

A New Approach to a Territorial Dispute Involving a Former Colonizer-Colony Pair: The Case of the Dokdo/Takeshima Dispute between Korea and Japan*

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Given that most states in the international system were once ruled as colonies or other dependencies of at least one foreign power, many scholars have examined the ongoing repercussions of colonialism. We study one such topic, that of territorial dispute between a former colony and its former colonial ruler. Specifically, we look at one such pair, Korea and Japan, and at the territorially disputed

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islets of Dokdo/Takeshima. Hitherto, policymakers and scholars alike have emphasized the importance of history and international law in this dispute. In this paper, we argue that plausible historical and legal arguments are not adequate tools to explain the current deadlock or predict the future outcome of the dispute, an important element of social-science research. In this paper, we see the territorial dispute as a strategic issue based on the utilities/preferences of the citizenry in the disputant nations. With that in mind, we introduce two different types of utilities possessed by Korea and Japan in relation to Dokdo/Takeshima and show how the disputed islets can be valued differently depending upon the weights of these two types of utilities. Utilizing two utility functions and a bargaining model, we predict the most likely outcome of the dispute, which is (very close to) the status quo. Given the current relative importance of the two utilities in Korea and Japan, any kind of negotiated settlement between the two countries is unlikely. Successful bargaining on the issue of the islets will only be possible when the preferences of the citizens of these countries undergo a fundamental change regarding what is and is not considered important. We conclude by discussing some scenarios in which the preferences of Korea and/or Japan over the disputed islets may change.

Key Words: Territorial Dispute, Dokdo, Takeshima, Korea, Japan, Utilities/Preferences, Bargaining Model

I. Introduction

Most states in the international system have at some time been ruled as colonies or other dependencies of at least one foreign power,¹ so if colonial legacies do affect events after independence, much of the world seems likely to be affected. Recognizing this, scholars have

1. The ICOW Colonial History data set, available at (<http://www.icow.org>), reveals that 183 of 222 states in the modern interstate system (82.4%) have been ruled as a dependency or part of at least one foreign state at some point in the last 200 years.

examined the effects of colonialism on such topics as economic development, trade, democratic stability, ethnic conflict, and territorial claims either between former colonies or between a former colony and its former colonial ruler (Blondel, 1972; Valenzuela and Valenzuela, 1978: 535-557; Bollen, 1979: 572-587; Huntington, 1984: 193-218; Bollen and Jackman, 1985: 438-457; Lipset et al., 1993: 155-175; Blanton et al., 2001: 219-243; Athow and Blanton, 2002: 219-241; Bernhard et al., 2004: 225-250).

In this paper, we will look at a territorial dispute over the islets of Dokdo/Takeshima² stemming from the colonial legacy between Korea and Japan. This is a much-studied dispute. Previous case studies on the disputed islets have almost exclusively relied on historical and legal arguments. Further, most were done by either Japanese or Korean scholars and support the sovereignty rights of the authors' home country over the islets. In this paper, our focus and approach are different. Instead of making a normative argument about the ownership of the islets, we explore (i) *why* the neighboring countries of South Korea and Japan have not been able to resolve the Dokdo/Takeshima issue for so long and (ii) *what conditions need to be met* for the resolution (or settlement) of this dispute.

In the next section, we will discuss the current state of affairs between South Korea and Japan regarding these small islets situated between the two countries in the East Sea (the Sea of Japan). In the following section, we review existing studies of the Dokdo/Takeshima dispute and contend that historical and legal approaches are not sufficient to analyze the dispute between the two countries. To better understand the nature and future of the Dokdo/Takeshima dispute, we use a bargaining model derived from game theory and introduce two different types of utility, one emotional and one substantive. We conclude by explaining our findings and discussing the potential implications of territorial disputation between the two (historically

2. The Korean name for the islets is "Dokdo," while the Japanese call it "Takeshima." Whenever we refer to the disputed islets, we will use the term "Dokdo/Takeshima" to maintain neutrality.

hostile) states in general and of the Dokdo/Takeshima dispute in particular.

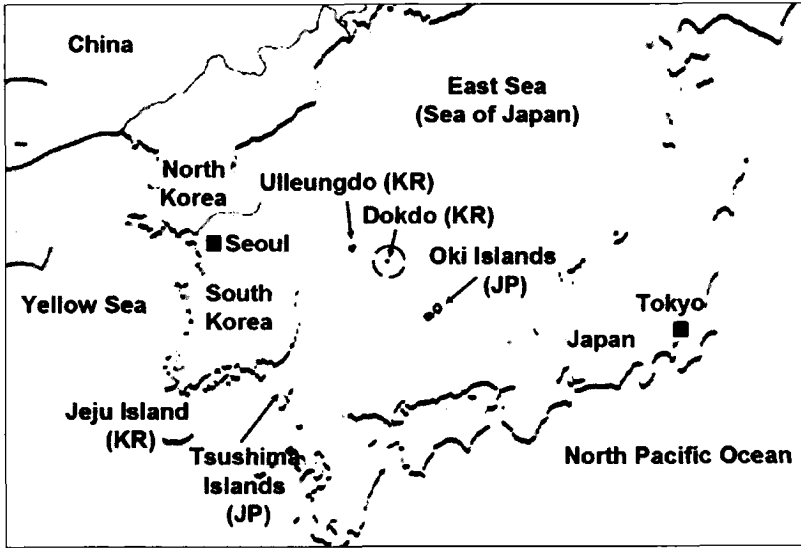
II. Current State of the Territorial Dispute over Dokdo/Takeshima between Korea and Japan

