ABSTRACT

Title of dissertation: STATES’ RESPONDING BEHAVIOR IN CONFLICT: ASYMMETRIC RESPONSE AND STRATEGIC CONFLICT AVOIDANCE

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State responses to external threats and aggression are studied with focus on two different rationales: (1) to make credible deterrent threats to avoid being exploited, and (2) to minimize the risk of escalation to unwanted war. Given external aggression, the target state’s responding behavior has three possibilities: concession (under-response), reciprocation, and escalation. This study focuses on the first two possibilities and investigates how the strategic nature of crisis interaction can explain the intentional choice of concession or avoidance of retaliation.

I build a two-level bargaining model that accounts for the domestic bargaining situation between the leader and the challenger for each state. The model’s equilibrium shows that the responding behavior is determined not only by inter-state level variables (e.g. balance of power between two states, or cost of war that each state is supposed to pay), but also the domestic variables of both states. Next, the strategic interaction is rationally explained by the model: as the responding state believes that the initiating state has strong domestic challenges and, hence, the aggression
is believed to be initiated for domestic political purposes (a rally-around-the-flag effect), the response tends to decrease. The concession is also predicted if the target state leader has strong bargaining power against her domestic challengers and she believes that the initiating leader suffers from weak domestic standing.

To test the model’s prediction, I conduct a lab experiment and case studies. The experimental result shows that under an incentivized bargaining situation, individual actors are observed to react to hostile action as the model predicts: if the opponent is believed to suffer from internally driven difficulties, the subject will not punish hostile behavior of the other player as severely as she would without such a belief. The experiment also provides supporting evidence for the choice of concession: when the player finds herself in a favorable situation while the other has disadvantages, the player is more likely to make concessions in the controlled dictator game. Two cases are examined to discuss how the model can explain the choice of either reciprocation or concession. From personal interviews and fieldwork in South Korea, I find that South Korea’s reciprocating behavior during the 2010 Yeonpyeong Island incident is explained by a combination of ‘low domestic power of initiating leader (Kim Jong-il)’ and ‘low domestic power of responding leader (Lee Myung-bak).’ On the other hand, the case of EC-121 is understood as a non-response or concession outcome. Declassified documents show that Nixon and his key advisors interpreted the attack as a result of North Korea’s domestic political instabilities (low domestic power of initiating leader) and that Nixon did not have difficulties at domestic politics during the first few months of his presidency (high domestic power of responding leader).
STATES’ RESPONDING BEHAVIOR IN CONFLICT: ASYMMETRIC RESPONSE AND STRATEGIC CONFLICT AVOIDANCE

by

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Dissertation submitted to the Faculty of the Graduate School of the University of Maryland, College Park in partial fulfillment of the requirements for the degree of Doctor of Philosophy 2016

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For my family.
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Chapter 1: Introduction

How does a state react to external threats or aggression? When a state is threatened or attacked by external actor(s), the response seems to be crucial in determining the rest of the interaction. This study looks into state responding behavior in the context of crisis situations, especially responses to the initial triggers of the crisis. The fact that there exist more crises than wars indicates that most international crises have somehow not escalated to war. It is, therefore, important to have a strong understanding of crisis management – how a crisis is resolved or managed, if not completely resolved – in order to understand why countries fight wars with each other.

The target state’s response to initial aggression necessarily involves two policy goals. First, the target must react to the aggression so that the initiator will be deterred from further aggression. This goal pushes the target state to seek a ‘credible deterrent threat’ or ‘costly signal’ so that the aggressor will acknowledge potential consequences of continued aggression. Second, the target must consider the risk of escalation, which is the least preferred outcome in most cases. This goal, contrary to the first goal, is most likely to push the target state not to pursue a strong response, so that the crisis interaction should not cross the line and enter a costly
fight. The response is, then, to be made somewhere between ‘too far’ and ‘too weak’ reactions. The art of crisis management is, in other words, finding the possible range of responses to a given aggression that both parties can accept and therefore avoid spiraling conflict. The main question of this study is how a target finds, if it exists, such a range of responses.

Interstate (military) crises are often understood as a state between war and peace, which can develop into heavily militarized conflicts or war, or end with mutually agreed settlement avoiding the occurrence of war. The literature on crisis bargaining and conflict resolution characterizes a crisis as being composed of three elements: a threat to basic values, a high probability of war, and a finite time window for response (Brecher, 1977; Hermann, 1972; Snyder and Diesing, 1977). While the first two elements set out the direction of crisis behavior, the third element is more about limitations in decision making during a crisis. That is, many find that under-responding behavior during a crisis is an inevitable result of such limitations (the lack of time to go over all possible options, incomplete information, and so on). In this study, I argue that a (target) state’s responding behavior is understood as a strategic choice, including what often look like irrational and suboptimal choices. Among other features of international crisis, this study places emphasis on two aspects of international crisis interaction: strategic interaction and domestic politics. First, a crisis situation creates a particular space of strategic interaction, given the nature of limited information and sequentialized process of events. After the initiating state provokes the target, the target state is to make its reaction to the aggression. And based on the reaction, the initiator can either conduct further
aggression or restrain itself from escalation. Second, a crisis often involves audiences at both international and domestic levels. An international military crisis is likely to receive a great deal of attention from the general public. Often is the case that the use of force in an international crisis is influenced by domestic political processes and structure. For instance, the president may need a congressional approval to use military forces against other sovereign countries. A state’s foreign behavior, especially when involving the use of force, is a function of domestic politics as well as the country’s foreign relations. This is not a new approach. In fact, there have been numerous attempts to bridge domestic politics and a country’s foreign behavior across the discipline. Responding behavior in a crisis provides a good opportunity to further explore this dynamic. In the following, I argue that the responding behavior of a state is determined not only by relative power and other system-level variables, but also by domestic political dynamics. Furthermore, the domestic politics of the initiating state affects the target state’s response.

When a state is attacked or provoked by another state, many would expect that it would respond in a reciprocal fashion. The reality, however, shows great variation in responding behavior, from under-response to over-response. For instance, in 2006 Israel conducted a massive aerial and naval bombardment against Lebanon in response to Hizbullah’s raid at the Israeli border. On the other hand, in 1969 when a US reconnaissance plane was shot down and all 31 crew members were killed by the North Korean air force, then-President Nixon gave orders not to retaliate at all. The only response from the US was to resume the reconnaissance flights. Why do states respond so differently to external aggression? This is an important
puzzle because the rest of the interaction can be dramatically affected by the target state’s responding behavior. When Israeli Prime Minister Ehud Olmert ordered the massive retaliation in 2006, the response itself brought on a war that left over six thousand killed or wounded. On the contrary, Nixon’s decision of restraining from retaliation eased the tension that could have escalated to a serious confrontation.

1.1 The puzzle

Spectrum of responding behavior

When a state is threatened or attacked by another state, the target state has to find, as discussed earlier, a way to meet two policy goals. On one hand, the target state has to respond to the initial aggression, so that it will not be exploited in future. A firm and credible response is necessary. On the other hand, the target also needs to be careful: its response should not cross the line so that unwanted war can be avoided. Given these contradictory incentives, the target state chooses what it thinks the most ‘appropriate’ strategy in reacting to the other state’s provocation.

From empirical observation, a target state has three possible options of response. Figure 1.1 illustrates three types of responding behavior, which are described as a spectrum. I call this continuum the spectrum of response. Existing theories of conflict behavior can be explained using this spectrum. Then, the responding behavior of a target state can be located on any point on the continuum. An observed response around the center of the continuum is a ‘reciprocating response’ or equal-response, in which the target reciprocates the initial aggression.
Reciprocating Over-responding Under-responding

Figure 1.1: Theoretical Continuum of Responding Strategies. The dot at the center of the continuum represent the objective size of the initial aggression. If the target’s response is found somewhere around that point, it is categorized as a reciprocating behavior or equal-response. Note that it allows some errors around the initial point (±ε). If the response is observed toward the right end of the spectrum off the central area, it is viewed as an over-response. If the response is found toward the left end of the spectrum, it is considered as a under-response.

This reciprocating behavior, or ‘tit-for-tat (TFT)’ strategy, is often believed to be an optimal strategy for long-term interactions (Axelrod and Hamilton, 1981; Huth, 1988a,b; Leng, 1993, 2009). Conceptually, it may be difficult to draw lines for the exact range of reciprocating behavior, because there may exist cognitive differences and other noises in actual perception of behavior. That is, the target perceives the initial aggression differently from what the initiator intended, or vice versa. Empirically, however, it is possible to draw lines, even though flexible, to distinguish different patterns of response. If we assume that such lines can be drawn around the observed point of aggression, as drawn in figure 1.1, we can see two more possibilities. Toward the righthand side of the center is ‘over-response,’ in which the target retaliates against the initiator. When a state is attacked or threatened, the target may want to show its toughness by retaliating against the initiator so that further aggression should be deterred. A strong response is also possible if the target state is concerned about its reputation (Lebow 2010; Sechser 2011). On the other hand, to
the left of the center is ‘under-response,’ in which the response is much weaker than the initial aggression. This seemingly more forgiving strategy poses an important puzzle, because it suggests that a state should sacrifice its utilities in international crisis.

Empirical observation

If reciprocity is functioning as a norm in international relations, particularly in cooperative behavior of states, how does it work in a conflict context? What does the real world look like in terms of negative reciprocity? Following Wilkenfeld and others (1991), I classify a total of 512 militarized interstate disputes between 1993 and 2001. As shown in figure 1.1, 74% of the observations in this period involve a symmetric response. Surprisingly, 24% of dyads involve under-response, where there is a non-militarized response to a militarized trigger.¹ Most of those non-reciprocated responses are cases of under-response. That is, the target country did not take any actions against the initiator’s threat/attack or displayed significantly

¹The coding of the MID dataset is not exactly capturing aggression-response sequence since it only measures the highest level of hostility during the period of observed interactions. For instance, if the initial aggression was nonviolent threat but the actor did attack militarily later at some point of time during the dispute, the dispute is coded by the highest action of the actor regardless of the timing of the action. Being aware of that, I coded a dyads as non-reciprocated when the initiator’s highest level of hostility is greater than or equal to ‘use of force’ and the responding actor’s is lower than ‘use of force’. Such coding yields 272 dyads for non-militarized reciprocated dyads, 107 for militarized reciprocated dyads, 125 for under-response (militarized trigger and non-militarized response), and 8 for over-response (non-militarized trigger and militarized response). In sum, non-militarized response is observed in 99 dyads out of 133 non-reciprocated dyads (total number of observed dyads is 512). Using International Crisis Behavior (ICB) dataset gives similar picture. I used same coding rule for militarized versus non-militarized trigger/response, and found that 381 cases are non-reciprocated behavior, comprising 38.1% of total observation. However, over-response cases (19.9%) are slightly more than under-response cases (18.2%). This may be due to the different structure of dataset. That is, ICB is not a dyadic set, and the major response to the trigger could be the record of behavior by other actors but the targeted state (e.g. allied countries of the initial target country).
What makes states abstain from the use of forces when they are responding to external aggression involving military forces? Cases of under-response display a serious violation of reciprocity in conflict behavior and give rise to an important question: is it rational and efficient for a state not to reciprocate an enemy’s threat and/or aggression? This study focuses on the sources of non-reciprocal responses.

Why response?

Before I start the discussion of non-reciprocating responses, it may be necessary to say something about why responding behavior is important. Many scholars and decision makers put emphasis on conflict resolution by probing and searching for efficient ways of managing, preventing, and terminating crises and conflicts. However, relatively less attention has been paid to state responding behavior following initial aggression. As some conflict researchers have suggested, how states respond to their opponents’ provocations has a large effect on the trajectory of further interaction (Hensel and Diehl, 1994). Particularly during militarized disputes, the lower level of hostility in response.

Table 1.1: Triggers and responses of militarized interstate disputes (MIDs) between 1993 and 2001. Data obtained from MID Dataset 4.01
immediate response to aggression is likely to be viewed as an important signal, either about resolve or capability, by the initiator. Since a militarized dispute already involves a certain degree of violence by definition, reciprocating behavior is likely to produce an upward spiral of hostile interaction. This potential danger of escalation could be solved only by the target’s cooperative or non-reciprocal response. Once the target steps back, the initiator can also de-escalate by reciprocating the non-aggressive act of the target (Hensel and Diehl, 1994). Hence, the way that states respond to the initial aggression may help us find important clues for peaceful resolution of conflicts.

Besides practical and policy-related points, the question of state response in conflict gives rise to three important issues in conflict studies. First, responding to the initial aggression shows who is taking the cooperative initiative, which is crucial in making cooperation possible in the following interactions. Theorists have found that actors can benefit from reciprocating behavior (Axelrod and Hamilton, 1981). However, the reward outcome can be achieved only if both actors are nice enough to cooperate at the first decision node. Let us assume a sequential Prisoners’ Dilemma game where two actors are making decisions between cooperate (C) and defect (D). If the first mover chooses D, the second player will choose D to avoid the sucker payoff. Even if both players entered the game with TFT strategy, the observed behavior (the initial D by the first mover) will never allow the TFT strategy to

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2Axelrod further discusses that reciprocity is an important property for the emergence of cooperation (Axelrod and Keohane, 1985; Axelrod and Hamilton, 1981). Axelrod (1981) suggests four properties of the tit-for-tat strategy as follows: niceness (never be the first to defect), provocability or reciprocity (punish the other player’s defection as quickly as observed), forgiveness (do not hold a grudge once you have vented your anger), and clarity (act straightforwardly for the other player to understand clearly).
generate reward payoffs. A conflict in the real world is more like a sequential game than a simultaneous game. In the world of sequential moves, once D has been played, at least one player must go through the loss (the sucker payoff) to allow cooperation to reemerge. Since such cooperative initiative often turns out to be costly, it is important to understand when states are able and willing to initiate cooperative responses non-reciprocally.

Second, the responding behavior has a signaling effect, through which the initiator's next move can be changed. In the example of the downing of the US plane, the United States did not know what the real intention of the North was for the attack. Without knowing the true preference of North Korea, the U.S. decided not to respond. Such non-response by Washington signaled to Pyongyang its having no intention of escalation. And in turn, it led to the defusing of the crisis.

Third, studies on state response face, like most of conflict literature, the problem of the selection effect. If the target country did not respond to the provocation from the very initial stage of the dispute, the initial attack is not likely to appear in the data since the incident itself is not likely to have been collected. This causes two problems in terms of theory building in conflict studies. First, non-response (or even under-response that resulted in no further escalation of interaction) cases are under-reported so that reciprocity in conflict situations may be overstated. Second, related to the first problem, the true effect of reciprocity (or non-reciprocity) on conflict outcomes cannot be properly estimated. Cases of inverse reciprocity (responding harsher than the initial provocation), on the other hand, are more easily integrated, which often leads the analysis to be biased.
1.2 Existing literature

Reciprocity in IR

Imagine that someone punches you in the face while you are waiting on the street for a walk sign. Surprised, you look around and find a man right next to you, who looks upset. Now, you notice that your nose is bleeding. It seems that the man hit you for some reasons; but you don’t know anything for sure. What are you going to do? If there is no authority to appeal to and enforce the law, you may find three options available. First, you can ignore or tolerate the damage and do nothing against that person. Second, you can just counter-punch him in the face as he did to you. Third, you can beat him down to the ground and show no mercy. There are good reasons of choosing any of these actions. If you choose to do nothing, it might be because you are too weak to punch back, or your religious beliefs prevent you from use of violence, or you just don’t have time to engage (recall that you were waiting for the walk sign to cross the street). If you decided to punch him back, it also make intuitive sense because you want to retaliate in kind: it seems fair and just that that person should suffer as you suffer. If you chose to beat him down, you were giving him a lesson that he could never hit you again. Given the assumption that there exist no higher authority, many would think the reciprocal response makes the most sense and justice.

How about violent interactions between states? The international system is understood as an anarchy, where no single authority exists to enforce justice. In this
sense, the politics among nations, especially when it comes to the matter of survival under anarchy, is sometimes characterized as *bellum omnium contra omnes*, struggle for power, or a melee. Under such an anarchic situation, the idea of justice likely remains at a very primitive stage. The rule of ‘eye for eye,’ then, becomes acceptable and implementable, if not the most desirable. Individual countries in the international system find reciprocity attractive. In fact, the concept of reciprocity has been acknowledged and practiced in different areas of international relations (Keohane, 1986; Lepgold and Shambaugh, 2002).\(^3\) For example, international trade regimes like the General Agreement on Tariffs and Trade (GATT) are based on the idea of reciprocity (Bagwell and Staiger, 2001; Finalyzson and Zacher, 1981; Keohane, 1989, 2005). Many studies use the norm of reciprocity is to explain conflict behavior (De Dreu, 1995; Goldstein and Pevehouse, 1997; Leng, 1998; Leng and Walker, 1982; Moore, 1995; Rajmaira and Ward, 1990) as well as policies for national security, including arms control agreements (Smith, 1990; Stoll and McAndrew, 1986) and the confrontation between superpowers during the Cold War era (Goldstein, 1991; Goldstein and Freeman, 1991; Rajmaira, 1997; Rajmaira and Ward, 1990; Ward and Rajmaira, 1992).

Although the norm of reciprocity can be an important foundation of cooperation (Axelrod and Keohane, 1985; Axelrod and Hamilton, 1981; Lubell and Scholz, 1991)\(^3\) the term reciprocity sometimes induces ambiguity both in practice and theory. Keohane suggests two underlying concepts to clarify the term: contingency and equivalence. According to his argument, reciprocity refers to “exchanges of roughly equivalent values in which the actions of each party are contingent on the prior actions of the others in such a way that good is returned for good, and bad for bad” (Keohane, 1986). For a general discussion of reciprocity in international relations, see Keohane (1986, 1989); Pahre (1998). For its application to international institution, see Cortell and Davis Jr (1996); Stein (1990).
2001), the norm also implies a darker side. The ‘dark side of reciprocity,’ or negative reciprocity, is often related to suspension of moral order (Narotzky and Moreno, 2002) and willingness to punish others (Fehr and Gächter, 2000). In a conflict situation, a simple ‘paying back’ may or may not lead to a peaceful settlement of a dispute. It is largely due to the possibility of a conflict spiral, in which the agents in dispute often reinforce negativeness through the iterated exchange of hostile actions (Lawler, Ford and Blegen, 1988). Also, the uncertainty about each other’s intention often creates a security dilemma, where an increase in one state’s power (e.g. military build-up) should increase insecurity in other states (Glaser, 1997; Jervis, 1978). Reciprocating behavior, therefore, can lead to an arms race. Powell (1996, 1999) and others explain a similar logic, but with a more nuanced term, the ‘commitment problem.’ In a nutshell, a state would have fear of being exploited when the power of its opponent increases or is expected to increase. Such disruption of power distribution, according to Powell, is likely to lead to an increased chance of war, because the relatively weaker party believes it’s more promising to act now than to wait and be a sucker. The response to the (anticipated) shift in power can yield preemptive or preventive attack.

Crisis bargaining

Some studies on foreign policy making and crisis behavior find that states tend to reciprocate others’ action in conflict more than non-conflict situations. Earlier works on this topic argue that the propensity of reciprocating is higher in milita-
rized conflicts, and lower in non-militarized conflicts (Wilkenfeld, 1991; Wilkenfeld et al., 1980; Zinnes and Wilkenfeld, 1971). Given the common practice of symmetric response, non-reciprocal response is often discussed as an ‘interruption.’ The underresponding behavior, therefore, is explained as a deviation from a normal reaction of the target. The existing literature highlights four explanations for non-reciprocal responses.

First, the target state may ignore or under-respond to the initial threat because it does not perceive the threat as severe as the initiator intended in the first place. The threat perception is likely to relate to the target state’s assessment of national security goal(s) during the crisis. If the initial aggression is not believed to threaten its national security, the target may have little incentive to react harshly. For instance, Wilkenfeld (1991), using the International Crisis Behavior data from 1929 to 1985, finds that non-matching behavior is more likely under conditions of low threat than in high threat, both for violent and nonviolent triggers.

Second, power discrepancy between the target and the initiator prevents the former from taking stronger action. When the target is weaker than the initiator, the target may have to give in to the stronger party’s demand. However, the impact of power (dis)parity is somewhat controversial in terms of empirical evidence. Wilkenfeld (1991) finds that states tend to match against nonviolent triggers and that the matching behavior is more likely under the condition of power parity than of disparity. Hensel and Diehl (1994), however, find no significant impact of power disparity in explaining non-military response in dispute.

