing vessels should be checked by both parties for compliance with the regulations. Each state should enforce violations of the regulations by vessels of the other party in its half of the zone, but because of differences in legal systems, the flag state should have court jurisdiction. Nevertheless, each state should have to report to the other the result of such process.

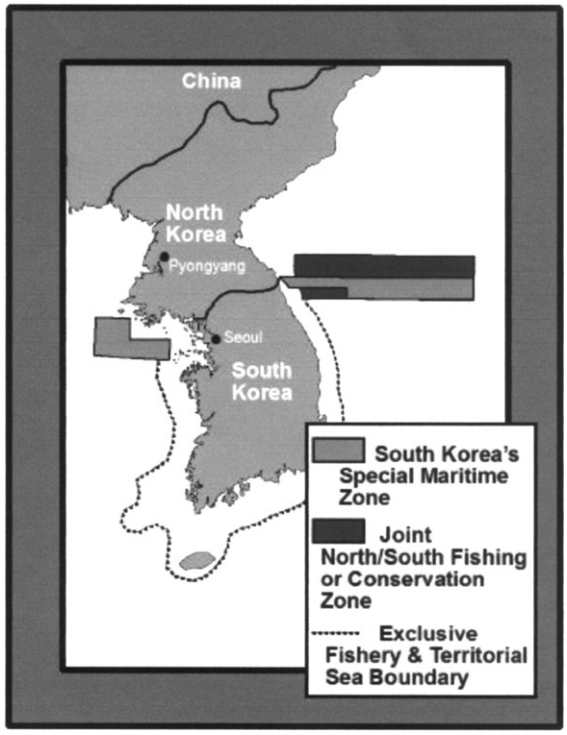

Fig. 4. Proposed North/South Korea joint fishing zone in and around South Korea's declared special maritime zones in the West (Yellow) and East (Japan) Seas (Source: Chung Young-Hoon, 'South and North Korea cooperation in fisheries: toward establishing a joint fishing zone,' master's thesis, College of Marine Studies University of Delaware, 1993, p. 69).

Marine protected areas: A third alternative is for the two Koreas to declare the Special Maritime Zones as Marine Protected Areas (MPA). Recent studies have shown that MPAs can, within a few years, lead to an increase in fisheries even outside their boundaries [76, 77].[38] All the major fisheries resources of the West Sea

[38] The study reports gains in fishing as a result of nearby fully protected marine reserves. For further information see [77]. In a press

and East China Sea are fully exploited with the possible exception of the smaller tunas and coastal cephalopods in southern waters. Although total catch has been steady or increasing slightly, catches of particularly valued species have declined. The decline has been particularly obvious in such commercially important species as the lesser yellow croaker, the black croaker, the red seabream, and the yellow seabream. Nominal catch of the lesser yellow croaker dropped from approximately 400,000 mt in 1955 to 31,000 mt in 1984. Other commercial species affected, but to a lesser degree, include lizardfishes, the daggertooth pike-conger, the greater yellow croaker, the silver croaker, the spotted croaker, the Japanese butterfish, and the silver pomfret. It is unlikely that new fisheries resources will be discovered in these seas in commercial quantities. Therefore, existing stocks must be conserved to ensure that fishing does not deplete them. Some questionable attempts have been made to restrict effort, to close areas to fishing, and to manage by regulation of mesh sizes and seasons, but more could certainly be done to ensure the sustainability of the stocks. And given the obvious connectivity of stocks in their waters, the two Koreas could lead the way.

Such cooperation would be far preferable to the current conflict-prone situation in the peak crabbing season of a free-for-all with both North and South Korean naval vessels trying to control their own national fishing boats while simultaneously guarding against an attack.

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(*footnote continued*)
released on November 29, 2001 entitled "Trophy fish in Florida and Doubled Catches in the Caribbean Attributed to Nearby Marine Reserves" regarding the aforementioned study, the following statement was made concerning the case of St. Lucia: "They closed off 35% of their former fishing grounds to try to rehabilitate their severely depleted reef fish food fishery. In the first couple of years, times were harder. Yet within just 5 years, stocks have nearly doubled in nearby waters and local fishermen are catching 46–90% more fish." Although the study focuses did not focus on species such as crab, it has shown that both sedentary and mobile species benefited. It may be that establishing a Marine Protected Area would be easier to negotiate than a joint catch zone and fishers could benefit in the long run. The need for revenue, however, may dictate that only a portion of the zone be fully protected as a no-take zone.

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