Recently, the territorial dispute over the islets between (South) Korea and Japan again became a hot issue when the Japanese government announced in July 2008 that Dokdo/Takeshima would be claimed as Japanese territory in a teaching guidebook for middle-school teachers (*Kyunghyang Sinmun*, July 17, 2008). At about the same time, the Japanese Ministry of Foreign Affairs (MOFA) website declared "Japan's inalterable position on the sovereignty of Takeshima" officially, to the effect that "[...] it is apparent that Takeshima is an inherent part of the territory of Japan [...] The Occupation of Takeshima by the Republic of Korea is an illegal occupation undertaken on absolutely no basis in international law. Any measures taken with regard to Takeshima by the Republic of Korea based on such an illegal occupation have no legal justification" (MOFA, 2008). The conflict between Korea and Japan sharpened as the U.S. Library of Congress held a meeting on the viability of changing the name of the island from "Dok Island" (the English translation of the Korean *Dokdo*) to "Liancourt Rocks."³ In the midst of the earthquake and nuclear-leakage crisis in Japan in March 2011, tempers flared up once again when the Japanese government approved middle-school geography and civics textbooks that stated that Dokdo/Takeshima belonged to Japan and Korea was occupying it illegally.

Throughout contemporary history, Koreans have felt very strongly about Dokdo/Takeshima.⁴ A recent survey of public opinion regarding

3. The name Liancourt Rocks derives from the *Liancourt*, the name of the French whaling ship that spotted Dokdo/Takeshima in 1849. Liancourt Rocks is a third name used by the international community in place of Dokdo and Takeshima. The U.S. Congressional Library provides the standard to categorize topics in major U.S. universities, research institutes, and public libraries.

Figure 1. Map of Dokdo/Takeshima



Dokdo/Takeshima shows that 98.2 percent of Koreans considered it to be their territory (*Research News*, August 12, 2008). Koreans accuse Japan of practicing legal trickery when Japan calls the islets Takeshima or Liancourt Rocks. This belief further strengthens the existing anti-Japanese sentiment in Korean society. The Korean position is that there is no reason to negotiate with Japan over this territory, and Korea is unwilling to accept any proposal that deprives it of absolute sovereignty and control over Dokdo/Takeshima (Yuji, 2006: 104-128). Korea intends to hold permanent sovereignty and control over Dokdo/Takeshima, while completely eliminating negotiations with Japan and ignoring the occasional global media coverage of the issue.

Before 2001, Dokdo/Takeshima was labeled as Korean territory in Japanese textbooks. Since then, however, Dokdo/Takeshima has been included in Japan's exclusive economic zone (EEZ) in Japanese history, geography, and civics textbooks (*Chosun Ilbo*, July 11, 2008). The dispute further intensified on March 16, 2005, when the Shimane

4. See Figure 1 for the location of Dokdo.

Prefectural Assembly in Japan publically announced that it had voted to designate a "Takeshima Day,"⁵ and the Takeshima Problem Research Association was established later that year to study the Dokdo/Takeshima issue and make its findings known to the public (*Hankook Ilbo*, July 18, 2008). Furthermore, since 2000, Japan has taken active measures to see the islets listed as Liancourt Rocks in the publications of foreign governments and international organizations. As a result, currently the U.S. *CIA World Factbook*, Wikipedia, and the Netsaber website all use the term Liancourt Rocks, to refer to Dokdo/Takeshima.

The Japanese government's actions have increased public awareness of the issue in Japan, as is shown in a survey jointly conducted by the Sankei and Fuji news networks in which 73.7 percent of Japanese who previously had not been even aware of Dokdo/Takeshima now consider it to be part of Japan, and 75.0 percent said that Japan should take more aggressive measures in pursuing its sovereignty over the islets (*Korea Daily*, August 10, 2008).

The Korean government's unresponsive attitude regarding the issue of territorial sovereignty over Dokdo/Takeshima in recent years has met with public criticism in Korea. The government has not been vocal about the issue because it believed that this might result in Dokdo/Takeshima becoming internationally recognized as a disputed area, when Korea has actual physical control over it.

But a recent survey conducted in Korea shows that 79.4 percent of respondents stated that strong actions must be taken regarding the Dokdo/Takeshima issue, even if it has a negative impact on relations with Japan (*Seoul Sinmun*, July 14, 2008). In August 2008, the Korean government established the Dokdo Research Institute to direct research about the Dokdo/Takeshima issue at the governmental level, and has held many academic events regarding Dokdo/Takeshima.

5. On March 18, 2005, the Municipal Assembly of the city of Masan in Korea passed an ordinance by unanimous vote proclaiming "Daemado (*Tsushima* as called by Japanese) Day" in retaliation against "Takeshima Day" in Japan. The Daemado is a much-lesser known disputed island between the two countries, and is currently occupied by Japan.

There has also been a growing demand among Korean people to exercise sovereign rights, for instance of building an ocean hotel, developing a settlement, and exploring seabed resources. As Japan will object to these actions, the dispute between Korea and Japan over the territorial sovereignty of Dokdo/Takeshima will likely continue.⁶

III. Territorial Dispute over Dokdo/Takeshima: Historical and Legal Arguments

Previous studies of sovereignty over Dokdo/Takeshima have been mainly conducted by historians (J. Yoo, 1996: 117-138; Y. Yoo, 1996: 55-74; Lee, 1997: 389-421; Shin, 1997: 333-358; Choe, 1998: 187-203; Hyun, 1998: 93-120; Choi, 2005: 177-195; Choi, 2007: 401-428; Han, 2007: 318-352; Koo, 2007: 353-383) and legal scholars (Kim, 1996; Lee, 1998: 423-475; Jhe, 2005: 177-195; Choi, 2006: 295-329; Jhe, 2006: 201-228; Kim, 2006: 184-211). They have focused on examining the historical record on Dokdo/Takeshima and logical reasoning under international law.