Third, domestic constraints in the target can lead to under-response. A classic
example is Allison and Zelikow (1999)'s accounts of the Cuban Missile Crisis. The bureaucratic nature of the decision making unit and other domestic political constraints often prevent the leader from employing strong and violent reaction. The logic of political survival is also relevant as well (De Mesquita, 1983; De Mesquita and Siverson, 1995). When the leader faces domestic challenges (i.e. the leader has difficulties in holding the minimum winning coalition for political survival), an external aggression could be a useful tool to turn the table. Thus, the target state may take strong actions in response to the initiator, hoping to (re)gain the support from domestic constituencies. However, this expectation has not be supported empirically. In criticizing the logic of diversionary behavior, Miller (1995) argues that democratic leaders are less likely to use force in an attempt to divert domestic attention because they tend to have higher costs for engaging in militarized conflicts than non-democratic counterparts.

Finally, non-reciprocal (usually weaker) response is understood as a result of international pressure. The source of international pressure could be varying, such as international norms, third party intervention, reputation, and so on. Explanations of foreign crisis behavior of the United States during the Cold War era often find the influence of third parties. Using complicated interaction between three actors, Goldstein and Freeman (1990) examine the ‘triangular’ relationship between the United States, the Soviet Union and China during this time period. They find that non-reciprocal cooperative initiative is often possible through the pressure from the triangular relationship. They explain that the cooperative initiative taken by the PRC in 1955 toward the United States was the ‘spin-off’ from the relationship
between the PRC and the Soviet Union, and between the US and the Soviet Union. A norm-based approach also has something to say about non-reciprocal behavior of states. In making decisions about the use of force, leaders and the public often rely on “the logic of appropriateness,” rather than on cost-benefit calculation (Katzenstein, 1996; Olsen and March, 1989). For example, the United States has continuously refused to use nuclear weapons in its fights against non-nuclear adversaries since the bombing in Hiroshima and Nagasaki (Tannenwald, 1999, 2007). Such behavior is understood as evidence that the use of force can be constrained by international norms.

Strategic conflict avoidance

The above explanations of under-responding behavior have one thing in common: the target state couldn’t make a strong or equal response. That is, the leader of the target might want to make a stronger response, but other constraining circumstances (e.g. power disparity, domestic instabilities, bureaucratic constraints, and international pressure) prevented it from reciprocating or retaliating. What if the target willfully, rather than inevitably, under-responds or concedes to the aggression?

Earlier works on conflict response have focused on the responding actor’s conditions, but less attention has been paid to the nature of interaction between states. The decision making process of the target state should involve some strategic calculations. To cope with a given threat or attack by the adversary, one of the first steps
to be taken is gathering information to figure out the intention of the threat/attack. Even if it is a crisis situation and there is limited time horizon, the decision on how to respond is very likely to go through such a reasoning process. The response should be determined in part by how the target state views the adversary’s intention. Such strategic interaction between states has been widely accepted and discussed. A good example is the strategic choice of states, which anticipate others’ diversionary behavior (Smith, 1996, 1999). That is, a state would accommodate the other state’s demand as it anticipates the other state’s incentives of diversionary conflict. The same logic of strategic interaction can be used to explain under-responding behavior in a crisis: if the target state believes that the initiator provokes to find a scapegoat to recover from its domestic challenges, then the target may have reason to placate the initiator’s demand and not to respond harshly.

The idea of strategic conflict avoidance (SCA) is introduced as a logical explanation of why diversionary conflicts are rare. Smith (1996) raises the possibility of strategic avoidance when other states engage in a diversionary aggression. Following Levy (1989)’s criticism of the diversionary theory of conflict, Smith suggests a simple conjecture that a state is able to expect the diversionary intention of the triggering state so that it will strategically take a lower profile against any given provocation by the triggering actor. Leeds and Davis (1997) also argues that democracies’ diversionary behavior is hard to observe because would-be adversaries anticipate the willingness of diversionary behavior and take pre-cautionary measures. Examining the differentials in diversionary behavior by regime type, Miller (1999) argues that democracies are more subject to strategic interaction opportunities than
non-democracies. Testing the SCA argument is challenging, because strategic inter-
actions are often unobservable. Since Fordham (1998a)’s attempt to test the SCA
argument, more advanced and sophisticated methods are employed to examine un-
observed strategic interactions. For instance, Clark (2003) examines the endogeneity
of the use of force. Based on Fordham (1998a, b), he suggests zero-inflated models
to test the SCA. More recently, in his analysis of rivalry behavior, Fordham (2005)
shows that rival states of the United States behave more cooperatively when the
United States experiences economic difficulties.

The logic of strategic avoidance has not been applied to state responding be-
behavior in a crisis situation. The choice of response can be a more direct and hard
test for SCA. Without an initial aggression, it is hard to know whether accommo-
dating behavior is driven by the logic SCA or other reasons. For example, Fordham
(2005) examines whether countries act cooperatively or aggressively against the
United States given the varying economic conditions of the United States. Since
the potential diversionary actor is set to be the United States, the most powerful
country in the world, both economically and militarily, cooperative action of other
states toward the United States may or may not be directly correlated to the antici-
pated diversionary behavior. Others investigate SCA in similar settings to examine
whether the rival behavior can be alleviated given poor economic performance of the
potential diversionary state (Clark, 2003; Enterline and Gleditsch, 2000). However,
their works does not completely eradicate the danger of selection bias and endoge-
rous causes to accommodating behavior within a given dyad. That being said, if a
target state of a crisis refuses to retaliate against the perceived aggression, such a
non-response can be a good candidate for SCA for the target should tolerate some
loss anticipating bigger damage if it responds. Therefore, the test of SCA against
state responding behavior can make contributions to both the SCA and the conflict
behavior literatures.

In sum, the literature on state response in conflict situations faces at least four
limitations in terms of reciprocity and non-reciprocity arguments. First, there still
exist anomalies that cannot be explained by the simple action-reaction or Richardso-
nian model. Second, most studies on response of a target state are heavily focused on
the ‘violent versus non-violent’ or ‘military versus non-military’ dichotomy. There
also exist great variations within violent or non-military responses as well. Third, lit-
tle has been theorized on the dynamics of domestic political uncertainties at dyadic
level. In choosing how to respond to initial aggression, the decision maker should
face domestic constraints as well. Moreover, the strategic calculation of reaction
also involves how the opponent is dealing with its domestic partners/challengers. If
the responder believes that the initiator has strong incentives of diversionary war
because of its domestic situation, the optimal response could be changed to avoid
unnecessary war. Thus, a dyadic two-level approach to strategic conflict avoidance
may shed some additional light on those mixed findings.
1.3 Plan of study

This study explores the variation in responding behavior, particularly underresponding behavior of a target state in an international crisis. To answer this question, I develop a model of response that incorporates the logic of strategic conflict avoidance. The rest of this dissertation is organized as follows. In Chapter 2, I build a game-theoretic model to illustrate the aggression-response interaction. The rational modeling draws from bargaining models of conflict (Fearon, 1995; Powell, 1999, 2002). The model gives a stylized discussion of responding behavior using a well known and unique solution of a bargaining game (Rubinstein, 1982). In Chapter 3, I present experimental evidence for the model. For the experiment, I conduct a laboratory experiment against human subjects. In doing so, I discuss the methodology and findings of the experiment. I use an economic game (i.e. a modified dictator game) to see if individuals react to hostile behavior of their partners under an incentivized bargaining situation. The findings from the experimental study presents a stepping-stone toward the next stage of this study: applying the model to real world cases. Chapters 4 and 5 are dedicated to that task. In Chapter 4, I look into a recent case of North Korea’s artillery attack on a South Korean island, named Yeonpyeong. One of reasons that the Yeonpyeong case is chosen is the long history of hostile interactions between two Koreas. Based on the past responding behavior of South Korea, I could determine which category the response of 2010 was, while minimizing the risk of erroneous interpretation. For the investigation of the Yeonpyeong case, I conducted field work and personal interviews with relevant
persons, including government officials in South Korea. In Chapter 5, I conduct a
historical case study on the downing of a US EC-121 reconnaissance aircraft in 1969.
When the Navy’s plane was shot down, the United States did not take any actions
against North Korea, but continued reconnaissance flights in East Asia. I argue that
Nixon and his advisors, including Henry Kissinger, benefited from several domestic
and international factors that made it possible for non-response. For the 1969 case,
I examine declassified documents from the National Archive and the Naval History
Center in Washington D.C. The archival research gives sufficient evidence on how
Nixon and key decision makers evaluated North Korea’s motivation for the attack
as well as the president’s own leverage within the US politics at that time.
Chapter 2: A Model of Response

In this chapter, I develop a game-theoretic model to account for the different responding behavior of the target state. The existing literature and the empirical observation reveal that a significant portion of international crises involve non-reciprocal behavior. In other word, a state would non-proportionately react to the initial aggression, either over-responding or under-responding. Why does a target state which is capable of strong retaliation choose not to react at all? Why does a stronger state choose to show only symbolic gesture or non-military response to a weaker state’s militarized aggression? The asymmetric reaction, hence, is the main puzzle of this study. Particularly, I ask why states restrain themselves from conducting retaliatory attacks, even if they are able to. To answer this question, I emphasize two aspects of international crisis: strategic interaction and domestic politics. The stylized model presented in this chapter does not reject previous works on crisis behavior of states. Instead of repudiating existing arguments, I develop a model on top of the existing literature while incorporating domestic structure of each crisis actor. To make an account of the variation of states’ responding behavior, this chapter consists of three parts.

First, I survey models and arguments of states’ responding behavior that are
based on the bargaining literature. As discussed below, the bargaining model of war provides with a sound foundation of my model, because I frame the aggression-response interaction as a bargaining process that two competing actors are bargaining over limited resources. Second, I present a model of response that takes into account the domestic politics of both the target and the initiating states. In a stylized form, the sequential bargaining game between two actors are constructed with two-level structure: the first one at the inter-state or international level, and the second one between the leadership and domestic challenger(s) or the domestic level. This dual two-level structure of the game reveals how the subgame parameters are influencing the actor’s choice of response. Finally, I present hypotheses that explain the relationship between the responding behavior and the domestic bargaining structure.

2.1 Rational modeling of conflict behavior

Bargaining models of war

The term ‘bargaining’ has been used in political science for a long time and is still valid and useful in explaining much of political phenomena in both domestic and international politics. Schelling (1960) is considered as the first one who suggests that an international conflict be understood as a bargaining process. Along with his insightful description of conflicts, many scholars and students of IR use bargaining models to describe and analyze different types of conflict behavior as well as outcomes, regardless of the involvement of military forces.
The original model of bargaining is based on Rubinstein (1982)’s work, which most of bargaining literature, at least within IR, is relying on.¹ A bargaining situation, described in his work, is where two actors are making offers[demands] to each other, alternately, over the acquisition of limited resources. To give a brief illustration, consider that two actors (i and j) are bargaining over how to divide $10 between themselves. Actor i makes a proposal or an offer about how to divide the fund. If j accepts that offer, the bargaining ends and they receive the amount of money associated with the offer. If j rejects i’s proposal, then she may make a counter-offer. This counter-offer is, then, either accepted or rejected by i. They alternate offers until both of them agree. This game has infinite Nash equilibrium, and a satisfactory solution was not found until 1982, when Rubinstein finds that there exists a unique subgame perfect equilibrium. Rubinstein (1982)’s solution reveals an important insight in bargaining: as long as bargaining actors know each other’s payoff, they should be able to find a point that both can agree. This gives birth to a new approach in explaining the onset of war.

The most influential pieces for the bargaining theory in IR are of Fearon and Powell. Fearon (1995) argues that a war is an outcome of rational choice. Using a simple bargaining model, he finds that the model predicts countries are always supposed to prefer negotiated outcome to war because of non-zero costs of war. However, there may exist conditions that keep such preferred outcome from being achieved. Fearon lists three of such conditions as, namely, ‘information asymmetry,’

¹For the foundation of formal models of bargaining, see Rubinstein (1982); Young (1975). For a less formal, yet equally important discussion of bargaining theory in international politics, see Schelling (1960, 1966); Wagner (2010).
‘commitment problem,’ and ‘indivisibility of issue’ (Fearon, 1995). In a similar vein, Powell further discusses that causes of war are boiled down to the commitment problem (Powell, 1996, 1999). He specifically models the ‘shadow of future’ in such a way that one actor cannot be certain about whether the other actor will continue to commit to preserve the status quo in the future, where the other is likely to possess greater power.

Conflict behavior is also explained using the bargaining model. While the bargaining models in 1990s and early 2000s treat war as an outside option, later works endogenize war, making it an inside option. For example, Slantchev (2003) explains that war could occur under complete information because war itself is to be understood as a bargaining process. Elsewhere, he further argues that war could be an attractive option as states need to make their deterrent threats credible (Leventoğlu and Slantchev, 2007).

Domestic politics

What is the role of domestic politics in the formation of states' foreign behavior? Since the emergence of neo-liberalism, emphasizing the importance of domestic political variables in international relations has a long history and has led to enormous accumulation of knowledge (Milner, 1997; Moravcsik, 1997; Putnam, 1988).

Recently, increasing number of works show great interest in modeling domestic pressure/influences on the decision making process in conflict situations. In his seminal article, Fearon (1994) shows how domestic political pressure, represented as
‘audience costs,’ influences the state’s foreign behavior, especially in crisis bargaining. His message to readers is straightforward: as the bargaining state has higher audience costs, the state should bargain harder and is more likely to signal a strong and credible message to the other state due to the high costs in the event that it doesn’t meet its foreign policy objectives. In his model, audience costs, however, are not an objectively existing parameter, but something that bargainers (i.e. state leaders) may intentionally manipulate to increase their bargaining powers. For example, the Chinese leadership selectively oppresses domestic strikes and protests to send credible signals to the United States in an attempt to shape U.S. beliefs about Chinese resolve in a crisis (Weiss, 2008, 2013).

However, many works on audience costs treat them as a sine qua non to modeling domestic influence on conflict behavior. For instance, Tomz (2007) explores whether there exist such costs against the leader. However, in Fearon’s (1994) original model of domestic audience costs, state leaders (bargainers) have incentives to manipulate their own audience costs to increase the credibility of bargaining threats. Elsewhere, he also suggests that different strategies of increasing audience costs have different effects (Fearon, 1997). Political leaders - often assumed to be concerned about their tenure - are willing to do something to overcome or take advantages of domestic audience costs via various channels. When a state has to make a concession to another state, the leader would circumvent the execution of such decision and minimize the anticipated criticism. Allee and Huth (2006) find that leaders seek ‘political cover’ of an international legal system to justify decisions of concession. The leader even can claim his or her innocence by passing the responsibility to his
or her predecessor. Croco (2011) shows that domestic audiences are smart enough to punish culpable leaders while sparing non-culpable ones with the same outcomes. More recently, Levendusky and Horowitz (2012) show that leaders can avoid disadvantages caused by high audience costs even when they make empty threats. Using a series of survey experiments, they find that domestic political conditions shape the impact of audience costs: when voters are told that the president decided to back down because of new information, they do not punish the leader harshly. That is, audience costs may have little to do with judgements about the leader’s competence.

Besides all the ontological issues of audience costs, the audience cost is, at best, a public or political pressure on the decision maker. Moreover, audience costs can either increase or decrease the chance of ending a crisis peacefully. According to Fearon (1997), a ‘tying hands’ strategy can amplify the credibility of deterrent threats. However, such costly strategies and policies require support from the domestic public. If not, the leader must have a good reason to give its constituents about his decision. The leader’s ability to mobilize (or pretend to mobilize) is likely to dependent of the leader’s domestic power (e.g. public opinions, approval ratings, partisan structure in the Congress, etc.). Therefore, if the leader can successfully adopt costly actions for signaling her toughness and resolve, such choices are endogenously correlated to lower sensitivity to domestic audience costs.

Another line of thought that connects a state’s foreign behavior and its domestic politics is the leader’s incentives to take the full advantage of his or her position as a state representative to garner more supports at domestic politics. It has been argued that the leader may seek a common enemy from outside to increase its in-
ternal coherence. The ‘rally-around-the-flag’ effect (Lee, 1977) or a ‘diversionary conflict’ (Ostrom Jr and Job, 1986) is a good example. During domestic political difficulties, the leader often prefers conflict with external actors in order to divert attention away from domestic problems. Therefore, it is possible that a state leader may manipulate the direction of foreign policy to maximize his/her chance to remain in power. If it is a democracy with regular elections, the leader may seek a common external enemy to mute political opposition in the name of national security. Regardless of the regime type, policy makers may manipulate the state’s foreign and domestic policies strategically to win the necessary support of a winning coalition (De Mesquita, 2005; De Mesquita and Smith, 2010).

However, the idea of describing the leader as a homo politicus or a power-seeking being has a problem in terms of theoretical parsimony and predictability, because both directions – seeking for aggressive policies or remaining extra careful – are possible. On one hand, a diversionary conflict is plausible if the state leader finds initiating a conflict can be an attractive option in order to overcome his/her poor domestic standing (Dassel and Reinhardt, 1999; DeRouen Jr and Peake, 2002; DeRouen, 2000; Fordham, 1998a; Ostrom Jr and Job, 1986; Smith, 1996). Being more vulnerable to its domestic politics, democracies and democratizing countries are believed to be more subject to the diversionary use of forces (Mansfield and Snyder, 1995). On the other hand, the domestic vulnerability may have discouraging effects: state leaders should become more careful and passive in crisis bargaining due to domestic pressure (Mansfield, Milner and Rosendorff, 2002; Miller, 1995, 1999). Other empirical studies finds autocracies do have domestic pressure and no signif-
icant difference between democracies and non-democracies in terms of using forces against other sovereign states. Empirical studies on states’ diversionary conflict behavior indicate mixed findings (Meernik, 2001; Mitchell and Prins, 2004; Pickering and Kisangani, 2005; Richards et al., 1993; Sobek, 2007). While democracies are often believed to be more prone to domestic pressure, Chiozza and Goemans (2003) find that democracies are no more likely to initiate a crisis because of leaders’ domestic political insecurity. Focusing on China’s leadership, Fravel also contributes to this line of thought. He argues that China’s leadership would be more careful if its political authority is in danger (Fravel, 2010). In a similar vein, Yamagushi (2012) explains that China’s foreign behavior is less likely to be affected by internal difficulties, which is not aligned with the logic of diversionary conflict theory.

In sum, the domestic politics of a crisis actor is not fully described in previous models, from the inside of each actor. The audience cost based models often misunderstand and mislead the ontology of audience costs. Even if such understanding holds validity, the nature of statecraft cannot be fully explained. On the other hand, the strategic avoidance argument has suffered from limitations both methodologically and analytically. The choice of avoiding or yielding behavior has not been rationally modeled, and, thus, suffered from empirical challenges. In the next section, I construct a model that incorporates the domestic politics of both the target and the initiator. This allows us to see the strategic interaction within the bargaining model. For the simplicity and clarity of argument, I present the model formally using a two-person bargaining situation.
2.2 The model

Two states, Responder and Aggressor, enter a crisis bargaining, which has been initiated by A’s initial aggression. The dispute is about a division of a limited resource valued 1. By the status quo, the value under dispute is distributed \((Q, 1-Q)\) between \(R\) and \(A\), where \(Q \in (0, 1)\). This distribution is common knowledge. Initially, \(A\) made a threat or aggression against \(R\), causing non-zero damage to \(R\). This aggression is denoted by \(k \in (0, 1)\).

Then, the aggression-response interaction begins as \(R\) chooses between ‘react’ or ‘not react.’ If \(R\) chooses not to react at all, the crisis ends with the changed status quo, in which \(R\) gets \(Q - k\) and \(A\) has \(1 - Q + k\). Let’s call this outcome concession outcome.\(^2\) If \(R\) chooses to react, it will make a decision on how far it should respond to the initial aggression. The severity of response is \(x\), which denotes the size of the counter-demand to \(A\). Given \(R\)’s response \((x)\), state \(A\) will choose to either ‘fight back’ or ‘back down.’ If \(A\) chooses fight back, the crisis escalates into a war, which involves non-zero costs. Let us call this outcome escalation. In this case, the payoff is determined by the relative power: \(R\) gets \(p - c_R\) and \(A\) gets \(1 - p - c_A\), where \(p\) is the relative power of \(R\) and \(c\) is the cost of fighting war. However, if \(A\) chooses to back down, the crisis ends with a negotiated outcome after a limited exchanges of military actions. I call this

\(^2\)I assume that the initial aggression is pre-meditated \((k > 0)\). In reality, a provocative behavior is usually made at a minor level as the initiator calibrate the threat/aggression and anticipate the target’s reaction \((k < 1)\).

\(^3\)It is possible to distinguish a concession from non-response behavior. However, in this model I use the term concession and non-response interchangeably. The payoff associated with the choice of ‘not react’ is designed to cause negative effect on the target state, or state \(R\). And I assume that making no response at all is equal to accept what the initiator demands in the first place.
A \xrightarrow{\text{aggression (k)}} R \xrightarrow{\text{react}} R_L \xrightarrow{\text{x}} A_L \xrightarrow{\text{fight back}} \text{Escalation (p - C_R, 1 - p - C_A)}

Concession

\( (Q - k, 1 - Q + k) \)

\( R_L \xrightarrow{y} R_C \)

\( A_L \xrightarrow{z} A_C \)

Reciprocation

\( (Q - k + x, 1 - Q + k - x) \)

\( R_L \xrightarrow{y} R_C \)

\( A_L \xrightarrow{z} A_C \)

Figure 2.1: The payoffs of concession and reciprocation subgames are of subgame actors (the leader and the challenger). By assumption, the escalation outcome does not involve a subgame.

outcome reciprocation, where \( R \) gets \( Q - k + x \) and \( A \) receives \( 1 - Q + k - x \). Note that depending on the size of \( x \), this outcome can be either the restoration of the status quo \( (x = k) \), or a new status quo in favor of \( R \) \( (x > k) \) or \( A \) \( (x < k) \).

Once the bargaining is over, each state will face a domestic sub-game, in which the leader has to bargaining with the challenger over the division of the bargaining outcome. In constructing the domestic level bargaining, I make a few assumptions. First, the domestic bargaining is simplified to have two-person bargaining: the leader and the challenger(s). Although, depending on the regime type and other
domestic institutional settings, the sub-game structure could vary, I employ a simple bargaining structure because that does not hurt the concept of a two-level game (Putnam 1988) and the nature of the principal-agent relationship at domestic politics. Second, I assume that the leader has to play the domestic bargaining if the crisis did not escalate to war. The escalation outcome (i.e. war) is not likely to allow domestic challengers to play. It is more reasonable to assume that the race for the power or domestic bargaining would be paused or skipped when the state enters a war with another country, rather than the case that the domestic challenger(s) will continuously compete against the incumbent leader during a war. The path to war in previous works (e.g. the gambling for resurrection, the diversionary conflict behavior, and the rally around the flag effect) is speaking of such a strategic choice of initiating a war. In figure 2.1 I illustrate the two-level bargaining model of aggression-response interaction.

At the domestic level, if the bargaining between $R$ and $A$ ends with the concession outcome, the leader of state $R$, $RL$, is to bargain with its challenger, $RC$, over how to divide the outcome, $Q - k$. In bargaining against the domestic challenger, the leader first makes a demand of $y \in (0, Q - k)$ to the challenger. If $RC$ accepts the demand, the subgame ends, and both sub-state actors receive the agreed division: $RL$ receives $y$ and $RC$ gets $Q - k - y$. A same procedure is applied to state $A$: the leader, $AL$, makes a demand of $z$ out of $1 - Q + k$. Then, $AC$, the challenger, can either accept or reject such demand. The subgame perfect equilibrium of each

\[\text{4}\text{In a real world, the state leader likely possesses strong domestic power when conducting a war. Even if a limited war is the case, the leader is most likely to have information advantages in dealing with the domestic challengers. Such settings during a war allow the leader to have a control over domestic politics.}\]
domestic bargaining gives the payoffs as follows:

\[
U_{RL}(\text{concession}) = q(Q - k) + \delta_{RC}
\]
\[
U_{AL}(\text{concession}) = r(1 - Q - k) + \delta_{AC},
\]

where \( q \in [0, 1] \) and \( r \in [0, 1] \) represent the leader’s domestic bargaining power against the challenger in state \( R \) and \( A \), respectively. If the domestic actors fail to reach an agreement, they enter a costly competition, and \( \delta \) denotes the cost of domestic competition.

Likewise, we can define the payoff structure for the other sub-games under the ‘reciprocation’ outcome. In both states, the leaders will make demands that their respective challengers would be indifferent between accepting and rejecting demands. This gives the payoff under the reciprocation outcome as follows:

\[
U_{RL}(\text{reciprocation}) = q(Q - k + x) + \delta_{RC}
\]
\[
U_{AL}(\text{reciprocation}) = r(1 - Q - k + x) + \delta_{AC}
\]

Finally, the escalation outcome gives the full control to each state’s leader by assumption. The payoff they receive is in the form of expected utility since the final outcome is determined by the distribution of power, \( p \). The payoff of escalation is
defined as follows:

\[ U_{R_L}(\text{escalation}) = p - c_R \]

\[ U_{A_L}(\text{escalation}) = 1 - p - c_A, \]

where \( c_R > 0 \) and \( c_A > 0 \) are the cost of fighting war for state \( R \) and \( A \), respectively.

Then, the aggressor should find the demand of \( x \) acceptable if it falls in the following range:\(^5\)

\[
k - Q + \frac{p - c_R - \delta_{RC}}{q} \leq x \leq k + 1 - Q - \frac{1 - p - c_A - \delta_{AC}}{r}
\]

(2.1)

Since it is reasonable to assume that state leaders seek to maximize their expected utilities, the equilibrium response is as follows:

\[
x^* = \begin{cases} 
0 & \text{if } \frac{p - c_R - \delta_{RC}}{q} + \frac{1 - p - c_A - \delta_{AC}}{r} < 1 \\
 k + 1 - \frac{1 - p - c_A - \delta_{AC}}{r} & \text{if } \frac{p - c_R - \delta_{RC}}{q} + \frac{1 - p - c_A - \delta_{AC}}{r} > 1
\end{cases}
\]

(2.2)

The equilibrium of the model shows the relationship between the responding behavior and other variables of interest, including the domestic bargaining power of the leadership (\( q \) and \( r \)) as well as the relative power (\( p \)) and the initial aggression (\( k \)). I will discuss predictions of the model in the following section.

\(^5\)See the Appendix A for details.
2.3 Predictions

The two-level bargaining model of crisis interaction gives the equilibrium response as presented in equation 2.2. To facilitate the argument, the same equation can be put after rearranging terms as follows:

\[ x^* = k + (1 - Q) - (1 - p - c_A) + \frac{\delta A}{r} - \frac{1 - r}{r} \left( 1 - p - c_R \right) \]  \hspace{1cm} (2.3)

The equilibrium of the model confirms existing wisdom about responding behavior. The first term on the righthand side of the equation shows that the response is positively associated with the initial aggression. I discuss that most observed crisis triggers are responded proportionately through reciprocal responses. The model confirms such relationship between the aggression and the response. The relative power of the target state \( p \) is also positively associated with the optimal responding behavior: the more power the target has, the stronger response is expected.

**Proposition 2.1** (Initial threat and relative power of the target). *The response of the target increases as the initial aggression increases, \( \frac{\partial x^*}{\partial k} > 0 \). A stronger target’s response is greater than that of a weaker target, \( \frac{\partial x^*}{\partial p} \).*

In the equilibrium 2.3, the second and the third terms on the right of the equation together refer to the difference between the initiator’s status quo \( (1 - Q) \) and the distribution of power \( (1 - p - c_A) \). To see this, assume that state \( R \) and \( A \) are bargaining over the initial point of the status quo. The logic of bargaining model tells that the division of the good under dispute (e.g. territory) is determined by the
distribution of power \((p)\) and the cost of war \((c)\). From state \(A\)’s view, the division less than \(1 - p - c_A\) should be unacceptable. Therefore, the difference between those two terms reveals the initiator’s satisfaction with the status quo. Under complete information, the target knows that \(A\) has incentives to change the status quo if the current status quo is less than what \(A\) could have received based on the distribution of power. If \(1 - Q < 1 - p - c_A\), then, \(R\) anticipates \(A\) would escalate if the interaction didn’t reach a negotiated outcome. This makes the target reluctant to make a strong response. However, if the status quo is greater than what the initiator’s could have based on the power distribution,\(^6\) the target’s response will increase.

**Proposition 2.2** (Satisfaction with status quo and responding behavior). *If the current status quo is less preferred than the distribution of power by the initiator, or if the status quo is more preferred by the target, the target’s response should decrease. If the current status quo is more preferred than the distribution of power by the initiator, or if the status quo is less preferred by the target, the response is expected to increase,* \(\frac{\partial x^*}{\partial (1-Q-1+p+c_A)} < 0\).

Additionally, the equilibrium response in equation 2.3 shows that the calculus of optimal response takes account for the domestic distribution of power within the initiating state. The term \((1 - r)r^{-1}\) is the ratio of the domestic challenger’s bargaining power to the leader’s power within the initiating state. If this term has a value less than 1, the initiating leader \((A_L)\) is dominating over the challenger \((A_C)\). If it has a value greater than 1, the leader is dominated by the challenger.\(^6\)

\(^6\)Or this can be stated from the target state’s view: if the status quo is less than what the target could have based on the power distribution \((Q < p + c_A)\).
Assume that the initiating leader’s domestic power is very small, which makes the ratio much greater than 1. Then, the overall size of equilibrium response decreases. In other words, the initiating leader’s domestic power is positively related to the target’s response:

**Proposition 2.3** (Initiating leader’s domestic power and responding behavior). *As the domestic bargaining power of the initiating leader decreases, the size of equilibrium response also decreases. Or, \( \frac{\partial x^*}{\partial r} > 0 \).*

In a real world interaction, the small value of \( r \) refers to a situation that the initiating leader is overwhelmed by its domestic challenger(s). When the leader finds herself in an unfavorable condition in domestic politics, she may seek a ‘rally-around-the-flag’ effect to break through domestic political difficulties. Being aware of such weak position of the initiating leader, the responding leader would decrease the response. Note that the model only touches on the responding actor’s beliefs. That is, if the responding leader ‘believes’ that the aggression is driven by diversionary incentives, then, the response is likely to be moderated. If, however, the target state leader does not hold such beliefs or believes that the initiating leader has strong domestic power against its challengers, the response shall not be mitigated. This rationally explains the logic of strategic interaction: if the target state leader knows the domestic weakness of the initiating leader, the responding leader would believes that the aggression was motivated by domestic political purposes of the initiating state. Then, the responding behavior is to be mitigated.

At the extreme end of the spectrum of response (figure 1.1) is the choice of
non-response or a unilateral concession made by the target: the target state does not react to the initial aggression at all. Before I discuss how the model predicts the non-response of the target, I show below how the model’s equilibrium corresponds to the spectrum.

Figure 2.2 visualizes the bargaining range (i.e. the range of possible response) against the initial aggression. From the given range and the size of aggression, we can distinguish the condition for under-response and over-response, in theory. Obviously, the response is to be reciprocal or equal-response if \( x^* = k \). If the initial aggression is out of the range to the right \( (k = k_1) \), the maximum level of response is smaller than the aggression. This makes the target under-respond to the initiator. This gives the condition for under-response of the target. To put it formally,

\[
q < p - \frac{c_R - \delta_{RC}}{Q}
\]

In other words, the concern for the target state leader’s own domestic power would make the response stronger. The under-responding is expected if the responding leader’s domestic power is less than certain threshold. Thus, as the leader’s bargaining power against challenger decreases in the target state, the response is more
likely to be a over-response.

**Proposition 2.4** (Over-response and the responding leader’s domestic power). *If the target state chose to react, the response is more likely to be over-response as the domestic power of the target state leader decreases.*

On the other hand, if the lower bound of the range is greater than the initial aggression, or if \( k = k_3 \), the equilibrium response is always over-response because the minimum level of predicted equilibrium response is necessarily greater than the initial aggression. This gives an additional condition for over-response as follows:\(^7\):

\[
r < \frac{1 - p - c_R - \delta_{AC}}{1 - Q}
\]

In other words, the concern about the power distribution in the initiating state is related to the under-responding behavior. In the above condition, the initiating leader’s domestic bargaining power should be less than a threshold for the response to be under-response. As the domestic power of the initiating leader decreases, the probability that such domestic power is less than the threshold for under-response. Thus, we can hypothesize that the under-responding behavior is more likely as the initiating leader’s domestic power decreases.

**Proposition 2.5** (Under-response and the initiating leader’s domestic power). *If the target state chose to react, the response is more likely to be under-response as the domestic power of the initiating state leader decreases.*

\(^7\)The underlying condition, of course, is that the expected utility of responding is greater than that of non-responding.
Those two conditions tell an important aspect of the responding behavior and the decision making process of it. The domestic bargaining power of the responding leader plays a crucial role in the choice of over-response, while the domestic power of the initiating leader has more things to do with the under-response. As I discuss in case studies, it is possible to gauge the propensity of over/under-responding behavior by examining how much attention was paid to the initiator’s domestic power distribution, as oppose to the target’s own domestic distribution of power.

Finally, the condition for the target state to make a concession or non-responding behavior is determined by the inefficiency condition of the bargaining range. In Powell (1966)’s argument, the existence of inefficiency leads a bargaining failure (i.e. onset of war). In my model of response, however, the inefficiency condition tells that choosing to react is no longer pursuable and that choosing not to react at all should make the target better off. This is due to the structure of the bargaining. As escalation is anticipated due to the inefficiency condition, the target would choose not to react at all in the first place.\(^8\) Then, the inefficiency condition and the higher payoff of concession than that of war gives the following conditions that non-response is preferred to response:

\[
q > \frac{p - c_R - \delta_{RC}}{Q - k} \quad \text{and} \quad r < \frac{1 - p - c_A - \delta_{AC}}{1 - Q + k} \tag{2.4}
\]

The first condition in 2.4 tells that the responding leader can make a concession when her domestic standing is higher than certain threshold level. The threshold

\(^8\)The other condition is, of course, that the payoff of concession is higher than the payoff of escalation. Otherwise, the target could choose to fight war.
is determined by both system and domestic variables. Holding those variables constant, the probability that the target gives in and does nothing against the initial aggression increases as the target state’s domestic leadership has stronger power. The second condition, defined by the initiating leader’s domestic bargaining power, shows that the responding leader may view concession more profitable if the initiating leader’s domestic power is believed to be lower than certain threshold. Again, holding other variables at constant values, the chance of concession increases as the initiating leader’s domestic power decreases. Then, when the responding leader’s domestic power increases and the initiating leader’s domestic power decreases, the probability of the target’s concession increases. I hypothesize the relationship between the probability of the target’s non-responding behavior and each leader’s domestic power as follows:

**Proposition 2.6** (Domestic bargaining powers of both leaders and non-responding behavior). *The choice of non-response (or concession) becomes more likely as the responding leader’s domestic power increases and the initiating leader’s domestic power decreases.*

**2.4 Discussion**

There have been numerous works and models that attempt to incorporate domestic politics into crisis bargaining (Mo, 1995; Tarar, 2001; Trumbore and Boyer, 2000; Wolford, 2007). The model in this study is different from previous modelings in that it is structured to entail both states’ domestic politics. The purpose of the
dual two-level structure is to explain how each other’s domestic bargaining relates to the bargaining behavior at the international level. By having two state leaders have a common knowledge about each other’s domestic politics, the bargaining behavior at international level is also subject to the domestic politics of each other. As the model explicitly stylizes such strategic interaction, it allows us to examine the relationship between foreign behavior and other strategic considerations, including diversionary behavior and strategic conflict avoidance. Although this may increase the complexity of the model, the underlying logic is not very complicated: state actors think and act strategically to maximize their utilities in such a way that they consider other states’ internal variables as well as external ones.

The use of bargaining model has both merits and shortfalls. First, it allows us to explicitly describe the sequence of moves, which corresponds to the real world interaction during an international crisis. While all of actions are not necessarily observable to the other, the bargaining model presumes that making demands and choosing whether or not it accept demands are all parts of communication. In an international crisis, a direct communication often becomes limited. It is observed actions through which decision makers could form beliefs about each other. Also, a general form of bargaining gives a range of possible response (the bargaining range). Regardless of the payoff structure, the bargaining model yields a theoretical range of acceptable demand. Then, we can learn more about the bargaining outcome as well as the variation in responding behavior. As I hypothesize (2.4 and 2.5), the variation of responding behavior is explicitly explained by the domestic as well as system variables. For instance, an excessive retaliation (over-response) against an
external aggression is plausible when the responding leader’s domestic power is low because \( q \rightarrow 0 \) increases the minimum of the range. On the other hand, the strategic nature of crisis bargaining is also articulated through the model: the under-response is expected (proposition 2.5) when the initiating leader’s domestic power is believed to be low, and even a non-response is expected if the initiating leader’s domestic power is lower than a certain threshold (proposition 2.6).

As most modeling processes do, the model presented in this chapter also simplifies reality. In simplifying an international crisis bargaining, I build the model on some assumptions. First, I assume that the domestic subgames is structured as an identical bargaining game between the leader and the challenger(s). However, the domestic subgame may have different structures across countries. I brushed such institutional differences of crisis actors in a single stroke. This simplification, I believe, can be forgiven since the model aims to explain the influence of domestic consideration on responding behavior, not to see the effect of institutional design of domestic bargaining per se. It is also acceptable if we agree that crisis bargaining often involves pressure on the time window for quick decisions. When a response to external aggression is established, the usual process of domestic institution may or may not be relevant (think of how the Kennedy administration addressed and decided its response to the Soviet during the Cuban Missile Crisis). The pressure created by a crisis indeed makes the domestic process simpler than non-crisis situation. Therefore, it is reasonable to assume that all domestic subgame is boiled down to the bargaining between the leadership and major challenger(s). Then, the domestic subgame is the political bargaining process between the incumbent leader
and the challenger over how to divide the outcome payoff from the international bargaining. Second, the model and the equilibrium is based on a complete information assumption. In a real world, the decision makers may not have complete information about everything. Under a crisis, the limitation on information makes more sense. However, the model is more interested in how the responding state (and its leader) ‘believes’ the relevant variables. As the bounded rationality theory argues, decision makers do not have completely rationalized tools for precessing information. The urgency of crisis decision makes it even more limited for leaders have full information and time to process it. The crisis decision making is likely to involve incomplete information; but the ‘incompleteness’ may not bother the decision making process. The target state should build its response with incomplete information. I, therefore, treat those variables in the model as the believes of the responding leader against the initiating leader and so on. It is how the decision makers perceive and beliefs the given information that drives the process, not the objectively existing parameters.9

To sum up, Although the model has limitations due to its assumptions on the structure of domestic bargaining, it depicts the aggression-response interaction in a way that not only confirms the existing literature, but also sheds additional lights. First, it confirms the logic of reciprocity and the power-begets-action argument: a

9In discussing the information problem, I mainly address the limitation of acquiring information about domestic bargainings. Specifically speaking, the uncertainty can be happening in two variables in the model: the cost of domestic competition/fighting on the challenger in the target (δ_{RC}) and in the initiator (δ_{AC}). Then, the dual two-level bargaining game yields the complexity of information asymmetry in four possibilities (1) the leader (RL) has complete information about his own domestic bargaining (δ_{RC}) and the initiating state’s domestic bargaining (δ_{AC}); (2) has only information about its own domestic bargaining (δ_{RC}); (3) has only information about the initiator’s domestic bargaining ((δ_{AC}); and (4) has no information about both subgames. In the appendix, I address the second possibility of incomplete information (RL knows δ_{RC}, but not δ_{AC}).
minor aggression is expected to be responded by a weak response, while a strong aggression is punished more harshly. Also, the more power the target state has, the stronger its response is. Second, the two-level model reveals that the pattern of strategic conflict avoidance is discovered during the target state’s responding behavior. The model rationally and explicitly argues that the target state has incentives of strategic conflict avoidance: if the responding leader believes that the initiating leader suffers from weak domestic power and that the triggering aggression or threat is intended for a rally-around-the-flag effect, the response should be mitigated. Third, the introduction of domestic bargaining explains that the target state’s domestic situation can have either positive or negative influence on the responding behavior. If the leader of the target state experiences serious political challenge at domestic level due to the leader’s weaker bargaining power against the challenger, a weak response could endanger the leadership because it would be an easy target for criticism. However, if the responding leader has strong domestic power vis-à-vis its challenger(s) at domestic level, the leader may have more freedom in making response to external actor. In a worst case that the international bargaining ends in an unfavorable outcome (i.e. a concession outcome), the leader could overwhelm its domestic challenges using the high level of domestic bargaining power.

The next step of the modeling process is to test if the model correctly predicts rational actors’ behavior in the real world. In the following chapters, I employ

10 However, this prediction between the power and the response should be discussed with caution since previous studies using empirical data show controversial evidence for this type of argument. The relationship between the optimal response and the power is not defined as a simple equation. The effect of power, even though its direction may be constant, varies depending on other variables in the model. For instance, the net effect of power on the response is contingent on the initiating leader’s domestic power.
multiple methods to test the arguments developed from the model. Chapter 3 reports the result of a lab experiment, which I conduct against human subjects to see if individuals react to others’ hostile action as the model predicts. In chapters 4 and 5 I apply the model to historical international crises and explain the target state’s responding behavior based on the model prediction.
Chapter 3: Experimental Evidence

In this chapter I use a laboratory experiment to test if individuals respond to others’ hostile action in the way the model of response predicts. I use an experimental approach for several reasons. First, an observational study is limited because of data availability and possible selection bias. Existing data, including event data, is likely to omit cases in which a minor crisis trigger was never responded to at all. Even if such a crisis is included, the choice of non-response is hardly coded in existing datasets (for instance, the lowest level of response in the International Crisis Behavior dataset is a ‘verbal condemnation’). Second, the most problematic part is that a measurement error is inevitable, and it could cause bigger issues. It is difficult to define reciprocity in states’ behavior in the real world. When the target state makes a responding action against the initiator, we cannot tell for sure if it is concession, or under-response, or over-response without looking into the context of the interaction.