At the same time, governments and scholars in Korea and Japan have taken positions over the territorial sovereignty of Dokdo/Takeshima based on their own respective historical and legal viewpoints. A brief summary of Korea's position over Dokdo/Takeshima is as follows: a passage from the oldest extant Korean historical text, *Samguk Sagi* ["History of the Three Kingdoms"], published in the 12th century, states that Kim Isabu of Silla, one of the three kingdoms in the Korean peninsula, conquered the state of Usan-guk in 512 A.D. Further, it is clearly stated in two geography texts, *Sejong-Sillok Jiriji* ["Annals of King Sejong," 1454], and *Dong'guk Yeoji Seungnam* ["The Geography of Chosun," 1531] that "Usan-guk" refers to the present-day Ulleungdo and Dokdo/Takeshima. These records came approximately

6. Korea is currently building an East Sea-Dokdo Oceanographic Research Center, which is expected to be completed in 2012 and will do active research on the likelihood of earthquakes and tsunamis in East Asia.

200 years before any historical records of the islets in Japanese documents, the earliest of which are from a report written for the Japanese Foreign Ministry in 1667, *Onshu Shicho Goki* ["Records of Observations on Oki"]. Towards the end of the 17th century, Korea's An Yongbok received a document from Japan's Tokugawa *bakufu* (the *de facto* central government was run under a *shogun*, the Emperor's military deputy and actual ruler of Japan at that time), which confirmed that Dokdo/Takeshima belonged to Korea.

The expanding Japanese empire forcibly took Dokdo/Takeshima under its sovereignty while curtailing Korea's diplomatic rights in 1905. Japan eventually annexed the whole Korean Peninsula in 1910. After Japan was defeated in World War II, however, an order by the Supreme Commander of the Allied Powers — Pacific, Douglas MacArthur, declared the suspension of Japanese administrative control over Dokdo/Takeshima. The first president of South Korea, Syngman Rhee, announced the "Presidential Declaration on the Territorial Waters" in 1952; with this document, he drew the so-called "Peace Line," which included Dokdo/Takeshima on the Korean side. Since then, Korea has exercised its territorial sovereignty over Dokdo/Takeshima through various actions such as constructing a territorial monument in 1953; building a lighthouse in 1954; allowing common citizens to settle on the islets in 1980; building a helicopter landing facility in 1981; installing a radar facility in 1993; and building an anchorage in 1996. As far as Koreans are concerned, Dokdo/Takeshima is so clearly Korean territory that there is no need to give in to Japan's demand to take the issue to the International Court of Justice.

So far, we have looked at the historical development from the Korean point of view. Japan's position regarding territorial sovereignty over Dokdo/Takeshima is very different (Ryoichi, 1968; Hori, 1997: 477-523; Kajimura, 1997: 423-475; Seitsu, 2000; Hara, 2001: 361-382; Masao, 2005; Akaha, 2008: 156-188; Embassy of Japan in Korea, 2011). The historical records Korea claims as evidence of its sovereignty do not clearly state that they are referring to the present-day Dokdo/Takeshima. Similar to how Korea argues that Dokdo/Takeshima is subsidiary to Ulleungdo, Japan claims that Dokdo/Takeshima is

subsidiary to Oki Island.⁷ While Korea abandoned the uninhabited Dokdo/Takeshima during the 17th century, Japan exercised its control over Dokdo/Takeshima by allowing fishing off its shores.

In 1905, Japan lawfully gained sovereignty over Dokdo/Takeshima, as far as the Japanese government was concerned (Niksch, 2007). The Japanese government does not consider the order by the Supreme Commander of the Allied Powers, issued after the Japanese defeat in World War II, a binding treaty determining which territories belong to Korea. It was the San Francisco Peace Treaty of 1951 that determined which territories belong to Korea, and this treaty did not mention Dokdo/Takeshima specifically. Therefore, many Japanese believe, Japan attained control over Dokdo/Takeshima through this Peace Treaty. Syngman Rhee's declaration of the Peace Line and the steps Korea has taken to exercise territorial sovereignty over Dokdo-Takeshima are considered nugatory because they go against the international law of open seas. Japan has continuously objected to Korean actions through official channels on the grounds that they were a breach of territorial sovereignty. By agreeing to place Dokdo/Takeshima in the neutral zone through the New Japan-Korea Fishery Treaty of 1998, goes the argument, Korea in fact abandoned the exclusive zone surrounding Dokdo/Takeshima. The fact that Korea does not respond to Japan's demand to take the issue to the International Court of Justice is a reflection of Korea's weakness in its claim, so Japan argues.

When we examine Japanese and Korean arguments about the territorial sovereignty of Dokdo/Takeshima, we can see that there are large discrepancies in the *interpretation* of the same historical evidence or international laws and each country adopts the version that serves its own interest.

In this section, we have briefly shown that previous studies tended to focus on historical and international legal approaches, which led to normative judgments about which country Dokdo/Takeshima must belong to. These approaches, however, are not sufficient to (i) explain

7. See Figure 1 above for the location of Oki Island.

why the two countries have failed to reach a negotiated settlement in the over half a century since Korea's independence from Japan in 1945, and (ii) make predictions about the outcome of the dispute, an important element of social-science research. In this paper, we view the Dokdo/Takeshima dispute as more of a strategic game played by the two countries and adopt a bargaining model for illustration. To better understand the present and predict the future of the dispute, we first need to know why Japanese and Koreans care about these small islets so much. In the next section, we discuss the benefits of having control over the disputed islets.

IV. Why is Dokdo/Takeshima Important? Two Different Types of Utility of the Disputed Islets

Why do Japanese and Koreans care about these small islets enough to risk long-term damage to the relationship between the two countries? The value of Dokdo-Takeshima for Japanese and Koreans is decided by various factors that are hard to compare, quantify, or aggregate, including economic/military factors as well as sovereign/emotional factors. We apply the utility theory from the economics literature to represent the perceived value of the islets to Korea and Japan. It is assumed that each country will choose a policy that maximizes its utility.