For example, China conducted a series of missile tests in 1995, which was allegedly a response to a provocative speech made by Lee Teng-hui, then president of Taiwan.¹

¹The crisis was triggered by then president Lee Teng-hui’s speech, delivered at Cornell University. The speech was regarded as a bold and symbolic step out of Taiwan’s decade and a half long isolation. In the speech, Lee repeatedly used the phrase “Republic of China on Taiwan,” which was taken by Beijing as a challenge to the “One China” policy. In response to Lee’s provocative speech, the PRC conducted a series of missile tests from July 21 to 26, and from August 15 to 25. Missiles fell only 80 to 85 miles north of Taiwan. During the August tests, China also conducted a navy-air joint exercise in waters within 250 nautical miles off Taiwan. Missile tests and military demonstrations continued in early 1996. In March 1996, the PRC fired ballistic missiles that
A military response to a verbal threat seems to be an over-response or retaliative measure. However, it is also possible that the Chinese government took Lee’s speech as a serious step toward a declaration of independence, which the PRC viewed as being a declaration of war. Then, the force demonstration and missile exercise may be seen as a more of a reciprocal response. Thus, it is difficult to have a universally applicable measurement for states’ foreign behavior or diplomatic actions. Third, an experimental approach can provide with a useful leverage on variables of interest as needed. It is nearly impossible for researchers to find well balanced and contrasting samples in real conflicts and crises. Some variables are simply beyond our reach. For example, explanatory variables of this study include beliefs held by the decision maker(s) of the target state. No structured dataset has collected variables of this sort. Experimental design can be a remedy to this. In analyzing the decision making process, researchers face the ‘black box’, inside of which is not observable. Based on rational modeling, the experimental design can manipulate such beliefs and observe how different beliefs lead to different behavior. Lastly, crisis bargaining is a good place to use experimental design. In both empirical and theoretical senses, an international crisis or decision making under a crisis situation involve deliberate and strategic processes. One advantage of using experimental design is that we can grasp the inside mechanisms of the decision making process, which is often unaccessible. The main unit of analysis of this study is the decision maker(s): their choice of response to external aggression or threat in a crisis situation. Since I already landed near the Keelung port, only 23 miles from Taiwan’s northern coast. The PRC’s missiles offensive ended on March 15, 1996.
built a model of response, a well designed experiment can give us important clues about how decision makers would have made their decisions, which is impossible to observe otherwise.

3.1 Objectives of the experiment

I conduct two experiments: one using an experimental game, and the other using a survey experiment. Both types of experiments are widely used in the literature (Druckman et al., 2006; Mintz, Yang and Mc Dermott, 2011; Sieberg et al., 2013). In the first experiment, I use a bargaining game to test the internal validity of the model: I look for the comparative statics of the experimental result in comparison to the model’s prediction. In the survey experiment, I ask a foreign policy question to subjects to see how they respond to a fictional scenario of an international crisis (Gaines, Kuklinski and Quirk, 2007; Tomz, 2007).

Although the two experiments aim at different objectives (the first one is targeted toward the internal validity of the model and the second one toward the model’s external validity), the overall purpose of the experimental design is to test the model within a controlled laboratory.\(^2\) Theory testing involves, in general, two aspects. On one hand, the testing addresses the internal validity of the theory under investigation. If the given theory has internal validity, the expected outcome should be observed during the experiment. I present a two-level bargaining model,

---

\(^2\)Experimental approaches are not new in conflict studies. For a general overview of experimental approaches in IR, see Mintz, Yang and Mc Dermott (2011). According to Mint and others (2011), experiments can used for three purposes: theory testing (speaking to theorists), data generating (searching for facts), and policy application (searching for meaning).
which predicts several patterns of responding behavior in an international crisis bargaining. Therefore, the experiment is designed to test whether the predicted behavioral pattern is observed. The main issue regarding the internal validity is the transition of the unit from states to individuals. As discussed in the following section, the experimental game is designed not to give up the two-level structure while increasing the internal validity of the experiment. On the other hand, theory testing sometimes encourages researchers to obtain external validity of the model. That is, the theory being tested is assessed in terms of how relevant it is to the world outside the laboratory. Theories and arguments of IR are, therefore, required to pass the test of whether they contribute our understanding of states’ actual behavior. However, the use of a subject pool involves inevitable limitations. For instance, this study recruits human subjects from college students, while the model is about a state’s responding behavior under crisis. However, the claim of external validity against an experimental study is under debate (Druckman and Kam, 2009; Kam, Wilking and Zechmeister, 2007; Mintz, Redd and Vedlitz, 2006; Mook, 1983; Stevens and Ash, 2001).

Both experiments were conducted against human subjects in a controlled laboratory. That is, the observed behavior is of individuals, not that of sovereign states. Following the modeling process in the previous chapter, I assume that any individual subjects are able to make choices as strategically as state leaders under a crisis do. For this assumption not to disturb my arguments, the experiment needs to be so straightforward that average subjects can understand the logic of strategic interaction.
To test propositions drawn from the model in Chapter 2, I use comparative
statistics: comparing the result of the experiment to the model’s prediction in terms
of the direction and statistical significance of key parameters. Regarding specific ar-
guments to be examined, I test the effect of the following variables on the size of
response: the initial aggression \((k)\), the relative power of the target \((p)\), the target’s
satisfaction with the status quo \((p + c_A - Q)\), the domestic bargaining power of the
responding leader against its domestic challengers \((q)\), and the domestic bargaining
power of the initiating leader \((r)\). The main argument of this study, however, is two
fold as illustrated in figure 3.1. First, while the logic of reciprocity holds \((\frac{\partial x}{\partial k} > 0)\),
the response decreases as the target state believes that the initiating leader’s domes-
tic power decreases.\(^3\) This aligns with the ‘strategic conflict avoidance’ argument,
which predicts that the state would rather accommodate other states’ demand if
a diversionary conflict behavior is expected. Second, the chance of concession by
the target increases as the initiating leader has weak domestic power and as the
responding leader has strong domestic power. As the model predicts (2.6), I expect
that individuals are more likely to refuse to react as the condition for concession is
met.

In the following section, I describe the structure of the experimental game and
the treatment for the survey experiment. Then, I present the results of both exper-
iments with further discussion of how the model explains the responding behavior

\(^3\)The equilibrium concept always predicts the maximum level of demand that can be strategically
acceptable. However, actual behavior may not reach such limit. Instead, the model predicts certain
range (i.e. the bargaining range that both actors would agree) that the target state’s response
should be made. If the bottom line of the response goes below zero, the target state would not
react to the aggression at all. Acknowledging the subject-based error, I will look for a tendency of
subjects’ responding behavior in a given treatment.
Figure 3.1: The size of response increases as a function of the initiating leader’s domestic power ($r$). It also increases as the initial aggression ($k$) changes from $0.1$ to $0.5$ to $0.8$. The response size at $0$ means that the target abstains from making any response. As illustrated, the length of non-response is contingent on the size of the initial aggression. I expect that the probability of concession (non-response) decreases in $k$ and $r$.

of individuals in a bargaining situation.

3.2 Experimental design and hypotheses

Since the experiment is conducted using human subjects, the unit of observation is moved from a sovereign state to an individual. This shift poses two challenges. First, individual subjects are unlikely to have any experience in inter-state crisis bargaining or decision making under international conflicts. Therefore, it seems irrelevant or impossible to test their crisis bargaining behavior. Second, the model’s major interest is the condition of each state’s domestic politics, which an individual human doesn’t have. The gap between a collective actor (state) and a unitary actor (individual) yields an important obstacle in the experimental design for the study.
To address those obstacles, I employ two different experiments. Given individuals have least experience in decision making process under international crisis, I use an experimental game, in which most individual subjects feel relevant and incentivized regarding the context and choices. For the direct connection between the individual’s choice of action and the state’s responding behavior, I simply ask them how they would react to a foreign crisis if they were in the position of a decision maker.

Experimental design

I construct a bargaining game, which is based on the idea of Diekmann’s modified dictator game (Diekmann, 2004). His modified dictator game is more similar to the setting of an ultimatum game. In an ultimatum game, a ‘proposer’ initially proposes how to split a given amount of money. Then, a ‘responder’ decides whether to accept or reject the proposal. If it is accepted, the game ends and each keeps the proposed amounts. If rejected, both of players gets nothing. Although most experimental studies based on the ultimatum game focus on the idea of fairness or inequity aversion (Bolton, Katok and Zwick, 1998; Fehr and Gächter, 2000), the game has also provided ways to test punishing behavior. Earlier works often interpret the choice of costly punishment as a propensity to reciprocate (Fehr and Gintis, 2007; Fehr, Fischbacher and Gächter, 2002). However, recent works suggest

4The dictator game is slightly different. The dictator simply decides how to divide the money, and the recipient has no choice but receives whatever the dictator leave to him. Thus, a dictator game used to see if an individual behaves as the *homo economicus* model predicts: if individuals were only concerned with their own economic well being, the dictator would allocate the entire amount to himself and give nothing to the recipient.

5In some studies, the outcome of rejection involves some costs in order to induce a ‘costly’ punishment.
that a simple rejection cannot capture the reciprocity in a sufficient way (Yamagishi et al., 2012).⁶

Diekmann (2004) suggests that the game should include two rounds to observe/test subjects’ reciprocal behavior. In his experiment, he modified the normal protocol of the ultimatum game by making it have two rounds. In the first round, \( P_1 \) unilaterally decide how to divide certain amount of money, say $10. He can put all $10 in his pocket, or leave as much amount as he wishes to \( P_2 \). Once \( P_1 \) makes a proposal of how to divide the fund, \( P_2 \) can either accept or reject that proposal. If \( P_2 \) accepts, each player receives proposed amounts by \( P_1 \). If \( P_2 \) rejects, there will be non-zero cost, while the initial fund will be gone. In the second round, the order of play is switched: \( P_2 \) makes the initial proposal, and \( P_1 \) chooses to either accept or reject. Since two players repeat the same game, but with changing roles, the modified structure captures reciprocating behavior, because it directly observes how the second player rewards or punishes the first player as she has observed the first player’s final decision. If the second turn were not introduced, the second player’s propensity of reciprocation may not be properly observed.

The experimental game is illustrated in figure 3.2. In this study, two players (\( P_1 \) and \( P_2 \)) bargain over how to divide 100 tickets. Each ticket will be rewarded at the end of the game by cash value. However, the rewarding process involves a discounting factor, which I discuss later. At the beginning of the game, the tickets are randomly distributed between \( P_1 \) and \( P_2 \). This initial distribution (\( Q, 100 − Q \)) is

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⁶Yamagishi et al. (2012) find that the second mover’s rejection in the ultimatum game may not account for the negative reciprocity. They show, in a series of different experiments with same subject, that there exists inconsistency between punishing behavior and reciprocating behavior of individuals.
common knowledge. To cause a hostility against $P_1$, $P_2$ unilaterally takes a random number ($k$) of tickets from $P_1$. Then, $P_1$ is asked whether or not he will react to $P_2$’s hostile action. If $P_1$ chooses not to react, the game ends in ‘concession’ outcome, where the distribution is changed to $(Q - k, 100 - Q + k)$. If $P_1$ chooses to react, he is asked to input exact number of tickets ($x$) to take back from $P_2$. This amount captures the responding behavior to the initial aggression. Then, $P_2$ can either accept or reject $P_1$’s reaction. If $P_2$ decides to accept, the game ends in ‘reciprocation,’ and the distribution is changed again to $(Q - k + x, 100 - Q + k - x)$. If $P_2$ decides to reject, the game ends with ‘escalation’ outcome, in which both players play a costly lottery. Each player is told his probability of winning the lottery at the beginning of the game. This probability is randomly generated per round and

\[\begin{align*}
\text{Concession} & : q(Q - k) + d_i, \\
& \quad r(100 - Q) + d_j \\
\text{Reciprocation} & : q(Q - k + x) + d_i, \\
& \quad r(100 - Q + k - x) + d_j \\
\text{Escalation} & : 100p - c_i, \\
& \quad 100(1 - p) - c_j
\end{align*}\]

Figure 3.2: The structure of the experimental game

\[\begin{align*}
\text{Concession} & : q(Q - k) + d_i, \\
& \quad r(100 - Q) + d_j \\
\text{Reciprocation} & : q(Q - k + x) + d_i, \\
& \quad r(100 - Q + k - x) + d_j \\
\text{Escalation} & : 100p - c_i, \\
& \quad 100(1 - p) - c_j
\end{align*}\]

In this experiment, $P_1$ is player by a human subject and $P_2$ is by a pre-programmed computer. Thus, $P_2$’s initial move of taking $k > 0$ tickets from $P_1$ causes some losses to the human subject’s utility (aggression).
also known to both players: \( p \) for the chance of \( P_1 \)'s winning and \( 1 - p \) for \( P_2 \). There is non-zero cost for playing the lottery. So, the winner of the lottery gets all 100 tickets less the cost of the lottery (\( c \)). Once the bargaining is finished, each player’s tickets are rewarded using two parameters: reward rate and agreement bonus. The reward rate is a randomly generated number between 0 and 1 for each player: \( q \) for \( P_1 \) and \( r \) for \( P_2 \). The agreement bonus is presented in a dollar value: \( d_1 \) for \( P_1 \) and \( d_2 \) for \( P_2 \). Then, the final reward of \( P_1 \) is determined as follows:

\[
U_1 = \begin{cases} 
100p - c_1 & \text{if the game ends in escalation} \\
q(Q - k) + d_1 & \text{if the game ends in concession outcome} \\
q(Q - k + x) + d_1 & \text{if the game ends in reciprocation outcome}
\end{cases}
\]

The reward of \( P_2 \) is defined in a similar way:

\[
U_2 = \begin{cases} 
100(1 - p) - c_2 & \text{if the game ends in escalation} \\
r(100 - Q + k) + d_2 & \text{if the game ends in concession outcome} \\
r(100 - Q + k - x) + d_2 & \text{if the game ends in reciprocation outcome}
\end{cases}
\]

Note that the final reward values are identical to the payoff structure in the model. By common knowledge, \( P_2 \), the human subject, knows that \( P_1 \) has a similar utility function as listed above. This allows \( P_1 \) to think further and anticipate how \( P_2 \) would react to his/her choices. For instance, \( P_1 \) may want to be careful in

---

\(^8\)The cost of playing the lottery is also randomly assigned to \( P_1 \) and \( P_2 \), respectively. For the simplicity of the game, the cost is to be deducted from the winner’s reward value.
deciding how many tickets he will take back from $P_2$ (on the second decision node), because $P_1$ believes that $P_2$ would reject his counter-move of taking $x$ tickets if that will make $P_2$’s final reward from reciprocation lower than that from escalation. At the same time, $P_1$ wants to secure as many tickets as possible to maximize his final reward value. In this way, I expect that the subject pays attention to the reward rate of $P_2$ as well as his own.

The survey experiment is designed as a post-test-only control group design. In the survey experiment, I have subjects read a scenario of an international crisis and observe their choice of responding strategy on the side of the target state. I use the Hainan Island Incident (or the Spy Plane incident) between the United States and China in 2001. The general description of the crisis is based on a real incident; but the details related to the decision making process were fabricated for the purpose of the experiment. Subjects are not told about such fabrication until the end of the experiment (the crisis scenario used in the survey is in Appendix C). After reading the crisis scenario, subjects are given another page showing the list of possible response options on the side of the target state. They also read some key intelligence that the decision maker considered during the incident. Then, I ask them to step into the shoes of the decision maker of the target state, and choose which of the listed options is the most appropriate response.

The experiment treatment is delivered in the intelligence briefing given to the subject. To see the effect of strategic consideration on the initiator’s internal difficulties as well as that of the domestic pressure, I give them two different treatments:

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9For different types of experimental design, see Campbell and Stanley (1963).
Table 3.1: Each subject is randomly assigned to one of four groups. Control group (group 4) receives irrelevant information. Experimental scenarios and treatment messages are presented in the appendix.

<table>
<thead>
<tr>
<th>Group</th>
<th>Message</th>
<th>N</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>China faces internal instabilities during the crisis</td>
<td>52</td>
<td>(25.7%)</td>
</tr>
<tr>
<td>Group 2</td>
<td>US faces domestic pressure for strong response</td>
<td>51</td>
<td>(25.3%)</td>
</tr>
<tr>
<td>Group 3</td>
<td>Message of Group 1 and Group 2</td>
<td>48</td>
<td>(23.8%)</td>
</tr>
<tr>
<td>Group 4</td>
<td>No treatment message (control group)</td>
<td>51</td>
<td>(25.3%)</td>
</tr>
</tbody>
</table>

one that emphasizing the domestic instability of China, and the other that highlights the domestic pressure of the United States for a strong response. For the test of each treatment’s effect, I divide the sample into four groups. Then, subjects are randomly assigned to four groups, and each group has different treatment messages. Each group had roughly 25% of participants (see table 3.1). The first group is assigned to read the intelligence indicating that the leadership of China was facing significant domestic opposition in 2001 and that the provocation was likely intended to distract its domestic attention from the leaderships’ political difficulties. The second group receives intelligence about the domestic politics of the United States: the public of the United States was concerned about the possible decline of the power of the United States, particularly in Asia, so that most people supported a stronger response. Subjects in the third group read a mixed message that contains both intelligence about China’s internal instabilities and the domestic pressure for a strong response in the United States. And lastly, the fourth group (control group) didn’t receive any message related to the domestic instabilities or pressure in either
Hypotheses

The experimental design described in the previous section is intended to link the model and the experimental game. As noted earlier in this chapter, there are gaps between the model and the experimental setting, because the experiment is conducted against human subjects while the model predicts state behavior. Having solved the issue of linking the model and the experiment, I articulate testing hypotheses in the language of the experiment. Since the game is structured by following the logic and payoff structure of the model, the testing of hypotheses on individual subjects’ behavior is also the assessment of the model’s validity. Therefore, experimental hypotheses are just a translation of the propositions in Chapter 2.

First, I test hypotheses that correspond to three existing arguments about responding behavior. The conventional wisdom of action-reaction arguments predicts a Richardsonian reciprocity. That is, the response increases as the initial aggression increases (proposition 2.1). According to this old concept of ‘an eye for an eye’, the participant is expected to take as many tickets as the computer has taken in the first move. This gives a simple and mechanical action-reaction behavior, which can be hypothesized as follows:

**Hypothesis 3.1.** The participant would take more tickets from the computer as the number of tickets the computer has taken increases (The target state’s response
becomes stronger as the initial aggression increases in its absolute size).

The subjectively defined threat perception also matters. For the responding actor to react, she needs to perceive the aggression, and the relative size of threat/aggression matters more than the absolute size does. On one end, the response could be smaller than expected if the target perceives the aggression to be not as severe as it looks. The response, on the other end, could be greater than expected if the target feels the aggression damages her welfare more seriously than it appears. Therefore, I expect that the participant would take more tickets as her perception of damage increases. Since I didn’t ask about the human player’s subjective feelings about the computer’s hostile action, I looked at the relative size of aggression, as opposed to the absolute size: the percentage of tickets the computer has taken from the participant to the total tickets of the participant’s initial share, or simply the size of aggression divided by the participant’s initial share \((\frac{K}{Q})\). Then, the relationship between the responding behavior and the relative size of aggression is hypothesized as follows:

**Hypothesis 3.2.** The participant takes more tickets from the computer as the percentage of tickets taken by the computer increases (The response increases as the target perceives the aggression more severely).

The model predicts that the response tends to increase in the relative power of the target (proposition 2.1). In the experimental game, the participant is expected to follow a similar pattern: she would find little reason to avoid the lottery if her chance of winning the lottery is high, and vice versa. Since the lottery is costly, I
expect that participants would prefer that the computer not reject the counter-move. If the probability of winning is high, however, this would make the participant be more aggressive in taking tickets from the computer without worrying about the lottery.\textsuperscript{10} I expect that the subject’s responding behavior changes as her probability of winning the lottery varies:

**Hypothesis 3.3.** As the participant’s probability of winning the lottery increases, the participant will take more tickets from the computer to punish its hostile behavior because the participant has less fear about going to the lottery (The response increases as the target’s relative power increases).

On the other hand, the cost of conflict also has something to tell about the responding behavior. A war is believed to be inefficient in most cases, because it imposes huge costs. Such costliness makes a war the least preferred outcome for states. Likewise, the lottery is not preferred by players of the game, if it incurs high costs. Therefore, if the player knows that the cost of playing the lottery is high, she would try to avoid the lottery as much as possible. Also the cost for playing the lottery would discourage the participant from making a bold move in responding to the computer’s hostile behavior. As the cost of the lottery increases, the participant has less incentive to punish the computer’s aggression and the response should decrease.

**Hypothesis 3.4.** If all else is equal, the participant should take fewer tickets from

\textsuperscript{10}Two explanations are possible here. First, the participant would be confident in playing the lottery if the computer rejects. Second, the participant could be certain that the computer would not reject his/her counter-move given the computer’s low chance of winning the lottery.
the computer as the cost of the lottery increases (The response decreases as the target state has higher costs of war).

The model equilibrium predicts that the response will decrease if the responding actor is satisfied with the current status quo (proposition 2.2). If the participant believes that her initial share is sufficiently large, so the tickets taken by the computer don’t significantly harm her utility, then the participant is less likely to make an aggressive response. I expect that the larger the participant’s initial share is, the less the participant will take from the computer in response to its aggression.

**Hypothesis 3.5.** As the participant’s initial share is larger than what she could expect from the lottery, the player will take fewer tickets from the computer’s share in response to the computer’s hostile action (The response decreases as the target state is more satisfied with the status quo).

Now consider propositions related to domestic subgames of each state. The equilibrium response is also a function of the domestic bargaining power of the initiating leader. That is, as the initiating leader’s domestic power deceases, the response also decreases because the target anticipates diversionary incentives of the aggressor (proposition 2.3). In the experimental game, the participant is expected to have a similar capability of strategic thinking: the player is careful in making the decision of how many tickets he/she would take back from the computer in order to avoid an unwanted lottery.

**Hypothesis 3.6.** As the computer’s reward rate decreases, the participant will become more forgiving and take fewer tickets from the computer. And, as the
computer’s reward rate increases, the participant will take more tickets from it to punish the computer’s hostile action.

The target state’s domestic power distribution also matters. The model predicts that the target state’s domestic subgame has do to with the lower bound of the range of possible response, while the initiating state’s domestic game relates to the upper bound of the range (range 2.1). This gives more refined predictions about the type of response. First, over-responding behavior is more likely as the responding leader’s domestic power decreases (proposition 2.4). Participants of the experiment face similar incentives to over-respond to the computer’s hostile action. When the participant’s reward rate is low, the only way to increase the final reward value for the participant is to take more tickets from the computer. Therefore, I expect a negative relationship between the number of tickets the participant takes from the computer and the reward rate of the participant:

**Hypothesis 3.7.** As the participant’s reward rate increases, the participant becomes generous and takes fewer tickets from the computer than the computer took from the participant. And, as the participant’s reward rate decreases, the participant will be more aggressive and likely to take more tickets from the computer in order to maximize her earnings (Over-responding is more likely when the responding leader’s domestic power is weak).

Next, under-responding behavior is predicted by the model: as the initiating leader’s domestic power decreases, the target would be more likely to under-respond to the aggression (proposition 2.5). In the experimental game, the participant should
become more forgiving (taking fewer tickets than the computer did) as she learns that the computer’s reward rate is sufficiently low.

**Hypothesis 3.8.** As the computer’s reward rate decreases, the participant becomes more forgiving and is likely to take fewer tickets than the computer did. And, as the computer’s reward rate increases, the odds of under-responding behavior of the participant decrease (Under-responding is more likely when the initiating leader’s domestic power is weak).

Finally, the model also predicts the responding actor’s choice of concession under certain conditions: the target state will concede to the initiating state’s demand if she finds no response is possible and if concession doesn’t lead to a significant loss. The two conditions together predict when the non-response is more likely (proposition 2.6). In our experimental setting, the concession corresponds to the choice of ‘not react’ by the participant on the first decision node. If the participant has a high reward rate, then the choice of concession should have small impact on her final reward. Also, the computer’s low reward rate should increase the participant’s fear of escalation, because she knows that the computer would reject her counter-move if it could severely harm the computer’s final reward.

**Hypothesis 3.9.** As the computer’s reward rate decreases and the participant’s reward rate increases, the participant becomes more likely to abstain from making a counter-move against the computer (The target state leader is more likely to make a choice of concession/non-response as the responding leader’s domestic power increases and the initiating leader’s domestic power decreases).
3.3 Results

For the actual execution of the experiment, I use zTree (version 3.4.7) to program the game and run it on eight PC computers in a controlled laboratory at the University of Maryland. I recruited subjects from the Government and Politics department’s undergraduate recruitment pool. Experiments were run for two weeks, and 202 students participated in ten sessions of the experiment. Each session had eight subjects at maximum. All subjects participated voluntarily and were incentivized with a course credit as well as cash compensation up to $5 (details of experiment conduct is in Appendix B).

For the experimental game, the participant plays the same game for 15 to 20 rounds in order to increase the number of observations and the credibility of the experiment. When the experimental game is finished, participants were immediately directed to the survey experiment. The survey experiment was also programmed using zTree, but the treatment was randomly assigned regardless of the subject’s performance in the experimental game.

Findings from the experimental game

The 202 participants played 2,881 rounds of the experimental game in total.\footnote{In the actual execution of the experiment, subjects played both the initiator and the responder. In each round, the participant’s role was randomly assigned to be the initiator (25\% of chance) and the responder (75\% of chance). The actual number of total rounds is 3,930, and in about 73\% of them subjects played the responder.} In more than 77\% of them, participants chose to react to the computer’s hostile action. On average, the computer took 20.9 tickets from its human counterpart in
its first move. The number of tickets the computer took from the subject ranged from 1 to 77. The distribution of initial aggressions is provided in figure 3.3.

Figure 3.4 gives a first look of how subjects responded to the aggression. Participants’ inputs of response are roughly scattered around the 45 degree line, which represents a hypothetical perfect reciprocating behavior. The tendency of reciprocal response is also illustrated in figure 3.5. After rescaling, the mean of difference between the response and the aggression is about .02, while the median is nearly
zero. This means that most responses are made in a reciprocal manner. For further description, I broke down responses into three categories: under-response, equal response, and over-response. If the subject’s response is smaller than the mean of response by one or more standard deviation, the response is categorized as ‘under-response.’ If it is greater than the mean by one or more standard deviation, I categorize the response as ‘over-response.’ The rest of the inputs, which fall within one standard deviation of the mean in both directions, are labeled as ‘equal-response.’ Table 3.2 shows the summary statistics of key parameters by types of response. About three quarters of responses are recognized as ‘equal’ – within a standard de-
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<td>(.26)</td>
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<td>.51</td>
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<td>(.24)</td>
<td>(.25)</td>
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<td>.54</td>
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<td></td>
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<td></td>
<td>(100%)</td>
<td>(.25)</td>
<td>(.25)</td>
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Table 3.2: Summary statistics of key parameters by response type. A participant’s response is categorized as under-response if it is less than the mean of all responses ($\bar{x}$) by one standard deviation or more; over-response if greater than the mean by one or more standard deviation; and equal if between the mean $+/-$ one standard deviation. *Difference is computed by subtracting the initial aggression from the response. Entries are mean values of variables (standard errors in parentheses).

viation from the mean of total responses. On average, participants took almost 7 tickets from the computer when under-responding; 21 tickets when reciprocating; and 50 tickets when over-responding.

The next two parameters in table 3.2 are of interest to this study. The mean value of the participants’ reward rate is decreasing, by small amount, as the category of response changes from under to equal to over-response. The difference of mean between the under-response group and the equal-response group is -.03, which is statistically significant at the .05 level (p-value is .0397 for a two-tailed test). The difference of mean between over-response and equal-response is -.02, which is narrowly statistically significant at the .1 level (p-value is .0913 for a one-tailed test). The computer’s reward rate, on the other hand, tends to increase as the response
Figure 3.5: Histogram of differences between response and aggression. The difference is measured after standardizing scales of response and aggression to range between 0 and 1.

Increases. The differences of mean between two groups – under vs. equal and over vs. equal – are .03 and .04, respectively. Both are statistically significant, at the .05 and the .01 level, respectively (in a one-tailed test). This result partially supports hypotheses 2.4, 2.5, and 2.6.

Table 3.3 reports the result of a linear regression. Since the data were collected from 202 subjects over repeated plays of the same game, a time-series cross-section model with random effects is used. In model 1, the dependent variable is the number of tickets the individual subject takes from the computer in a given round. Four variables turned out to have significant effect on responding behavior.
First, the size of response is highly associated with the size of aggression: the more tickets the computer has taken, the more tickets the subject takes back from the computer. The coefficient for the size of aggression is about .9 (close to one), meaning that the subject responds to the computer by taking .9 tickets on average per each ticket the computer takes from her. This reciprocating pattern is also statistically significant at the .01 level (hypothesis 3.1). Second, the subject’s initial share also has significant effect: as the subject’s status quo increases, the response tends to decrease. This gives supporting evidence for hypothesis 3.5. That is, the subject becomes more generous to her partner as she enters the game with greater endowment.  

Third, the subject’s reward rate has a negative effect on the size of response: as the subject’s reward rate increases, the subject took fewer tickets from the computer. This confirms hypothesis 3.7. This effect is highly significant at the .01 level. Finally, the subject took the computer’s reward rate into consideration as well. As the computer’s reward rate decreases[increases], the response also decreases[increases]. According to hypothesis 3.6 and 3.8, the subject was expected to be careful when dealing with the computer with a low reward rate. In model 2, I switched the aggression variables from their absolute value to their relative size, the percentage of the initial share. The model shows that the threat perception argument is supported by the experiment (hypothesis 3.2). As the relative size of aggression to the subject’s initial share increases, the response also increases. The result also supports the capability argument (hypothesis 3.3).

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12It is also possible that the size of initial share has a conditioning effect on other variables. When I ran the same model with different interaction terms between the initial share and other variables, none of them changes the direction of effect. A few variables’ marginal effects varies across the value of the status quo. Additional results are in the appendix.
that the response increases as the relative power of the responding actor increases. When the subject knew that she had high probability of winning the lottery, she also took more tickets from the computer in the belief that she could win the lottery in case the game enters the costly event.

The regression result, however, does not provide supporting evidences for hypothesis 3.4 or the relationship between the responding behavior and the domestic challenger's cost (or the agreement bonuses in the game setting). Although the coefficient for the cost of the lottery is in the expected direction, the effect doesn’t pass the statistical threshold for significance. The effect of the subject’s agreement bonus was also in the expected direction, but slightly missed the threshold (the effect is significant at .104 for a one-tailed test). As I discussed earlier, the objective of the experiment lies in the assessment of the effect of domestic variables, or the effect of the leader's belief about domestic politics. The values of those parameters (the cost of the lottery, the agreement bonuses for the subject and the computer) were, therefore, set to have limited ranges with smaller variance. Given that the subjects were seeing all parameters' specification throughout the experiment, they might have learned that those parameters were not important enough to pay attention. On average, participants did pay closely attention to the reward rates (both their own and the computer’s), which is aligned with the rationale of the model. When the target state’s leader makes the decision about how to respond to the initiating state, she might not have fully understood the cost of domestic challenges in the other state. Instead, the responding leader should pay attention to the initiating leader's domestic power, which provides her with better grasp of the initiator’s
incentives for aggression.

To examine the choice of concession, I ran a time-series cross-sectional probit model, and the result is reported in table 3.4. The experimental data support the hypothesis on the pattern of concession (hypothesis 3.9). First, as the subject’s reward rate increases, the subject is more likely to choose to accept the computer’s initial demand by making a concession. Second, the subject also considers the other player’s reward rate in making a concession. As the subject sees that the computer has lower reward rate, she is more likely to give in and accept the computer’s aggression in the first decision node. The predicted probabilities show more specific picture. Figure 3.6 plots the predicted probabilities of the subject’s concession by reward rates. When the computer’s reward rate is approaching 0, the probability of concession is over 26%. However, as the computer’s reward rate increases and approaches 1, the subject’s likelihood of making a concession to the computer is 15.7%. Likewise, the subject’s own reward rate has influence on the probability of making a concession. When the subject’s reward rate is approaching 0, the data predict that the chance of concession is only 17%. This probability increases up to 23%, however, as the subject’s reward rate approaches 1. Finally, the choice of concession is mostly determined by the size of aggression and the initial status quo. Subjects were more likely to concede or give in to the computer’s aggressive action when the aggression itself is minor. The coefficient on the size of aggression is negatively related to the choice of concession, and the effect is highly significant.\footnote{The predicted probabilities are computed using the \texttt{margins} command in Stata version 12, holding other variables at their mean values.}
This can be explained in the extension of the regression analysis. That is, the perceived threat or damage has more influence than expected. This could be the result of the large endowment from the beginning or of the modest size of aggression per se. Either way, as illustrated in figure 3.6, the threat perception of the subject dominates the choice of concession in the experimental game.

The observations from the two-level bargaining game show some supporting evidences that individual subjects do care about their partners’ internal difficulties when making responses. Even if they saw that the computer unilaterally changed the initial distribution favoring itself, the participants were careful and strategic enough to delve into the parameters related to the computer’s payoff. And the strategic calculation led the subject to be either restrained or bold in making the response to the computer’s hostile behavior. Thus, individual subjects responding behavior under an incentivized economic game is well aligned with predictions of the model.
Findings from the survey experiment

Subjects were assigned to one of four groups to test the effect of the domestic political environment on the choice of the target state’s responding behavior. Options for the US response to China were differentiated in the degree of strength, from non-response (or concession) to diplomatic/economic boycotts to retaliatory attack. Most participants chose non-military responses as an appropriate policy in resolving the crisis between the United States and China: 75.7% chose responses involving non-military or economic measures, while only 12.3% chose responses involving some military actions including the show of force.\textsuperscript{14}

The overall result is presented in figure 3.7. The effect of treatment messages was found in a predicted direction, yet their statistical significance was not fully satisfying. The mean value of response\textsuperscript{15} changed in the way the theory predicts. First, the average degree of strength in response was 1.73 in the control group (s.d=.77), while the mean of group 1 is 1.65 (s.d=.82). Since participants in group 1 read message about internal instabilities in China, the response in this group was supposed to be lower than the response from the control group (hypothesis 3.6). It was slightly lower (-.08) than the mean of the control group, but not at significant levels (p=.297). Second, the average strength of response in group 2 was supposed to be higher than that of the control group, for this group received the domestic pressure

\textsuperscript{14}Due to the limited size of sample, the relative power of the target state is controlled to be constant. That is, the survey experiment didn’t look at how the choice of response could change as the power of the initiator changes. Given the increasing power of China, it seems reasonable that most answers were clustered on non-militarized responses.

\textsuperscript{15}Response was coded as continuous between 1 and 5. The weakest response (1) represents the non-response option, and the strongest (5) is the retaliatory attack on a Chinese vessel or aircraft.
for strong response treatment. The average response of group 2 was 2.16, which was higher than that of the control group by .43. The difference was statistically significant at the .05 level (p=.016) and the direction was also aligned with our expectation (hypothesis 3.7). Finally, the mixed treatment increased the average strength of response. When subjects read both messages - the domestic pressure for strong response in US and the domestic instabilities in China – their choice of response tended to be the highest among the four groups.

3.4 Discussion

The overall results from the experimental game support key arguments of the model in Chapter 2. A rational actor tends to reciprocate others’ hostile action: the pattern of ‘an eye for an eye’ was observed. This finding is not new, but the experiment shows the variance of responding behavior as well as the dichotomous choice of punishment. Regarding the deviation from the reciprocating pattern, the experiment shows that an individual subject, who was thought to be a utility maximizer, was capable of strategic thinking. When the other actor faces an unfriendly internal situation, the responding actors consider such difficulties of others. This led subjects to under-respond or even tolerate others’ hostile action. On the other hand, if the aggressor’s internal situation is good, while the target actor’s internal situation is bad, the response tends to be more aggressive and punishing.

The survey experiment partially supports the model’s prediction about responding behavior during international crises. When subjects were given the mes-
Figure 3.7: Results of survey experiment. Total of 202 subjects participated in the survey experiment. Group 1 receives the treatment related to the diversionary motivation of the initiator (the initiating leader faces domestic challenges); group 2 receives the responding leader’s domestic challenge; and group 3 receives both treatments. Group 4 is the control group.

Sage about internal difficulties faced by the Chinese leadership, they preferred softer and diplomatic responses to hard and military ones. On the other hand, when they received a message about domestic pressure for a strong response, they chose more aggressive and militarized measures as an appropriate response to China. However, it should be noted again that the subjects were recruited from college students, whose decisions could be far off from those of actual decision makers.
From a broader viewpoint, the experimental design of this study relies on the literature of experimental economics that focus on the concept of reciprocity. Those works often use experimental games for both testing and explorative purposes. As a behavioral pattern, reciprocity is defined as behaving cooperatively to the other’s niceness while behaving aggressively (or punishing) to the other’s hostile action. Unlike previous studies on reciprocity, this study is interested in the degree of negative reciprocity – that is, how strongly an individual would punish the other’s hostile action. Under a bargaining situation over some financial gain, individual subjects have incentives to act strategically to maximize their utility (the monetary reward from the game). The result shows that individuals’ responding behavior follows the models’ predictions. The incentivized game proves that a rational individual actor considers the other actor’s internal variables when choosing the response to the other’s hostile action.

This result has several important implications for theories of conflict behavior. First, that conflict escalation is rare can be explained by strategic avoidance behavior. The experiment and the model show that a rational actor sometimes does not react at all or responds at a minimal level even if first attacked. As the target actor begins to consider the initiating actor’s internal variables, the response could be reduced or even restrained. Second, the bargaining model of war could have another way to overcome the commitment problem. Although the model of response does not directly incorporate the commitment problem, it shows that the nested sub-game structure changes the equilibrium dramatically. The experiment also shows the change of power, or the discontent with the status quo, did not make
the actor more aggressive when she considers the internal difficulties the other actor
was facing. Third, the audience cost argument could be refined by incorporating
more details of domestic politics into the interaction. Some studies show that the
audience costs do not necessarily have negative impact on the leader’s payoff. The
direction of effect could be conditional on the actual capability of the leader. For
instance, under more favorable conditions, the leader may not be influenced by her
opponent or audience costs. Thus, the actual effect of audience costs cannot be
treated as unidirectional. The model and the experiment contribute to the audience
cost argument by developing a more nuanced conceptualization of audience costs,
instead of relying on a single parameter.

The experiment shows that the causal mechanism of the model can be found
in individuals’ responding behavior. While some deviations were observed, most
subjects’ responses were adhered to the way that the model predicts. As I stated
earlier in this chapter, the main purpose of the experiment was to assess the inter-

c
nal validity of the model, and the collected data from the experiment give strong
evidence for that. Now we can move on and apply the model to the real world to
explain how a state’s responding decision was formed during a crisis with another
country. In chapters 4 and 5, I apply the same logic of response to two cases of
international crises.
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Table 3.3: Time-Series Cross-Section Regression of Response Size. Control variables are not listed in the table for the limitation of space. Those variables include the subject’s sex, school year, partisanship, and race. Each subject’s response per round is the unit of analysis. Random-effects model is used. Significance level is *p < .1, **p < .05, ***p < .01
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<td>Relative power</td>
<td>-13.022</td>
<td>0.032</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(10.646)</td>
<td>(0.146)</td>
<td>(10.656)</td>
</tr>
<tr>
<td>Cost of war</td>
<td>-0.226</td>
<td>-0.321</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.353)</td>
<td>(0.351)</td>
<td>(0.354)</td>
</tr>
<tr>
<td>Responding leader’s</td>
<td>0.258**</td>
<td>0.242**</td>
<td></td>
</tr>
<tr>
<td>domestic power</td>
<td>(0.121)</td>
<td>(0.120)</td>
<td>(0.121)</td>
</tr>
<tr>
<td>Responding challenger’s</td>
<td>0.532</td>
<td>0.902</td>
<td></td>
</tr>
<tr>
<td>cost of fighting</td>
<td>(1.873)</td>
<td>(1.184)</td>
<td>(1.875)</td>
</tr>
<tr>
<td>Initiating leader’s</td>
<td>-0.439***</td>
<td>-0.407***</td>
<td></td>
</tr>
<tr>
<td>domestic power</td>
<td>(0.120)</td>
<td>(0.120)</td>
<td>(0.121)</td>
</tr>
<tr>
<td>Initiating challenger’s</td>
<td>-0.386</td>
<td>-0.257</td>
<td></td>
</tr>
<tr>
<td>cost of fighting</td>
<td>(1.849)</td>
<td>(1.851)</td>
<td>(1.855)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.002***</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.245)</td>
<td>(0.183)</td>
<td>(0.209)</td>
</tr>
</tbody>
</table>

| N                             | 2,881            | 2,895            | 2,895            |
| Log likelihood                | -1302.323        | -1337.036        | -1316.548        |
| ρ                             | 0.304            | 0.302            | 0.305            |

Table 3.4: Time-Series Cross-Section Probit of Choosing Concession. Each subject’s response per round is the unit of analysis. Random-effects model is used. Significance level is *p < .1, **p < .05, ***p < .01 for two-tailed test; and † p < .1 for one-tailed test.
Chapter 4: A Case of Reciprocation: The 2010 Bombardment of Yeonpyeong Island

Most crises, including those involving the use of military force, end without escalating to all-out war. It means that in most crisis actors settle down after exchanging some military actions. How could states under crisis situations avoid escalation while taking military measures against each other? The model of response in Chapter 2 shows that crisis should not escalate to war (an escalation outcome) if the target’s response is made inside of the bargaining range (figure 2.2). That is, the crisis ends with a reciprocation outcome, and both states conduct only limited hostile actions. In this chapter I conduct a case study to examine whether the model of response can explain a real world case of reciprocation. According to the model, the target’s response is a function of each state’s domestic bargaining as well as crisis bargaining. The model reveals that domestic sub-games have two opposite effects. First, the domestic pressure of the target state pushes the minimum level of response upward. That is, the response becomes more aggressive as the leader of the target state experiences an unfavorable domestic political environment. Second, the domestic politics of the initiating state plays an important part in determining the maximum level of response. The response to the initial aggression will be weak
as the initiating leader’s domestic political position is believed to be weak. For the test of empirical power of the model, I investigate a recent case of international crisis between North and South Koreas, which happened in 2010 as the North attacked the South.