A. Type I Utility: Emotional Utility Based on Historical and Sovereignty Issues

Why is it so important for Japanese and Koreans to gain sovereignty over Dokdo/Takeshima? First, it can be noted that the anti-Japanese sentiment among Koreans dating back to Japanese colonization in the early 20th century can still be found in the Dokdo/Takeshima dispute today. Koreans believe that Japan's claim over Dokdo/Takeshima is completely unfounded and a shameless act of subconscious colonialism.

In this context, Korea's claim over Dokdo/Takeshima is fundamentally based on national pride. Japan's taking even an inch of Dokdo/Takeshima would be considered a second national humiliation. Therefore, in reality, Korea's emotional utility over Dokdo/Takeshima is satisfied only when its claim over Dokdo/Takeshima is absolute. If the result were not an absolute claim over Dokdo/Takeshima, there would be a significant drop in Korea's emotional utility.

On the other hand, Japan believes there is a problem with Korea's unilateral decision to call Dokdo/Takeshima its territory, especially when it was controlled by Japan by means of fishing practices and exclusive development rights after the 17th century and later transferred to its formal sovereignty in accordance with international law. In other words, when Japan returned Korean territories through lawful means after being defeated in World War II, Dokdo/Takeshima was not included, and any disagreement should be settled by international law.⁸

Japan's sovereignty/emotional utility of Dokdo/Takeshima is probably lower than of its other disputed territories, such as the Northern Territories (Kuril Islands) and Senkaku/Diaoyu Islands (Koo, 2005: 24-35). Japanese feel that Russia is unlawfully claiming the Northern Territories even though they were historically Japan's territory, and they do not want the Senkaku Islands to be disputed territory with China or Taiwan, because Japan is currently exercising sovereign rights there (Yuji, 2006: 116-126). As previously mentioned, hardly any Japanese people were aware of Dokdo/Takeshima in the past, making it a low-priority disputed territory for Japan.

Considering what we have discussed above, we can probably say

8. A former chair of the Japanese Liberal Democratic Party and the current chair of the Diplomatic Study Meeting, a review committee of foreign policy under the Liberal Democratic Party, Daku Yamasaki, stated in an interview with a Korean daily journal, "Japan has taken steps over a long-time period in order to bring the Takeshima issue to the International Court of Justice, and ultimately the international community will judge this issue" (*Joong-Ang Daily*, August 14, 2008).

that the emotional utility of Japan in Dokdo/Takeshima is different from that of Korea. If it loses the current claim over Dokdo/Takeshima, its sovereignty-based emotional utility will decrease, but not as drastically as it would have for Korea. At the same time, Japan's sovereignty/emotional utility over Dokdo/Takeshima does not need to be fixed at this level. Recent trends show that Japan's sovereignty-based sentimental utility may increase considering that its right-wing politicians (especially before the end of Liberal Democratic Party rule in 2009) have taken an active role in sensitizing the public to the issue of territorial sovereignty over Dokdo/Takeshima, which the international media has increasingly picked up.

B. Type II Utility: Utility Based on Non-emotional, Substantive Factors

Although Koreans have a very strong belief that Dokdo/Takeshima belongs to Korea, they may not be able to name anything other than "national pride" as a reason to defend Dokdo/Takeshima from Japan. Therefore, it is useful to go beyond the simple argument that Dokdo/Takeshima "undoubtedly" belongs to Korea and understand the substantive value of the islets.

At the time of the establishment of diplomatic relations between Korea and Japan in 1965, the records of which were made available to the public in August 2005, the value of Dokdo/Takeshima was unclear to both the Japanese and Korean delegations (Yuji, 2006: 104-128; Choi, 2008: 133-147). This can be seen from the fact that Iseki Yujiro, the head of the Asia division of the Japanese foreign ministry at the time, stated at the fourth preparatory meeting in September 1962 that "Takeshima has no value. It is as large as Hibaya Park, and it would make no difference even if we bomb and get rid of it." Korea rejected this idea not based on the practical value of Dokdo/Takeshima but based on anti-Japanese sentiment.

There are some studies that have explored the substantive value of Dokdo/Takeshima and the surrounding area. They can be summarized as follows (Park, 2005: 6-27; Cyber Dokdo, 2011): First, Dokdo/

Takeshima has value for its fisheries. The territorial waters surrounding Dokdo/Takeshima are where the cold current from the north and the warm current from the south meet, and therefore these waters have abundant plankton and plenty of migratory fish. Second, the territory has ecological value. Dokdo/Takeshima's marine plants are different from those of the Yellow Sea or Jeju Island and have a unique ecosystem that has characteristics similar to subtropical climate zones in the northern hemisphere. Third, the islets have geological value. Dokdo/Takeshima is geological evidence of the evolution of the surrounding seabed terrain. Fourth, it has value as a shelter. The geographic location makes it easily accessible by fishing boats and a good place for fishermen to take a break. Fifth, it has value as an ocean-science base. The waters surrounding Dokdo/Takeshima can be used to more accurately measure the ocean's status, which can be used to make weather forecasts with greater accuracy. In addition, Dokdo/Takeshima can be used as a base for environmental research, ocean-industry research, and research into prevention of ocean pollution.