I choose the crisis between two Korea for several reasons. First, the Korean Peninsula is a unique place where a ceasefire has lasted for over 60 years. Technically speaking, the two countries are still under war that never ended with a peace agreement. Over the past sixty-three years, there were thousands of hostile interactions, including several major crises. None of those crises have escalated to war. It is, therefore, puzzling how two Koreas could managed many crises over a long period of time without serious escalation. This makes the crises on the Peninsula interesting candidates that the model of response can be tested. Moreover, hostile interactions between two Koreas also display significant variation in several aspects, including the severity of aggression, the level of responses, the distribution of power between two countries, and domestic political environments. However, it should be noted that inter-Korean conflicts necessarily involve multiple actors other than Pyongyang and Seoul. During the Cold War era, the Soviet Union and the United States had great leverage on each side of the peninsula, respectively. And in the post-Cold War era, China has become the major patron for North Korea. As discussed later, the changes in the regional security environment have some impact on both domestic and foreign behavior of two Koreas.

The tension between two Koreas is increasing in recent years. Many policy analysts and scholars anticipate that the future of inter-Korean relations will be
worse as North Korea’s hostility grows in quantity and quality, including its nuclear program. In South Korea, policy makers and strategic planners began to have a heated discussion about its deterrent power and effective ways to stop the North’s provocative actions. In 2010, the tension grew dramatically and crossed the line: North Korea opened fire with artillery attack against a South Korean island in the Yellow Sea. Although the attack itself was an isolated provocation and did not escalate to a higher level of militarized conflict, the civilian-targeting unprecedented aggression has stirred the South Korean society. Upon the aggression, South Korea took series of counter-measures to signal its deterrent capabilities and resolve. In this chapter, I use the model of response in Chapter 2 to explain South Korea’s responding behavior during the 2010 bombardment crisis. The remainder of the chapter is organized as follows. First, I provide with the background of the dispute around the island under attack. This mainly discusses the issue of the Northern Limit Line (NLL), a de facto maritime demarcation line between the North and the South since the end of Korean War, and the increasing tension between Pyongyang and Seoul under the Lee Myung-bak administration. Then, I describe the artillery attack of North Korea with as much details as possible. Next, I trace the decision making process within the Blue House in response to the shelling. Since the attack was the first ever artillery attack directly on South Korean territory since the 1953 cease-fire, the incident called for an immediate attention of decision makers at the highest level. To collect data of the decision making during the crisis, I conduct fieldwork to South Korea, including personal interviews with government officials of South Korea. In the following section, I analyze South Korea’s responding behavior.
to examine the explanatory power of the model. I argue that the domestic political situation of South Korea was pushing the government for stronger response, while the concern for North Korea’s domestic instabilities constrained South Korea from taking massive retaliation. Instead, the South Korean government employed a show of force with significant costs. I conclude this chapter with discussion of how the model can explain overall trend of inter-Korean relationships for past decades.

4.1 Background

Since the late 1990s, the Western waters of the peninsula has been a major venue of serious confrontations between two Koreas. To understand the shelling incident in 2010, background knowledge on two issues is required. First, the historical background of the island under attack tells about how the dispute has been formulated over time. North Korea has been claiming the invalidity of the Northern Limit Line (NLL), which South Korea has defended for a de facto territorial boundary. Throughout the long history of the armistice, two Koreas crashed each other over waters around the NLL as well as the line itself. Second, North Korea’s provocative actions are to be understood in the context of inter-Korean relations. The years around the shelling are characterized as the turning point of the relationship. As early as in December 2007, then President-elected Lee Myung-bak propounded questions to his predecessors’ North Korean policies. The changed approach to the North of the new administration, or so-called a “principled stance” toward the North, must be considered in examining South Korea’s responding behavior.
4.1.1 Yeonpyeong Island and the Northern Limit Line

Yeonpyeong Island is a group of islands positioned in the western coastal water of the Korean Peninsula. The surrounding waters of the island is one of the largest fishery in the Yellow Sea, and the village on the island is one of the oldest fishing town of Korea. About 1,700 civilians are residing on the southern part of the island, and most are relying on fishing for living. The majority of the Yeonpyeong residents are native to the island and have been residing in the town for generations. The most striking fact about the island is its location. The main island is located at N37°40′0″ E125°41′47″, only 6.5 nm (12 km) south of North Korean coast, while 36 nautical miles (67 km) northwest of the western shore of South Korea. It is under the jurisdiction of the South Korean government, but it is physically located much closer to North Korea than to the South.

There are five such islands that are located far out west from the coast of South Korea in the West Sea. Those islands are called Northwest Islands (NWI), and posited much closer to North Korea. How did those islands in distance become territory of South Korea? When the Korean War ended by a ceasefire, two parties were separated by the 160-mile long and 2.5-mile wide demilitarized zone (DMZ). The DMZ was created by the armistice treaty in 1953 as a buffer zone along the military demarcation line (MDL). The treaty, however, did not set up an equivalent line in the

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1The Island is composed of seven small islands: Dae-yeongpyong-do, So-yeonpyong-do, Dang-do, Chaek-do, Moi-do, Guzi-do, and Yongdui-do. In general, Yeonpyeong Island refers to Dae-yeonpyeong-do, the main island. This main island is named after its shape, which looks like a train running on the sea. The word, Yeonpyeong, literally means something long and flat stretching out like a train rail.

2The nearest land from the island is Ongjin Bando, Hwanghae Province of North Korea.
Yellow Sea. The treaty only states, “all the islands lying to the north and west of the provincial boundary line between HWANGHAE-DO and KYONGGI-DO shall be under the military control of the Supreme Commander of the Korean People’s Army, except the island groups of PAENGYONG-DO, TAECHONG-DO, SOCHONG-DO, YONPYONG-DO, and U-DO.” Since then, those five islands (NWI) have been controlled by the South. Later, an operation line was drawn to prevent unnecessary disputes and border-crossings, which formed the Northern Limit Line.  

Yeonpyeong Island is critical for both Koreas. The Kangnyeong peninsula, the closest land to the island, has several military bases of the Korean People’s Army (KPA), including underground artillery positions. Among them, two facilities are closely related to the crisis: Sangi-gol and Kaemori. The Sangji-gol facility is a coastal defense missile battery site, equipped with surface-to-air or cruise missiles. The Kaemor is known as a site of artillery units. Due to its geographical proximity

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3There are debates among scholars and historians about the exact time of the NLL installation. The majority argues that the line was first promulgated on August 30, 1953, only a month after the ceasefire was signed. According to the 1953 theory, the United Nations Command (UNC) General Clark set up the line for operational purposes soon after the armistice: he needed to restrict both military and commercial boats and ships not to travel far north. So, he drew a line to separate NWIs from the North Korean territorial water. Upon the announcement of the line, the DPRK did not make any formal protests and silenced for the next 20 years (Kotch and Abbey, 2003; Roehrig, 2008, 2009, 2012; Ryoo, 2009). Other scholars raise questions about the ‘1953 theory’ and suggest alternative explanations about the legal status of the line. A doubt arises as some scholars argue that there is no evidence of General Clark’s order. For example, Lee (2001) pays attention to a CIA document, titled “the West Coast Korean Islands,” which discusses the origin of the NLL. To quote the report, the CIA states, “The South Koreans have regarded the NLL as a seaward extension of the Demilitarized Zone (DMZ) and a de facto boundary between South and North Korea. The NLL, however, has no legal basis in international law, nor does it conform along some of its length to even minimal provisions regarding the division of territorial waters. It is binding only on those military forces under the command or operational control of COMNAVFORKOREA. No evidence exists that the North Koreans have ever formally recognized the NLL. South Korea maintains that the North has respected the NLL since the Armistice in 1953, although no documentation can be found to indicate that the NLL was established prior to 1960.” According to the CIA report, the line was first mentioned in 1961 as referred to a ‘clear antecedent’. Conservatively, the report concludes that the NLL was established in the order of the Commander Naval Forces Korea issued on 14 January, 1965.
Figure 4.1: Yeonpyeong Island and the Northern Limit Line (NLL). The yellow line is the NLL observed by South Korea since the armistice. The white line is what North Korea claims to be the demarcation. The Google earth image is rendered by Curtis Melvin and downloaded from North Korea Economy Watch at www.nkeconwatch.com

to North Korea, Yeonpyeong Island has been heavily armed and fortified since the 1970s. As of 2010, about 1,600 marines are stationing on two islands, Yeonpyeong and Paengnyung, which are serving as an advanced base for the security of NWIs and the NLL. Most weapons on the island are defensive, preparing for possible amphibious assaults of the DPRK’s special force.

As the armistice treaty did not specify any lines on the water, the sea border in the West Sea becomes as strange as illustrated in figure 4.1. Having no formal agreement on maritime borders, the UN Command could not agree officially that the NLL is a demarcation line. However, the South Korean government maintains its jurisdiction based on the effective control, and it claims that the NLL is *de facto*
territorial border. Until today two countries are disputing over the legitimacy of the NLL. On the other hand, North Korea claims different lines for the division of the waters in West (figure 4.1). Given the highly armed confrontation on and around the island, past years witnessed several militarized crashes.

4.1.2 Military crashes along the NLL

According to the record of the Korean Ministry of Unification, the first violent confrontation in the Yellow Sea dates back to 1955, when a North Korean boat crossed the NLL and seized a South Korean fishing boat. Between April and December of 1974, the DPRK violated the armistice and crossed the NLL six times, including gunboat firing, circular flights of jet fighters trespassing the territorial sky of Paengyoung-do, and infiltration using a spy ship.

Besides the hostile seizure of fishing boats, the DPRK government began to make a series of formal objections to the current division of the water. North Korea used the Military Armistice Commission (MAC) meetings as the window of making official objections. At the 346th Military Armistice Committee (MAC) meeting on December 1, 1973, the delegation of the DPRK proclaimed that the North conserved the 12 nautical mile territorial water along the North Korean west coast and that the South violated the Armistice Agreement by trespassing the territorial water of the DPRK. Six days later, the South Korean government accused the North

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4The seizure of Daesung-ho was also the first incident of abduction since the end of war. Ten crew members, including the captain, were abducted. Since then, the total of 3,853 South Korean citizens were abducted, and about 87% were released and sent back to South. Most abductees were fishermen, who were usually fishing in waters near the NLL.


6According to the 1953 treaty, the MAC shall meet by the request of either side.
of having violated South Korean waters by intruding the surrounding waters of Paengyong-do. The DPRK escalated provocations on following dates of December 10 and 18 by launching torpedo boats in a combat formation. They entered the contiguous waters of Socheong-do and threatened South Korean civilian boats. At last, during the following MAC meeting on December 24, North unilaterally declared that they rejected previous agreements and warned that any attempt to interrupt and/or intrude the contiguous water and the passage from and to the NWIs would be regarded as a direct violation of Paragraph 15 of the Armistice Agreement. In response to the UNC rejection, the North escalated once again. On February 15, 1974, the DPRK naval vessels opened fire against two South Korean fishing boats – one was sunk at the scene and the other was seized by the North. About 30 crew member were sent to North with the vessel. The South immediately requested for another MAC meeting, which was held on February 28, 1974. At the 348th MAC meeting the South party accused the North for the provocative seizure and demanded the return of the crew and the boat. But the North refused to comply by arguing that those boats were on an espionage activity. In the following months and years, the DPRK continued to trespass the water again. In 1975, once again, the North provoked using air forces as well as naval vessels. Although it did not escalate to a limited warfare, the violent interactions during this period pushed

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7 Michishita (2009, 55). Paragraph 15 of the Armistice Agreement states that each side’s naval force should respect the water contiguous to the DMZ and the land under the control of opposing side.

8 The log of North Korean provocations (maintained by the Korean Ministry of Unification) lists six North Korean provocative actions between April and December, 1974. Such provocations include gunboat firing, circular flights of MiG(s) trespassing the territorial sky of Paengyoung-do, and infiltration of a spy ship.
two countries to concentrate their naval powers. The NWIs and its surrounding waters remained relatively calm after 1976. Throughout the 1970s the South Korean government initiated the fortification of NWIs. The marine units on Paengyoung-do were supplied with stronger fire power, including artilleries and advanced individual firearms. Patrol boats were equipped with ship-to-ship missiles and firing exercises began to be held on a regular basis.

The twenty year-long peace on the unsettled water was shattered as the DPRK naval vessel approached the ROK Navy in an attempt to crush to sink its rival in 1999. On June 15, 1999, four North Korea patrol boats crossed the NLL with about 20 fishing boats. The North Korean navy attempted to bump South Korean fast boats to scare them away. The bumping offensive, then, escalated to gun firing. The exchange of fire lasted about an hour. As a result of the battle, one North Korean torpedo boat sank and three patrol vessels of the North were damaged. About 17 to 30 North Korean personnel were killed or wounded, according to an official estimation of South Korea. South Korea had only minor damage on two patrol ships. Since the first maritime crash in 1999, the provocation of North Korea became bolder. In 2002, a second crash occurred in the same area again. The second battle resulted in severe damages on both sides. The Kim Dae-jung administration, however, did not withdraw its cooperative policy toward the North. During the

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9Most of weapon systems on the NWIs were defensive, preparing to possible amphibious assaults of North Korea.
10The crash of 1999 is later named the ‘first battle of Yeonpyeong.’ As a North Korean defector testified, the crash was a shock to North Korean soldiers, who believed in the military superiority of the North.
11On the following day of the first battle of Yeonpyeong, Kim Dae-jung approved the South Korean tourist group’s visit to the Geumgang Mountain in North Korea. The economic and humanitarian aids were also implemented as scheduled during those crises.
inter-Korean summit in 2007, then President Roh Moo-hyun suggested a joint fishing and peace zone in the area. Kim Jong-il agreed to the idea of installing a special zone, which was believed to facilitate a peaceful resolution of the dispute. In 2009, a third major naval crash took place around Daecheong Island, which is also one of NWIs. In the morning of November 10, 2009, a North Korean patrol boat crossed down the NLL, ignoring the warning message sent from South Korean navy. The ROK navy fired warning shots to compel the DPRK vessel to turn around. But the North Korean ship fired back, aiming the ROK boat. In response to the aggression, the ROK navy immediately made counter-attack on the North Korean vessel.

Why does North Korea keep provoking around the NLL? What’s the value of the NLL for both Koreas? There are four major points that dominate both states’ interests in the area. First, there are considerable economic value in the seas around the NLL. For a long time, the waters around the NWIs have been known for rich fishery with varieties of catches, especially blue crab. The blue crab catch in the area forms over 60% of the South Korea’s annual catch. Moreover, the border issue becomes complicated recently as Chinese trawlers started fishing illegally on both side of the NLL. Second, the NLL itself poses a significant impact on commercial navigation, especially for North Korea. The current sea borders set by the NLL forces North Korean ships to travel longer routes beyond Paekgnyung Island before

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12 However, when Lee Myung-bak came to office in South Korea, the plan was never implemented. The new administration was about to revise its North Korean policy, which, in turn, changed the trajectory of the inter-Korean relations.

13 The rules of engagement for South Korean Navy changed from those during the first two battles. During the first two battles, the ROK Navy followed the rules of engagement containing five steps: warning message → blocking → warning fire → threatening fire → aimed fire. But in the third crash, the Navy applied a revised rule, which has only three steps: warning message → threatening fire → aimed fire.
they enter the Yellow Sea. This adds extra miles and fuel costs for North Korean merchant ships. Given that over 90% of inter-Koreas trade is made via the routes in the Western Sea, the North has incentives to revise the NLL. Third, the NLL imposes a great security concerns for both states. The NLL is about midpoint between the DPRK coast line and South Korea’s NWIs. This allows South Korean vessels to approach very close to North Korean shore, which becomes a security issue for both parties. North Korea’s artillery batteries and other military facilities can be easily observed from NWIs, which does not service the North’s interest of concealing military capabilities. It is also interest of North Korea if the NLL is altered downward to south, because it would be much easier for the DPRK’s special forces to intrude into Seoul. Knowing such North Korea’s strategic concerns, South Korea also strands firm in defending the NLL for security reasons. Lastly, both the North and the South have some political values attached to the islands and surrounding waters. From the view of South Korea, who has been exercising de facto sovereignty over the islands for a half century, it cannot be an object of negotiation. Even an act of acknowledging the dispute status of those islands and the NLL will be regarded as a serious loss of territory and threats to sovereignty. On the other hand, the North will continue to provoke to publicize its objection to the legitimacy of the line. If the NLL issue is recognized by the international society as a ‘territorial dispute,’ it would be a great national achievement and propaganda of the victory against it rival.
4.1.3 Increasing tension

As the new administration took office in South Korea, inter-Korean relations also changed. Lee Myung-bak’s approach to the North differed from two pro-North governments before him. The new policy can be summarized in two words: denuclearization and reciprocity. Lee proposed a plan, called ‘Non-nuclear and Opening 3000,’ as the backbone of its unification strategy. The basic ideas of the plan is that South Korea offers to help raise the DPRK’s economy to the level of US$3,000 GNI per capita within the next ten years if North Korea successfully denuclearizes. Under this plane, the economic aid will be offered accordingly as Pyongyang takes steps toward denuclearization.\(^{14}\) Although details of the procedure were open to discussion with the North, the South Korean government had a plan to establish a cooperation fund – about 4 billion dollar in sum – with the international community for the benefit of the North.\(^{15}\) However, Kim Jong-il was skeptical about the offer. The uncomfortable relationship between Lee and Kim means darks days of inter-Korea relationship.

The first sign of discord came out from the human rights issue. Previously, South Korea used to abstain from voting at the United Nations, when it was asked to vote to adopt a resolution against North Korea.\(^{16}\) Lee Myung-bak, however, made

\(^{14}\)The official description of ‘Non-nuclear Opening 3000’ is that it’s a “plan for supporting economic development in North Korea and its cooperation with the international community during the North’s process of denuclearization, as a gesture of reciprocity in the denuclearization process.”

\(^{15}\)Park (2011b, 323). The figure 3,000 was intended as Lee quotes Zakaria’s book, The Future of Freedom. Lee (2015b, 307). In his book, Zakaria explains that the transition to democracy is most successful when the country’s per capita income is in the “zone of transition”, which is between $3,000 and $6,000 (Zakaria, 2007, 69-70).

\(^{16}\)In 2006, at the 61st General Assembly of the United Nations, South Korea voted for the North Korean human rights resolution, which was allegedly a response to the nuclear test North Korea
it clear that the human rights issue of North Korea was no longer a matter to be considered in the context of inter-Korean relations. He, instead, claimed that human rights is a universal value and that North Korea’s human rights should be dealt with accordingly. Starting from this issue, inter-Korean relations began to deteriorate. In July 2008, a South Korean tourist was shot to death by a North Korean soldier during her tour in the Mountain Kumgang. Seoul demanded immediate inquiry and measures to prevent recurrence of such tragic incidents in future, but Pyongyang’s response was extremely negative. The DPRK refused to acknowledge its responsibilities and blamed Lee Myung-bak for banning the tourism.\footnote{On July 11, 2008, a 53 year old tourist from South Korea was shot and killed by a North Korean security guard while wandering on the beach in front of the Mountain. Immediately after the incident occurred, Lee ordered to suspend all scheduled tourist visits to North. As Pyongyang refused to accept its responsibility, the entire tourism was shut down for undefined period of time. In 2010, North Korea forfeited several properties in the Kumgang Mountain area to threaten the South Korean government. As of 2015, the Mount Kumgang Tourist Region is run by the DPRK government, and inter-Korean tourist traffic is still forbidden. Only Chinese and Western tourists are accepted to enter. Since the establishment, the tourism in Kumgang Mountain has become a major source of hard currency for North Korea.} In December 2008, North Korea unilaterally informed the South that it would shut down the Gaeseong Industrial Complex. The Complex is the symbol of inter-Korean cooperation, which was first established in 2000 by an agreement between \textit{Hyundai Asan}, a South Korean corporate, and North Korean authority. The shutdown intensified the tension between two Koreas, and lasted until the following year.

North Korea’s provocation grew even stronger in 2009. On May 25, North Korea conducted its second nuclear test. The ROK government was already criticizing North Korea’s missile launch, which took places only a month prior to the test. On May 26, the following day of North Korean nuclear test, Lee officially conducted in October, 2006.
announced that South Korea decided to participate in the Proliferation Security Initiative (PSI). Following that, North Korea sent out menacing warnings of “nuclear war” to threaten the US-ROK alliance. On November 10, 2009, another maritime crash took place around Daecheong Island, one of the NWIs. Navy vessels of two Koreas fired thousands of shells against each other. It was the first violent interaction since the second battle of Yeonpyeong in 2002. It seemed that inter-Korean relations could not be worse.

The year 2010 is marked as the most dangerous and violent year in the entire history of inter-Korea relations since the ceasefire. On 26 March 2010, the ROK’s naval ship Cheonan sank near Baeknyeong Island, loosing the lives of 46 seamen. A month-long investigation by international experts concluded that a North Korean torpedo attack caused the sinking. Immediately after the official result, the Republic of Korea prohibited all imports and exports with North Korea, except for humanitarian aids for children and women. Pyongyang, not surprisingly, denied its responsibility and denounced South Korea’s decision of the sanction (the May 24 measures). On the other hand, public opinion of South Korea was divided into halves. One half of the country criticized the hardline policy toward North Korea and characterized the Lee Myung-bak administration’s North Korea policy as a to-

\footnote{The second nuclear test by North Korea brought international attention. The nuclear and missile tests were violations of the UNSC resolution 1718. The South Korean Defense put the military on a higher level of alert, including raising its Watch Condition from 3 to 2. The Security Council adopted the resolution 1874 unanimously in response to the nuclear test.}

\footnote{On November 10, 2009, a North Korean patrol boat crossed the NLL approaching Daecheongdo. The ROK Navy immediately issued verbal warning. After the last warning issued, the South fired warning shots (four rounds of 20mm Sea Vulcan). In response to the warning shot, the DPRK boat fired back aimed shots at the South’s vessel. The exchange of fire lasted about three minutes. Hit by thousands of shells fired by the ROK Navy, the North Korean boat fled the scene half-destroyed.}
tal failure. The other half was supporting the hawkish stance. The conflict within the South surged up over the controversial result on the cause of Cheonan sinking. The hardliners and its supporters had no objection to the result pointing North Korea as the responsible party. They voiced for strong response to Pyongyang. On the other hand, liberals and critics of the Grand National Party (GNP) cast doubts on the hasty conclusion of the investigation. Conspiracies were aired through the media and social networks. The result of the sinking, whether North Korea was responsible or not, seems to serve North Korea’s interest as South Korean public was divided. The shelling of Yeonpyeong Island occurred in the midst of such a turbulent atmosphere.

4.2 Aggression

On November 23, 2010, North Korea took a unprecedented and unprovoked attack against a civilian village on Yeonpyeong Island. It was the first artillery attack from the North, directly fell on South Korean territory since the Korean War. Although the shelling itself was surprising, there were other sings of belligerence prior to the November attack.

4.2.1 Pre-attack activities

When the island was attacked, many politicians and commentators asserted that the military failed to anticipate and prepare the provocation properly. Although it is impossible to predict North Korea’s next provocative action, observed were
several clues that altogether tell a direction. Beginning in December 2009, North Korea gradually heightened the level of verbal assaults. On December 21, 2009, the Korean People’s Navy (KPN) Command declared once again “the waters on the extension of the Military Demarcation Line in the West Sea under the control of our army as a peacetime naval firing zone of coastal and island artillery units of the Korean People’s Army (KPA).” On January 26, 2010, the KPN unilaterally declared a “no-sail” zone near the NWI and overlapping the NLL. On the following day, KPA conducted artillery exercises in the “no-sail” zone, which ran through February 29. Military experts view the exercise as a preparation for the attack in November. In March, 2010, a South Korean vessel, Cheonan, was sunken by a torpedo attack, which was later identified as North Korea’s by a joint investigation team. On August 9, 2010, the KPA ran another artillery exercise in the West Sea near Yeonpyeong Island. At that time the exercise involved 130 artillery rounds, and some of rounds fell south of the NLL. In that evening a small unmanned aerial vehicle (UAV) was identified flying about 20km north of the island.

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21Bermudez (2010, 2011) points out several notable features of the exercise as follows: a combined firing using 240 mm MRL and 130-170 mm artillery systems; assistance of coastal defense radars; the employment of ‘time-on-target’ tactics; the relatively high accuracy of firing; a new leadership’s control (General Ri Young-ho); and a combined exercise involving KPA, KPN, and KPAF. The shelling in November was conducted in a very similar fashion of this unusual combined exercise.
22North Korea, however, denied its responsibility. The joint investigation team was composed of military and civilian experts from the United Kingdom, Sweden, South Korea, and the United States.
4.2.2 The shelling

On November 16, South Korea announced that it would conduct its annual Hoguk military exercise from November 23 to 30. A written notice had been sent to the North in compliance with the agreement on the confidence building measures. Hoguk exercise is the largest military drill in scale, in which all four major branches participate. The exercise involves approximately 70,000 troops. As the exercise is usually conducted, that year’s exercise would involve a large-scale mobilization, including 600 tracked vehicles, 90 helicopters, 50 warships, and 500 aircraft. It would also include firing of live ammunitions against designated impact areas. Since the dispute over the maritime border went hot in 1999, the exercise was particularly focusing on the defensive operations in Yeonpyeong Island and surrounding waters. As a usual response, Pyongyang criticized the exercise, claiming that it was nothing but a ‘simulating an invasion of North by the South along with imperialistic Americans’. They sent a telex message stating that they would not sit idly and look on any firing at North Korean waters. There was also an intel report that called for attention to unusual military mobilization activities along the west coast.

Having observed such ‘usual’ hostile messages from the North, the ROK Joint

23 This large scale exercise, which North Korea continuously condemns as war preparation targeting North, was first held in 1996 to substitute the Team Spirit exercise. The Team Spirit was held between 1976 and 1995 to reinforce the deterrence capability of the US-ROK alliance and to increase interoperability of the ROK and the US forces. In 1992 the exercise was cancelled in order to encourage North Korea to cooperate on the nuclear issue. The US and South Korea agreed to cancel the joint drill in 1993 as well in exchange of North Korea’s IAEA inspection. In the following years, Team Spirit was cancelled for each year as an incentive to improve relationship with Pyongyang.

24 North Korea usually issued its strong objection through KCNA.

Chief of Staff was not very cautious about such bellicose rhetorics from Pyongyang. At 10:15 South Korea conducted exercise and opened exercise fire at the designated impact area, which was 20-30 kilometers southwest of the island. The North, however, regarded such activities as attacks on their territorial water.26

Around 14:30, the DPRK launched five MiG-23 fighters to Southwest from the Bukchang-ni Air Base. Those aircraft began a patrol over the southern coast of Hwaghanamdo. The DPRK Navy, Korean People’s Navy (KPN) also went on alert. At 14:34 KPA opened artillery fire with multiple rocket launchers from Kaemori base targeting against Yeonpyeong-do. Another base located at Mu-do also participated in the shelling in a few minute. Approximately 150 rounds of shells were fired, and 60 of them directly landed on crucial military facilities, such as marine’s artillery positions, fuel tanks, and communication centers. Since some facilities were located in civilian residence area, 20 residential buildings and houses were destroyed. The only consolation in the tragic scene was that most villagers were out of houses as they went to the southern shore to work. Witnesses recalled that they initially thought the sound of bombing was from the marines on the island since they had been notified about the exercise. Some villagers thought that some shells fell on houses accidentally. In a few minutes, the whole island turned into a complete chaos. Villagers rushed to shelters. Marines raced to their combat positions. In 13 minutes, the Marines conducted counter-fire, according to the rules of engagement. However, the counter-fire was not executed as planned: two K-9s went malfunction

26According to the borders claimed by the North, any activities in the disputed water are ‘illegal’ break-ins to the DPRK territory. See figure 4.1 for the strange configuration of borders around the NWIs.
and the AN/TPQ-37 Fire Finder radar experienced trouble. The responsive fire continued until 14:55.

After a short pause, the DPRK’s second round of fire commenced at 15:10, which continued until 15:41. During the second attack, approximately 170 rounds were fired on the island while the ROK fired back about 80 rounds with four operating K-9 howitzers. The exchange of shelling lasted for about an hour. While the artillery exchange was going on, the ROK Air Force launched F-15K and KF-16 fighters in preparation of any further engagement. North Korea also had additional artillery units prepared. Fortunately, the shelling did not escalate further and stopped around 15:40, about ten minutes after the South telexed the North requesting immediate halt of the hostile action. The unexpected aggression resulted in deaths of four South Koreans, including two civilians and damages on dozens of houses.

4.2.3 The aftermath

On the night of the attack, President Lee met with the Joint Chief of Staff and led an emergency staff meeting. Key staff members and ministers of security-related departments attended the meeting to discuss the attack and the response to it. On the following day of November 24, President Lee Myung-bak delivered a nationwide speech regarding the attack, criticizing North Korean violation of the 1953 Armistice and calling for coherence to the Korean society. On the same day the United States decided to dispatch the USS George Washington to the area. Upon
the news that the USS George Washington was heading to the Korean Peninsula, China also began to act promptly. On November 26, the Foreign Minister of the PRC, Yan Jiechi, met Chi Chae-ryong, the DPRK Ambassador to China. Although it is unknown what the PRC demanded, such a prompt move of Chinese officials shows the significance of the situation. On the following day, Dai Bingguo, the State Counselor of China, visited Seoul to speak to the Foreign Minister of South Korea.

On one hand, Seoul was contacting with major powers to initiate its response to Pyongyang. It also planned to send direct signal to the North, using military force, on the other hand. As discussed later with greater details, South Korea conducted several military exercises, some of which involved a joint exercise with the United States. From November 28 to December 1, South Korea conducted a joint naval exercise with the United States, which was the largest exercise in the Yellow Sea ever. There were other naval drills both western and eastern sides of the peninsula. On December 20, South Korea conducted another large scale exercise in front of Yeonpyeong Island. The tension grew sharply on the day of the exercise.

By the end of the year, South Korea wanted to hear from North Korea, especially an official apology about the attack and damages it caused. However, a North Korean delegation to the inter-Korean Military Talk on January 8, 2011 did not say anything about its violation of the armistice. Later, North Korea suggested another talk for political purposes, but South Korea refused to meet.
<table>
<thead>
<tr>
<th>Date</th>
<th>Major events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 23</td>
<td>North Korea attacked Yeonpyeong Island with artillery shelling.</td>
</tr>
<tr>
<td>Nov. 24</td>
<td>US dispatched USS George Washington to the Korean peninsula.</td>
</tr>
<tr>
<td>Nov. 25</td>
<td>Blue House called an emergency security-economic cabinet meeting. The Minister of Defense resigned.</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>Chinese Foreign Minister (Yang Jiechi) met with North Korean Ambassador (Jae-ryong Ji).</td>
</tr>
<tr>
<td>Nov. 27</td>
<td>The Minister of Foreign Affairs (Sung-hwan Kim) met with PRC’s State Councilor (Dai Bingguo).</td>
</tr>
<tr>
<td>Nov. 28</td>
<td>The US-ROK joint naval exercise began (ended on December 1).</td>
</tr>
<tr>
<td>Nov. 29</td>
<td>President Lee delivered a nationwide address regarding the attack.</td>
</tr>
<tr>
<td>Dec. 1</td>
<td>Additional firing weapons were installed on Yeonpyeong Island.</td>
</tr>
<tr>
<td>Dec. 2</td>
<td>National Intelligence Service reported the result of counter-attack.</td>
</tr>
<tr>
<td>Dec. 6</td>
<td>Trilateral Statement between the US, ROK, and Japan was announced. International Criminal Court initiated preliminary investigation on the attack. ROK’s naval exercises began.</td>
</tr>
<tr>
<td>Dec. 9</td>
<td>Kim Jong-il met with Dai Bingguo, Chinese Councilor of State Affairs.</td>
</tr>
<tr>
<td>Dec. 15</td>
<td>US delegation visited PRC.</td>
</tr>
<tr>
<td>Dec. 16</td>
<td>ROK gave notice to DPRK regarding its naval exercise on December 20. Governor Richardson (NM) visited Pyongyang.</td>
</tr>
<tr>
<td>Dec. 17</td>
<td>Russia released official statement against ROK’s scheduled exercise. North Korean state department announced a statement on South Korea’s exercise notice.</td>
</tr>
<tr>
<td>Dec. 18</td>
<td>PRC expressed official objection to the exercise.</td>
</tr>
<tr>
<td>Dec. 20</td>
<td>ROK conducted naval exercise as scheduled. DPRK made no hostile actions.</td>
</tr>
<tr>
<td>Dec. 26</td>
<td>ROK suggested an inter-Korean military talk.</td>
</tr>
<tr>
<td>Jan. 8</td>
<td>Inter-Korean Military Talk was held.</td>
</tr>
<tr>
<td>Jan. 27</td>
<td>ROK announced its plan of establishing government-run ports on major islands including Yeonpyong.</td>
</tr>
</tbody>
</table>

Table 4.1: Major events between November 2015 and January 2011
4.3 Response

Immediately after the shelling, there was a field-level response, which was conducted by the marine units on the island following the operational protocol. About thirteen minutes after the initial attack by the North, the South Korean marine fired back 80 rounds using three K-9 howitzers. After the second round of the shelling, they fired another 80 rounds using four howitzers, targeting Kemo-ri, the suspected origin of hostile fire. At 14:38, only a few minutes after the report of North Korean attack was received by the Joint Chief of Staff, two F-16 scrambled into the air of the island, which was soon followed by additional fighters. The additional airpower was supplied from Daegu, which included two F-16s and four F-15k fighters. When the ROK Air Force dispatched jets to the NLL, they were ordered to take the control of the sky and be prepared to engage if provoked. However, there was no aerial crashes between two forces.

The response to the North, of course, became the most pressing and important matter at that time to the decision makers. Having recognized the magnitude of the incident, the South Korean government took a careful approach. South Korea’s response was made in three domains: military response, diplomatic pressure, and unyielding policies in inter-Korean relations. First, the military response by South Korea was mainly to demonstrate its resolve and readiness for retaliation, but without actual retaliation. Second, the South Korean government promptly began to seek ways to pressure Pyongyang through diplomatic channels. In doing so, the US-ROK alliance along with the Japanese cooperation was playing the major part of the
diplomatic pressure on North Korea. The role of China was relatively minimized. As discussed below, the seemingly intentional exclusion of China gives different perspective that Seoul was playing against Pyongyang and Beijing. And finally, there was a discussion on the use of leverage in inter-Korean relations. Overall, the responding behavior was multi-faceted and prolonged. The major demonstration of force lasted until December 20. The inter-Korean talk took place in January of the following year. After that time and on, a new interaction started as North Korea suggested a high-level talk with the South.

4.3.1 Possible options

What options were available for Seoul in response to the unprecedented attack? The inside of the decision making process within the Blue House is unknown. It is, however, possible to outline the range of possible response options that Lee and his staff were considering during the crisis. I interviewed some of high rank officials, including the president’s staff and military officers, who were involved in the decision making, either directly or indirectly. Using multiple sources and approaches, I could find some clues revealing how the response was formed.

Military options

A retaliatory air strike was considered seriously within the Blue House. Immediately after the initial shelling was reported to the Joint Chief of Staff, two F-16 scrambled into the air of the island, which was soon followed by four additional
F-15k fighters. As reported later, the first dispatched fighters (F-16s) were intended to control the air, while the second wave was for possible air strike on the North Korean artillery bases.\(^{27}\) When dispatched to the NLL, the pilots of fighters were ordered to take the control of the sky and be prepared to engage if provoked. It was vague if they were armed with air-to-surface cruise missiles like Slam-ER. There are controversies about what kinds of preparation the air force made during the early stage of the crisis. Many news agents reported that air-to-surface missiles were available. On the other hand, Lee Dong-kwan, then spokesman of the Blue House, says that fighters were not prepared at all. He further accuses the military of failing to meet combat readiness.\(^{28}\) However, other military analysts blamed the president for being indecisive.\(^{29}\) What is important here is that a retaliative air strike was on the president’s list of possible options, regardless of the actual preparation. Other sources also show that South Korea was signaling its willingness to use force. In the memoire, Lee recalled that he wanted to send tough signals to Kim Jong-il by sending jet fighters and bombers. But the military staff and the Defense Minister opposed, he recalls.\(^{30}\)

Another aspect not to be overlooked is that the administration was viewing the shelling as an extended provocation from the sinking of Cheonan in March.

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\(^{27}\)The additional airpower was supplied from Daegu. According to the treaty and rules between the United States and South Korea, the US Command has the authority to air strikes. However, the F-15 fighters were sent to the Yeonpyeong Island without consulting with the US counterpart. The Joint Chief of Korean Forces unilaterally ordered the deployment. Kim (2013).

\(^{28}\)Lee (2015\(\text{a}\))

\(^{29}\)Kim (2013).

\(^{30}\)Lee (2015\(\text{b}\)), Gates (2014).
believed to be pre-meditated and planned in well advance at higher level. Second, a weak or symbolic gesture was excluded in the first place. One interviewee, who attended the national security meeting at the Blue House, described that there had existed a consensus that the response to the North must be “firm and strong.”

Given the consecutive events of provocation, the Lee administration was facing an important test. Lee and his staff were not only concerned about the military aspect of the crisis, but also political consequences of the crisis. The president already lost more than 40 lives from the sinking incident in March. The measure of May 24 in response to the sinking was likely to face criticism. Pyongyang’s heightened aggressiveness could make the punitive sanction a useless piece of paper. At any rate, the aggression must be met by a firm response. Although unknown is the exact list of options discussed during the national security meeting, one of the strongest options was an air strike against the artillery base in North Korean territory.

Diplomatic options

If military options were limited at best, what diplomatic measures were available for South Korea? Traditionally, Seoul usually seeks assistance from Washington. However, the end of the Cold War changed the traditional alliance-enemy dichotomy. More recently, Seoul finds that Beijing is an important partner in dealing with North Korea. For instance, China has played significant roles in several issues, including the nuclear program of North Korea, refugees, and border violations. When North Korea was blamed for the sinking of Cheonan, Lee tried to get coopera-
tion from China in condemning and sanctioning North Korea. However, Wen Jiabao refused to take steps together with Lee Myung-bak. Instead, not surprisingly, China directly approached North Korea and rejected to adopt a UN resolution. Lee was upset about China’s uncooperative stance toward the sinking incident. Since then, South Korea learned that Beijing is not a reliable partner in pressing Pyongyang. From such a negative experience with China, the Lee Myung-bak government was more inclined toward the United States. Lee Myung-bak himself was also known as pro-American person. From the first day in the office, Lee declared that the foundation of his North policy would be based on the strong tie with the United States both militarily and economically.

Diplomatic measures, therefore, were mainly discussed on the base of US-ROK alliance. A bilateral meeting and a joint statement condemning the attack were discussed. A cooperation with Japan was another viable diplomatic action to press the North. Of course, the effect of Japanese cooperation should be much smaller than that of Chinese cooperation.

Regarding the timing and format of diplomatic pressure, the trilateral meeting of ministers and secretary was a perfect place to start. The meeting was scheduled to be held in early December. Sunghwan Kim, the Minister of Foreign Affairs, prepared the meeting to be the right place to discuss the Yeonpyeong crisis.

In sum, there were not so many options for diplomatic responses. China’s quickly changing attitude made Chinese pressure on the North less likely. As Lee and his staff moved away from the PRC and stayed close to the US, the diplomatic

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31 A persona interview with an official in the Ministry of Foreign Affairs.
options were also limited.