The values of Dokdo/Takeshima listed above are substantial. However, there are other factors that add more value to Dokdo/Takeshima. The first is its military value. The reason Japan was able to so easily win the Russo-Japanese War in 1905 in the East Sea/Sea of Japan was because it established an observation tower on Dokdo/Takeshima in August 1905. Today, South Korea maintains a radar system on the islets and is managing them as a strategic base. This allows it to easily detect the Russian Pacific fleet, as well as movement of the North Korean and Japanese navies. If occupied by Japan, Dokdo/Takeshima could be used in the same way by Japan to observe military activity and prevent potential threats from Russia, China, and North Korea.⁹

Next, it is important to understand Dokdo/Takeshima's seabed resources. The territorial waters of the East Sea are likely to contain

9. With the rapid advancement of military technology, the military value of Dokdo/Takeshima may not be as great as it used to be. For example, placing an Aegis combat system in the East Sea/Sea of Japan may have an equivalent effect.

gas hydrates (Ahn, 1998: 414-427). Gas hydrates are a crystalline solid consisting of gas molecules that store an immense amount of natural gas, with major implications as an energy resource as well as an "indicative resource" that can show where oil is. Gas hydrates were first discovered in the 1930s but did not gain much attention because of the availability of crude oil and natural gas. Up to now, no countries are believed to have the technology to develop gas hydrates on a commercial basis.

Nowadays, however, there is increasing interest in gas hydrates as oil depletes, and there is a greater demand for clean energy sources for environmental reasons.¹⁰ The Korean government launched the Gas Hydrate R&D Organization (2011) in 2005 for the development of gas-hydrate technology in cooperation with the U.S. government. In 2007, the development agency of the Korean government discovered about 600 million tons of gas hydrates (an amount equivalent to 30 years of Korean natural-gas consumption) in the seabed approximately 100 kilometers south of Ulleungdo (*Saegye Ilbo*, June 24, 2008). The exact location of the center of this potentially rich resources (and whether it is near Dokdo-Takeshima or not) is still being debated (*Energy Times*, September 9, 2008; *Maeil Gyeongje Sinmun*, July 19, 2008).

In a world where states are worried about another oil shock, especially when the price of oil is rising, countries such as Japan, the U.S., Canada, India, and Korea are trying to develop gas-hydrate technology on a large commercial scale in the near future (*Saegye Ilbo*, June 24, 2008).¹¹

10. Gas hydrate has an advantage over oil in that hardly any air pollution from carbon dioxide occurs in combustion.

11. Japan has a Committee on the Development of Hydrates within the Japanese Earthquake Research Center, which is a government agency. Leading Japanese oil companies, university research centers, and exploratory technician teams are all part of this committee. In addition, from Japan's point of view, there is another reason why research and the development of gas hydrates are important. Global warming and rising ocean temperatures cause the dissociation of gas hydrates, which have hitherto been safely under the sea. As a result, the main element in hydrates, methane, can be exposed to the atmosphere. If this

V. The Dokdo/Takeshima Dispute: A Bargaining-Model Illustration

Our discussion above shows that Dokdo/Takeshima should be viewed as a very valuable territory by informed Japanese and Koreans, which only enhances the possibility of some sort of conflict between the two countries over the issue of who owns it. The total utility each country derives out of Dokdo-Takeshima is:

$$U_{JAPAN}(\text{DokdoTakeshima}) = f(U_J(T_I), U_J(T_{II}))$$
$$U_{KOREA}(\text{DokdoTakeshima}) = f(U_K(T_I), U_K(T_{II})).$$

That is, the total utility each country derives would be some mixture of type I and type II utilities. The combinations for both countries will depend on both domestic and international factors, including historical memory.

In this section, we introduce a simple Nash bargaining model to illuminate the current dispute involving Dokdo/Takeshima based on the two different types of utilities described above, and by doing so, to predict the likely outcome of the dispute between the two countries.¹²

happens, the methane will aggravate the global-warming situation, sinking the hydrate grounds further and demolishing the seedbeds. Because of rising sea levels from global warming and changes in the seafloor terrain from frequent earthquakes, Japan places much importance on the research into gas hydrates for its own security (Ahn, 1998: 414-427).

12. Nash's (axiomatic) bargaining model as we introduce it here, unlike some other types of bargaining models, does not model the bargaining procedure — the sequence of possible offers and counteroffers — but rather studies the set of outcomes consistent with some assumptions (including that of efficiency) about the characteristics of the outcome and how it depends on the players' preferences and opportunities. Also, negotiators must consider the possibility that negotiations will break down (see Nash, 1950: 155-162 and Osborne, 2004: 481 for details). As we do not need to concern ourselves with the act of bargaining or lack thereof between Korea and Japan over the issue of Dokdo/Takeshima, the Nash bargaining model serves the purpose of our analysis very well.

Figure 2. Territorial Bargaining Game between Korea and Japan: A General Model

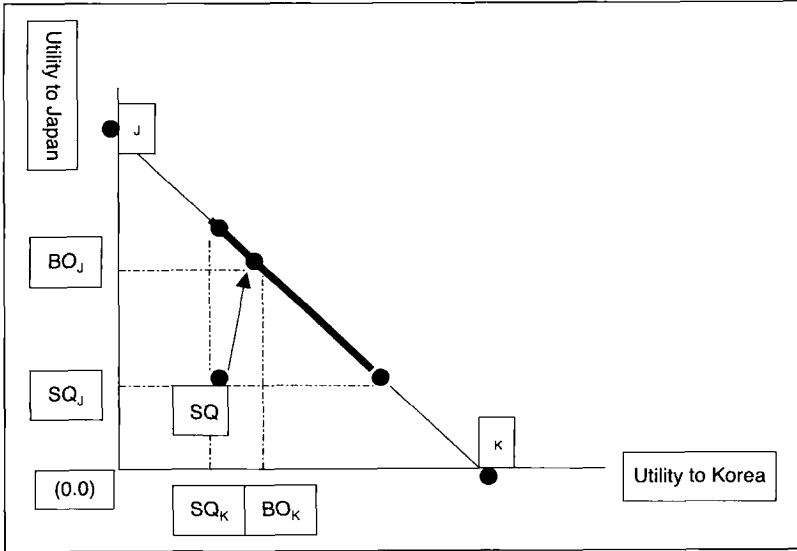


Figure 2 above portrays a *general bargaining model* of territorial dispute between Korea and Japan (or any two countries). The point J denotes the situation where Japan receives everything it can possibly hope for. Let us denote the utility to Korea as 0 at this point. The opposite is true at K , where Korea receives everything it can possibly hope for, and where the utility to Japan is denoted as 0. SQ denotes status quo in the absence of bargaining over Dokdo-Takeshima between the two countries or when the bargaining does not produce any agreement or negotiated settlement. In Figure 2, we assume that the SQ point is inefficient in the sense that both Korea and Japan will receive higher utility if the bargaining can produce a negotiated settlement. At the SQ point, the utility to Korea and Japan respectively becomes SQ_K and SQ_J .

We can reasonably expect that a negotiated settlement between Korea and Japan will end up somewhere on the line connecting J and K . From any point inside the triangle connecting J , K and $(0,0)$, there will be an attempt to continue bargaining, because both countries can increase their utility by moving toward the J - K line. Among the points

on the J - K line, only those on the thick portion can be the outcome of the bargaining between the two countries, because any point not on the thick portion means lower utility for either country than the status quo, and thus that country does not have any reason to agree to such an outcome. Let BO_s and BO_K be the final utility to Korea and Japan, respectively. The final outcome shows that the utility to both countries increases as a result of bargaining, because SQ was an inefficient point.¹³

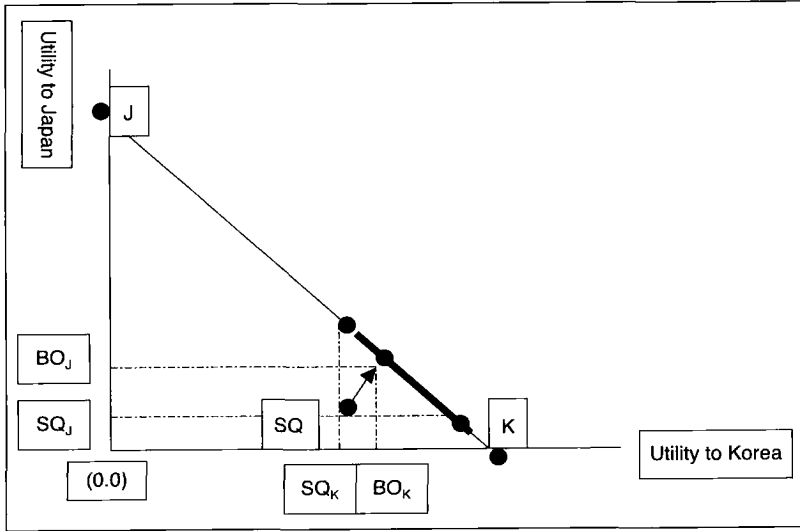
Now let us apply the general bargaining model in Figure 2 to the specific case of the Dokdo/Takeshima dispute. Let us first consider type II utility only. That is, we assume that there is no emotional attachment to the island deriving from past colonial history (inaccurate as this assumption is). This situation is depicted in Figure 3. In this case, both countries' utility functions consist of more practical economic and military interests. In this case, the points on the bargaining line in Figure 3 represent shared fishing areas, weather forecasts, joint development of natural resources, joint geological studies, and so forth. Any point on this line provides a more efficient outcome than the status quo.

One thing we need to note, however, is that the SQ point is much closer to Korea's ideal point than Japan's in Figure 3, unlike in the more general model of territorial dispute in Figure 2. This is because Korea currently occupies the island of Dokdo/Takeshima; thus, the status quo is very advantageous to Korea (Fern, 2005: 78-89). This means that if the two countries engage in the bargaining game *now*, Japan will not be able to extract many concessions from Korea.

We also need to note that the bargaining game over Dokdo/

13. Game theorists have argued that the actual outcome of the bargaining game is determined in proportion to the relative power of the two parties involved (Nash, 1950: 155-162; Luce and Raiffa, 1957; Schott, 1984; Osborne, 2004: 481). The more powerful one party is relative to the other, the closer the final bargaining outcome will be to that party's most preferred outcome on the bargaining line. In today's world, national power includes all the resources a country can mobilize, encompassing economic resources, military might, and ability to extract the support of other countries in the region, among others.

Figure 3. Dokdo/Takeshima Territorial Bargaining Game between Korea and Japan: Scenario I



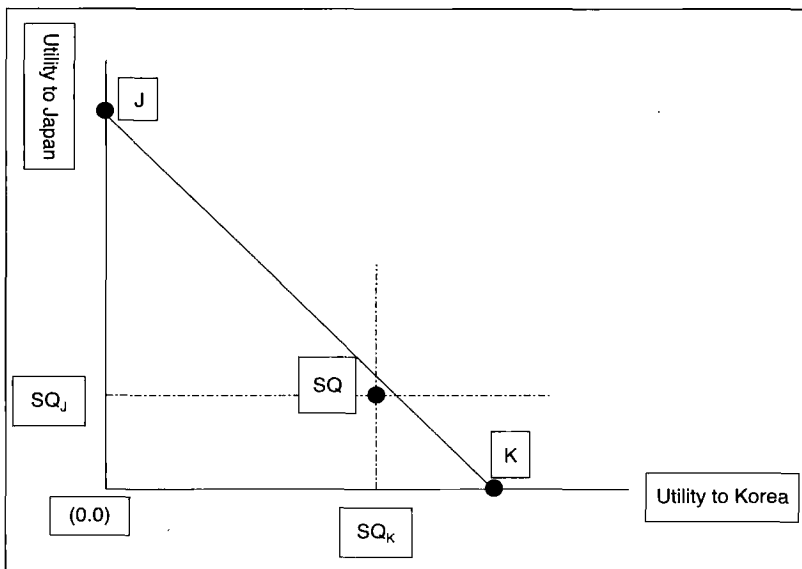
Takeshima is not a single-shot, static game in which the outcome must be determined once and for all at a given time point. Instead, both countries would try to create a domestic and international environment favorable to themselves in the long run *before* they actually sit down for bargaining. Japan is likely to try various steps to move SQ toward its own ideal point, J. As we mentioned above, Japan has taken several aggressive steps on the Dokdo/Takeshima issue lately, which we can only interpret as an attempt to move the SQ point for a future bargaining game.

So far, we have assumed that both Japanese and Koreans have only type II utility over the disputed Dokdo/Takeshima issue. Now we will look at a more realistic scenario — one in which both Korea and Japan have some mixture of type I and type II utility with regard to the issue of the island.

As discussed above, type I utility represents the value of national sentiment associated with sovereignty and past colonial history. Although we do not have an accurate measure of national sentiment, it is reasonable to assume that type I utility dominates type II, at least

in Korea, given the results of public-opinion surveys and Korean attitudes toward the Dokdo/Takeshima issue. When type I utility dominates type II, the value of potential economic and military benefits is seen as trivial. It is difficult to determine which type of utility weighs more heavily among Japanese, but it appears that type I utility is not as important for them as it is for Koreans. We can observe, though, that type I utility has been growing, due to the Dokdo/Takeshima policies of recent Liberal Democratic Party governments.

Figure 4. Dokdo/Takeshima Territorial Bargaining Game between Korea and Japan: Scenario II



Under this scenario, point K probably represents a situation where Korea completely controls the islands of Dokdo/Takeshima, the international community acknowledges that they are part of Korea, and Japan does not dare to approach the area. Given that Korea effectively occupies the island, the status quo would indicate a fairly satisfactory and efficient situation for Korea. This is represented in Figure 4, in which SQ_K has moved toward the (efficient) bargaining line from the situation in Figure 3. Under this scenario, Korea does not

have a pressing need to engage in negotiations with Japan, because it will not bring many added benefits to Korea. So in this most realistic scenario in which both Korea and Japan have some mixture of type I and type II utility, the status quo is fairly close to the bargaining line. This means that new negotiations between the two countries about the Dokdo/Takeshima issue will not bring any new or meaningful benefits to either country; thus, the two countries will implement aggressive policies to pull the SQ point toward themselves without ever reaching a negotiated settlement. This situation will only deepen their existing hostility toward each other, resulting in an increasing weight of type I utility in the Dokdo/Takeshima dispute.

VI. Evaluation of the Dokdo/Takeshima Strategies of Korea and Japan and the Future Prospects of the Dispute

It is not clear if the recent aggressive Dokdo/Takeshima policies of Japan are only about the disputed island. Like foreign policies of any country, Japan's Dokdo/Takeshima policies can be calculated to have particular domestic effects as well.¹⁴ For now, however, let us

14. For example, the recent "Northeast Project" of China may be seen as an aggressive territorial policy to Koreans, when in fact it might be more of an internal ethnic-minority policy, rather than one intended for a foreign audience. The Northeast Project, which is short for "the Northeast Borderland History and Chain of Events Research Project," was conducted by the Chinese Academy of Social Science from 2002 to 2006. The project applies the ideology of *Zhonghua Minzu* (Chinese nationality) to the ancient ethnic groups, states, and history of the regions of Manchuria and northern Korea. Under the *Zhonghua Minzu* ideology, it is assumed that there was a greater Chinese state in the ancient past. Accordingly, any pre-modern people or states that occupied any part of what is now the People's Republic of China are defined as having been part of that greater Chinese state. Similar projects have been conducted with regard to Tibet and Xinjiang, (the "Southwest Project" and the "Northwest Project," respectively). The project's claims with regard to *Gojoseon*, *Goguryeo* and *Balhae*, ancient kingdoms established by ethnic Koreans on land currently controlled by China, sparked disputes with Korea. In 2004, this dispute threatened to lead

look at the Dokdo/Takeshima policies of Japan in the framework of the bargaining game with Korea alone. In this light, recent attempts by Japan to sensationalize the Dokdo/Takeshima issue seem to be an effort to move SQ , which is currently located at a disadvantageous point for Japan. Japan appears to be trying to pull the SQ point as much as possible toward its most preferred point before the actual bargaining between the two countries begins.

Will this kind of strategy on the part of Japan promote a quick settlement of the issue or help it to attain a more profitable outcome? We think not. The simple reason is that the current Dokdo/Takeshima situation resembles Figure 4 rather than Figure 3. As we mentioned above, there is little room for bargaining in the case of Figure 4. Even if Japan succeeds in attracting international attention to the issue (thus, moving SQ toward its ideal point), in the end it does not gain much anyway. Korea, which in effect controls the disputed island, will refuse to respond to Japan's attempt to internationalize the issue. It will never agree to take the Dokdo/Takeshima case to the International Court of Justice. In the end, Dokdo/Takeshima will revert back to the situation in Figure 4, and the two countries will continue the same exhausting game of pulling the SQ point back and forth, unless of course they choose to go to war over the issue, which is highly unlikely at this point.¹⁵

The bargaining-game approach above shows why Korea and Japan have failed to even start a reasoned conversation or negotiation about the disputed islets in over half a century. It further shows that Korea and Japan will never be able to resolve the Dokdo/Takeshima dispute *as long as their utility over the issue remains the same or similar*. In other words, the status quo in the bargaining game between the two countries is already at or near equilibrium.¹⁶ This means that, for a

to diplomatic problems between the People's Republic of China and the Republic of Korea, although both governments involved exhibit no desire to see the issue damage the relations between the two countries.

15. We do not attempt to compare the level of utility and the location of bargaining lines in Figures 3 and 4, because they are determined by factors that are too difficult to quantify or compare in the way that we have done above.

change to happen in the current circumstances, the utility functions of Korea and Japan over the value of the Dokdo/Takeshima must change first. This is especially true for Korea where the significance of type I utility is probably greater than that for Japan. The type I utility stemming from history is so great that not only is bargaining about which country Dokdo-Takeshima belongs to out of the question, but also any negotiation about sharing natural and strategic resources with Japan is, from the Korean perspective, foreclosed.

Now imagine, for whatever reason, that type I utility decreases gradually relative to type II utility for both Japanese and Koreans. Substantively, this means that Korean anti-Japan sentiment stemming from the colonial history somehow diminishes and level of trust toward Japan increases. Let us further assume that Japan follows a similar pattern. This means that bargaining over the Dokdo/Takeshima issue gradually moves from the pattern in Figure 4 to that in Figure 3. Then, the previously efficient status quo (entailing Korean physical sovereignty over Dokdo/Takeshima, but also under-development and under-utilization of surrounding resources with continuous wrangling between the two governments) suddenly looks inefficient. If this happens, both Korea and Japan have something to gain from negotiation, and there is room for compromise for the joint development of resources around the Dokdo/Takeshima region.

VII. Conclusion

Given that most states in the international system were once ruled as colonies or dependencies of at least one foreign power, many scholars have examined the persistent effects of colonialism. We study

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16. An interesting aspect of this (near-) equilibrium is that it looks so volatile, as it involves heated verbal provocation and exchange on the part of political leaders and citizens of both countries, which does not fit the general perception of an "equilibrium." We argue that these seemingly emotional acts are a component of a long-term steady state, of which the production of normative academic studies by scholars in both countries is another component.

one such topic, territorial dispute between a former colony and its former colonial ruler. In particular, we look at one such pair, Korea and Japan, and at the territorially disputed islets of Dokdo/Takeshima.

As has been shown, we are critical of past studies of the disputed islets. Until now, both policy-makers and scholars alike have emphasized the importance of history and international law in understanding/settling the dispute. These studies have formed the normative grounds for the positions taken by both Korea and Japan. As we have argued above, however, they do not explain the current deadlock or predict the outcome of the dispute, which is the main goal of social-science research.

In this paper, we take an alternative route by approaching the territorial dispute as a strategic issue based on citizens' utilities/preferences regarding sovereignty over the islets. With that in mind, we introduced two different types of utility Korea and Japan have in Dokdo/Takeshima and show how the disputed islets can be valued differently depending upon the weights of these two different types of utility. Utilizing two utility functions and a bargaining model, we explain the deadlock that has existed until now and predict the most likely future outcome of the dispute, which is (very close to) the status quo.

Given the current relative importance of the two different types of utilities in Korea and Japan, any kind of negotiated settlement (i.e., the emergence of a new equilibrium) between the two countries is unlikely. Successful bargaining on the issue of the islets will only be possible when the feelings of the citizens of these countries regarding what is and is not important undergo a fundamental change. If this happens, for whatever reason, and the situation changes from that in Figure 4 to that in Figure 3, the location of the SQ point and the relative power distribution at that time will determine the outcome of a bargaining game between the two countries. In other words, for a resolution (of whatever sort) over the disputed islets to happen, change needs to be driven from below. This also implies that changes in government policies or government-funded "studies" are not likely to contribute to the resolution of the issue.

We conclude this paper by offering a few possible (but unlikely) scenarios that may change the weights the two countries place on the two different types of utility. The first possibility is a potential shock to the power balance in Northeast Asia involving a third party. If this third party is perceived to be a danger by both Korea and Japan, the two countries may approach each other with regard to stepping up strategic cooperation, resulting in a lower level of hostility and a higher level of trust between the two. This third party might be China, North Korea, or even Russia. However, whether any of them will turn out to be a big enough threat to force Korea and Japan to trust each other is simply impossible to conjecture at this point.

Second, we can imagine another oil shock. If the price of crude oil skyrockets for whatever reason when Korea and Japan have not developed (the technology for) major alternative energy sources, then both countries may turn to the gas hydrates available near Dokdo/Takeshima. They may, out of desperation, quickly reach a negotiated solution that defines sovereignty in order to define gas-hydrate rights, knowing they simply do not have time to quibble over whose territory the gas hydrates exist on. Once again, the likelihood of this scenario is beyond our knowledge.

Finally, if political leaders in Japan and/or Korea felt that a fundamental change to the situation in Figure 4 were in the long-term national interest of their country, then they might take the political risk of trying to persuade citizens to reach consensus on a change. Given our understanding of politicians in these countries, this is unlikely, since doing so would very potentially be political suicide. This shows our paper to be of some relevance to the field of leadership studies. Leadership as an object of study in social science tends to be cyclical, and has again come into fashion. Building on a long and multidisciplinary research program on leadership, a substantial body of work has emerged over the past two decades (Jones, 1989). However, the concept of leadership remains vague and contested, which means that the literature is incoherent. A review of the social-science literature on the topic reveals a dissensus on the characterization of leaders and leadership (Ahlquist and Levi, 2011: 1-24). We may here add a

particular element to the term "leadership." If political leaders in a country see potential long-term national gain in a controversial international issue, they may try to persuade citizens to take a particular position or care about that issue even at the risk of short-term political losses. In that sense, we would like to define the term "political leadership" as the ability to persuade and change citizen preferences in a legal and peaceful way, if the leaders have the strength to pursue what they see as long-term national interest even at the risk of short-term political risk to themselves.

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