Inter-Korean relations options

The next option is South Korea’s leverage through inter-Korean relations. The bilateral trade between two Koreas was, in fact, a different way to say South Korea’s foreign aids to the North. Since the 1990s, North Korea’s economy was significantly crippled, and its dependency on foreign aids has increased dramatically. If the economic cooperations and aids from the South were cut, according to the calculation of the Lee administration, the impact should be enormous and the consequence be miserable. President Lee used this card in May, when the cause of the Cheonan sinking was confirmed as a torpedo attack of North Korean forces. The unilateral measure of sanction, often referred to as the ‘May 24th measure,’ froze all outbound transactions from the South to the North. It further cut the physical size of flows between Seoul and Pyongyang, except for the humanitarian aids. It is difficult to examine the effect of the May 24th measure objectively. However, I could confirm that policy makers in Seoul seemed to believe in the pragmatic influence of the ‘May 24th measure’. An interviewee, a high rank official from the Unification Ministry, explained that the sanction should dry up the cash flow into the Kim family and the military. Another interviewee from the Defense Ministry shares a similar view, saying that the shelling might have been orchestrated at the very top level in response to the sanction.

President Lee himself was also skeptical about any kinds of aids to North
Korea. He believed that most of food and medical supplies sent to North were monopolized and only used to serve the interests of ruling elites and their families.\(^{32}\) It was even possible to view the attack as North Korea’s response to the ‘May 24th.’\(^{33}\) The sanction was believed to have significant impact on North Korean economy, especially on the economy of the political elite groups and the military. The remaining option was to shutdown the Kaesong Industrial Complex, an industrial park in North Korea formed in 2002 by the fund of South Korea. The Complex was not only to promote industrial development of North Korea, but also to be perceived as a sign of inter-Korean relations. In 2009, Lee ordered the Ministry of Unification to examine and prepare all possible consequences in case of shutting down the complex. Since the May 24th measure didn’t include any punitive measures against the Kaesong Complex, it was possible to include any direct measures on the complex, including shutting down of the complex, to raise the level of sanction on the inter-Korean relations.

### 4.3.2 Speculations about North Korea’s motive

After possible options are listed on the table, the next step is to figure out the motivation of North Korea’s attack. As the model illustrates, the responding actor’s knowledge and belief about the aggressor’s intentions makes a significant influence

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\(^{32}\)Lee (2015b).

\(^{33}\)An interviewee asserts that the shelling was a pre-mediated action to signal North Korea’s discontent with the sanction. According to this interviewee, the South Korean government intended to change the direction of its approach to the North. The May 24th measure is, he says, a strong signal of the South insisting a ‘principled’ North Korean policy. Pyongyang, however, did not buy the new approach and believed that it could make the South go back to the ‘soft’ approach as previous governments did.
on its responding behavior. What did the South Korean government conclude about the DPRK’s motive of the attack? From the experience of previous hostility of North Korea, scholars and pundits of North Korea suggest a few conjectures.

First, a group of experts argue that the provocation is a result of North Korea’s internal power struggle between militant groups. In some cases, a hawkish militant group adopted and committed provocative actions to gain more recognition from the ‘dear leader.’ This view describes that the North Korean military has multiple fractions competing each other for higher positions within the ruling elites, and that such competition sometimes produces excessive hostilities. The so-called ‘competition of loyalty,’ however, doesn’t seem to receive much credit of decision makers in Seoul during the crisis. Both the military and the civilian leadership under the Lee Myung-bak administration, including four interviewees of my fieldwork to South Korea, viewed that North Korea was highly centralized and controlled society and that the military organization was also under strict monitoring of higher authorities of the Korean Workers Party.

Second, the DPRK intentionally provokes around the NLL and the surrounding waters to obtain international attention in an attempt to change the status of the de facto sea border. Such an attempt first started in the early 1970s, and recent provocations are understood as an extension of the old attempt. Based on this view, Seoul often adopted alternately strategies of ignorance and planned response (e.g. scheduled military drills in the NLL area). However, it is less likely that Kim Jong-il would bring the NLL issue to the International Court of Justice or elsewhere. Even after joining the United Nations, North Korea continuously refuses
to follow both general and special agreements of the International Court. It is
even impossible to assume that a closed country like North Korea would seek an
international arbitration. Shelling indiscriminately, moreover, should be the last
choice of action to earn international support, if the attack was intended for outside
audience.

Third, Kim Jong-il finds the current regional order and environment less fa-
vorable to him, and intends to change it by increasing regional instabilities. The
improving relationship between China and South Korea is far from the picture Kim
would agree with. By increasing tensions in the region, therefore, Pyongyang may
need to confirm the tie between China and the DPRK. As the bloc-to-bloc confronta-
tion intensifies, the Kim regime feels more comfortable in justifying its military-first
doctrine and serving the interests of North Korean elites. However, even if this is
the case, the chance of North Korea’s initiating a war is extremely low. If North
Korea didn’t want to change the status quo so actively, why did North Korea dare
to fire on the island, which was far beyond the previous scale of provocation?

Finally, Pyongyang purposefully aggresses to raise the bargaining chips for its
negotiations elsewhere, especially the nuclear and missile talks. It is possible that
North Korea takes more aggressive gestures to increase its gains from the bargaining
with the United States as well as South Korea. If this is the case, North Korea should
have proposed a meeting with the South or the United States after the aggression,
either officially or unofficially. However, the Six Party Talk has been dormant for
several months since 2009, and Pyongyang did not request any meetings soon after
the attack. Hence, it is unclear if the hostile action was intended for a future
Existing explanations leave one important question unanswered: why did North Korea dare to attack in an unprecedented way, directly and indiscriminately on the territory of South Korea? How did the South Korean policy makers and leadership understand the motivation of the attack? In order to answer that, two circumstances deserve additional investigation. First, there were mixed signals from Pyongyang prior to the attack. In October, about a month before the shelling, North Korea agreed to have the Red Cross meeting on November 25 and to discuss solutions for the family reunion. If it had happened, it could be a turning point in inter-Korean relations since the Cheonan sinking. However, the North turned its back abruptly only two days before the scheduled meeting. Consequently, Seoul had to think over the reason for such precipitous change. Second, the attack itself was seen as unproductive to North Korea’s interest in terms of instigating public atmosphere of the South or earning coins from other states in the region. Public opinion of South Korea was divided over the result of the international investigation on the warship sinking in March. In a poll taken in September, after the final report was released, about 40% answered that they didn’t trust the result. The intentional use of regular armed forces against civilian target made the South Korean public turn their backs against the North. Apparently there were some advantages for Pyongyang as the public suspicion grew regarding the result of the investigation on the sinking of Cheonan. North Korea could have enjoyed the ‘stirring’ within the

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34In April, nearly 60% answered that they didn’t trust the South Korean government’s investigation. After the initial result was announced, 64% answered they trusted the investigation by the joint group. At the same time, however, 67% expressed doubts that there might be a political calculation behind.
South with no effort. The shelling, however, changed the atmosphere. The dovish line toward North Korea lost support, which was far from North Korea’s interest. Consequently, North Korea had to deal with more consolidated adherence between the United States, South Korea, and Japan. They could have lost even Chinese support and trust. Those circumstances are all together pointing at one direction: something went seriously wrong in Pyongyang.

As he recalls in his memoir, Lee Myung-bak believes that North Korea’s provocations are likely to be motivated by its internal politics.\textsuperscript{35} As the top decision maker, Lee’s perception and belief are crucial in understanding of South Korea’s responding behavior. It is, however, equally important to see how other policy makers and advisors to the president understood the motivation of the attack. On the following day of the attack, the Minister of Defense attended the hearing of the National Defense Committee of the National Assembly. As he briefed the incident before congressmen and women, he listed five possible motivation of North Korean attack.\textsuperscript{36} Interestingly, three of his five speculations were associated with the internal politics of Pyongyang. The Defense Minister suggested that the pre-planned attack could be conducted in order to promote and display the competence of Kim Jung-un, the youngest son of Kim Jong-il and the designated heir of the regime. Since the attack itself was unprecedented in terms of both the scale and the method, the November attack should be explained by more pressing and immediate reasons. The succession of the regime was the most convincing argument that could

\textsuperscript{35}Lee (2015b, 353).

\textsuperscript{36}National Assembly of the Republic of Korea, the Proceedings of the 294th Scheduled Meeting of the National Defense Committee, November 24, 2010.
explain the excessive level of hostility. Since the economic depression in early 1990s, most policymakers and analysts in South Korea began to accept the view that North Korea’s objective of provocations has changed from the Communist unification of the peninsula to the preservation and stability of the Kim regime.\textsuperscript{37} Many interviewees explained that decision makers in Seoul were more concerned about the internal politics of North Korea during the crisis. The discussion of South Korea on the internal instabilities of North Korea was largely consist of three arguments.

First, there was an increasing amount of suspicion and instabilities as the succession process started in Pyongyang, especially regarding the competence of Kim Jung-un, the soon-to-be leader of North Korea. The South Korean government was aware of the on-going succession process in North Korea. Although it was not clear when and how the succession took places, certain level of internal instability was anticipated. As discussed below, the intelligence of South Korea noticed that Kim Jung-un didn’t have enough time for the training as his father had. Many analysts and staff to the president pointed out that there were potential risk of lame duck in Pyongyang: veteran generals and military elites might not want to follow orders from a 28-year-old man, who had little experience both in politics and military.\textsuperscript{38} The artillery attack, then, could be understood as a pre-requisite for the young Kim to show his capability as a military commander.\textsuperscript{39}

\textsuperscript{37}Lee (2010); Michishita (2009).
\textsuperscript{38}According to North Korean defectors, especially those of high rank like Hwang Jang-yup, there exist several elite groups who would compete for the power if the dear leader dies. One of interviewees (a South Korean government official) also highlights that the provocation was a sign of Kim Jong-il’s loosing power.
\textsuperscript{39}It was reported that Kim Jung-un attended an artillery school at college. According to reports, official documents and education materials idolize Kim Jung-un as a ‘genius of artillery’ to build the cult of his personality. Choi and Shaw (2010).
Second, South Korean policy makers assessed that North Korea’s military-first doctrine was a sign of political failure in terms of the Kim family’s control over militants. The *Songun* politics itself is believed as nothing but another way of justifying the military’s control over the national economy. At the backdrop of this was the symbiosis between the Kim family and the military. As Kim Jong-il’s health condition deteriorated, the *Songun* doctrine turned to be a necessity for the survival of the regime as well as the succession process, which needs support from military elites. According to an interviewee from the Unification Ministry of South Korea, they believed that North Korea’s economy was nearly privatized by a group of military elites and the Kim family. Therefore, Kim Jong-il had placed the military’s interest on the top of the list for successful and smooth transition to his son. In this sense, North Korea’s provocative behavior or military adventurism was understood by the Lee administration as the reflection of how the leadership of Pyongyang should be vulnerable to the influence of the military.

Third, related to the above point of view, the attack was North Korea’s response to the heightened sanction of South Korea, or so called the May 24th measure. For the military-first policies to gain support, Kim Jong-il needed to give ruling elites some visible outcomes and benefits from his choosing of *Songun* politics. When the incoming fund was sufficient, it worked out for the entire economies, yet North Korean public was the least benefited. In the late 1990s and the early 2000s, relatively more liberal and progressive presidents of South Korea had provided financial and

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40 The interviewee further explained that the DPRK’s economy is split into three: a private economy for the Kim family; a group economy for the military elites; and public economy for the general population. For the past ten years, the financial aids from the South were mainly used for first two economies.
material aids, which was large enough for Kim Jong-il to satisfy the military and the population. However, the Lee administration changed the direction into a more conservative and hawkish line. In response to the Cheonan sinking, Lee Myung-bak stopped all inter-Korean transactions and in-flow of funds from the South to North Korea. Such intensified sanctions and controls over the incoming funds to Pyongyang damaged the Kim Jong-il regime’s stability, because the main recipient, the military elites, couldn’t receive as much profits as they used to. Having nothing to show to its audience, Kim Jong-il (and his son) had to create a new revenue. As one interviewee asserted, the November shelling was an intended signal to Seoul in response to the May 24th measure. This view is also aligned with the theory that North Korea has domestic challenges as the Songun failed to earn credits from its people: Kim Jong-il expected that Seoul should be appeasing the North if he raised the level of aggressiveness.

4.3.3 Final decision

South Korea’s response was made in two areas: military and diplomatic measures. For a military action, South Korea conducted a number of large mobilizations, including the joint naval exercise with the United States. In the first two weeks of December, there were more than 20 naval exercises conducted by South Korea. However, its effectiveness remains doubtful for two reasons. First, the show-of-force might have little impact on North Korea, if the purpose of action was to yield pressure and incur changes in North Korea’s policy direction. Such a indi-
rect measure could work in the opposite direction of its original intention. It has been an old strategy of Kim Jong-il to use the presence of South Korean threat as the justification of his military first doctrine. Second, there was significant costs of military exercise that Seoul had to pay. The Lee administration had requested a strong presence of the US force in the summer of 2010 to demonstrate in the wake of the Cheonan sinking incident. The plan of inviting a US force to the Yellow Sea brought strong objection of China. In seeking for a strong signal to the November attack, Lee Myung-bak again wanted to demonstrate a strong bond with the United States. This, in turn, will make China uncomfortable for sure. Then, why did South Korea become so desperate to invite the United States in its response, even at some serious expenses?

Based on personal interviews in South Korea, I could roughly grasp what was going on within the decision making circle. Immediately after the attack was reported, the president initiated an emergency call in the situation room, located at the underground level of the Blue House. The president entered the room with the National Security Advisor, Chief of Staff, Military Advisor, and several other close aids. While the president was briefed about the attack, the report of the second round of shelling came in. Still the president did not make clear decision, and did not receive even a rough sketch of possible options for response. When the president asked about retaliatory options, the National Security Advisor and the military advisor answered that the use of air force was difficult because it should

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41 One of interviewee attended the meeting at the situation room. So, I could ask him/her about details of the meeting.
be consulted with the Combined Forces Command. Then, for a few minutes, a
discussion went hot over the appropriateness of using air power. The main issue
was whether it was a ‘self-defense’ action to strike North Korean military facilities
using aircraft. After the exchange of fire halted, Lee called another emergency
meeting, where ministers of security related ministries were to attend. At 16:35,
the meeting started. Surprisingly, the Minister of Defense was absent. At that
time, Minister Kim Tae-young was attending the National Assembly hearing. Lee
ordered an immediate return of the Minister in an angry voice. Almost Kim arrived
at the Blue House about an hour later. The president retorted angrily. Then,
a news headline was put on the screen. The line read “President Lee ordered to
avoid military crashes and escalation.” Shortly, other screens in the situation room
were showing similar headlines. Lee went upset again for this. Later, it turned
out that one of spokesmen mis-briefed the press due to the unexpectedness and
pressure of time.\footnote{This part still remains uncertain. As I discuss with greater detail later in the chapter, the
president’s warning of escalation does not sound unacceptable. As the top decision maker of mili-
tary force, the president may have the power to revoke any counterattacks if he judged escalation
is likely. For instance, Kim (2013) believes that the order of cautious action was made by the
president.} Public atmosphere, however, was already irreversible. One of
staff in the room claimed that the inappropriate news message could make serious
backlash. My interviewee said that he thought the crisis was no longer military,
but changed to a political one as the president began to worry about the political
backlash. The meeting continued until 20:30, approximately. With only a handful
members, the president went to the cafeteria for dinner.\footnote{By that time, the main dining room was closed for the day, and only the cafeteria for secret guards was available.}
denounced the news report. He added that the president’s domestic standing could
be endangered if he didn’t take any action against North. The president dropped
his spoon without finishing his food, and rushed into the Joint Chief of Staff in
Yongsan. In a few minutes, all of major new agencies reported a breaking news
that President Lee visited the Joint Chief of Staff with photographs of the president
sitting among the generals. “The photo of the president sitting in the center of the
Joint Chief of Staff is what we wanted,” one of my interviewees recalled.

As the nature of crisis changed from military to political, the response also
needed to be adjusted to serve new objectives. Lee Myung-bak wanted to show Py-
ongyang how serious and resolve he was about the provocation. Initially, he asked
the military to prepare possible plans of retaliatory strike, including the use of air
strike. When the president wanted to know about the plausibility of air strike,
the military answered skeptically. According to the president’s memoire, the mil-
itary was more careful than the president throughout the crisis. The Minister of
Defense and the president’s military advisor opposed to the idea of striking North
Korean shore using air-to-surface missiles. Their rationale was that the use of fight-
ers against North Korea’s artillery attack was a violation of the rules of engagement,
and that maneuvering fighters into the sky of North Korea was beyond the South
Korea’s operational authority.\footnote{The wartime control of South Korean military forces remains under the authority of the United States since the end of the Korean War. However, General Sharpe, the Commander of USFK, answered elsewhere that the use of air force to defend South Korean territory is completely the right of the South Korean government in terms of self-defenses, not an issue of military operation. \textit{Kim} (2013).}

While the military was hesitating, Lee decided to move quickly to take an ini-
tiative in diplomatic measures. As discussed earlier, it was not surprising that Lee sought support of the United States. Demonstrating a strong tie with the United States could meet his goals of response: satisfying his domestic constituencies and signaling resolve to the North. The surprising part was that Seoul intentionally moved away from Beijing. Among key decision makers growing was a skeptical view about Chinese leverage against the North. A few months earlier, when South Korea announced the official result of investigation, China dismissed the official claim of the joint investigation team. Following that, China also refused to cooperate to adopt a Security Council resolution. As a result, the condemnation was made only in Presidential Statement. In May of 2010, Lee spoke to Wen Jiabao, the Premier of Chinese State Council, who was attending the trilateral submit of Korea, China, and Japan. On Lee’s request of China’s support for measures of condemning the aggressive behavior of North Korea, Wen answered only diplomatic gesture, implying that China would not take a side of any parties. As a result, two trilateral relations produced opposite outcomes regarding the aggression. The trilateral meeting between Korea, Japan, and the United States was held on December 6 in Washington, D.C. Chiefs of foreign affairs of three countries announced a joint statement, condemning North Korea’s unprovoked attack on Yeonpyeong Island. On the other hand, the other trilateral relationship of Korea, the United States, and China failed to make a coordinated response to the North.

To sum up, Lee Myung-bak considered the response in three areas: military, diplomatic, and inter-Korean relations. The president and his staff had set up

Lee (2015b, 279).
some bottom lines in making sense of plausible and effective measures. Although Lee Myung-bak blamed the military for not providing a reliable assistance, it the president himself that made final decision. The only decision involving military force was a series of exercises with extended length and scale. Those force demonstrations were, however, designed for domestic audiences. Diplomatic measures were short of efficiency, because China refused to take a part. One thing less discussed is the inter-Korean measure. It remains unclear if Lee considered further sanctions and punitive measures in inter-Korean relations, such as a complete shutdown of Gaesong Industrial Complex. One possible theory is that Lee would not consider such a strong action about the Complex, because he had a business-oriented view on the inter-Korean trade, as opposed to political and nationalistic views. Also, it is possible to argue that Lee had used up all possible measures in the inter-Korean relations when South Korea issued the May 24th sanction in response to the Cheonan incident. As discussed later, the domestic pressure within South Korea was not trivial. Moreover, the president himself was also sensitive to the domestic constituencies. Another consideration was the domestic instability of the North. Starting from 2008, it was reported that Kim Jong-il had a health problem, which increased concerns and potential instabilities of the North Korean regime. Given those possible internal issues of Pyongyang, policymakers in Seoul began to place more weight on North Korea’s military adventurism and the incentive of diversionary behavior.
4.4 North Korea’s instabilities

In 2010, North Korea was undergoing several changes and difficulties that could influence the foundation of the regime. Experts on North Korea characterize the year 2010 as the time of ‘dual crises’ (Park, 2011a). On one hand, North Korea had to begin its succession process from Kim Jong-il to Kim Jung-un, the designated heir. As discussed below, the succession process itself is one of the most significant change in the North Korean regime, and is often associated with a high potential of instability. On the other hand, the regime itself was on the sharp edge of survival. The economic difficulties had devastated the public commercials for years. The costs of Songun policy was too large. No infrastructure for economic development was effectively established. The productivity never improved, and a few attempts to boost economy turned out to be unsuccessful. For instance, the failure of the currency reform in the late 2009 was a finishing blow. Under such unfavorable conditions, the foreign policy of North Korea became more bellicose and adventurous. As many observers and experts analyze, the increasing number of provocations by Pyongyang was an indication of serious problems inside of the regime. In order to capture the multi-faceted nature of domestic instabilities that North Korea faced before the attack, I look into three major components of the DPRK’s statehood: the instability in politics, economic pressure, and its changing foreign relations.\footnote{Since North Korea is a closed society and information about its domestic situation is hardly accessible, I survey experts’ analyses on the domestic political and economic situation of North Korea as well as more direct sources relating to the DPRK, such as outgoing messages from the North Korea’s Central News Agency, trade indicators with China, and some political indicators}
4.4.1 Political instabilities

North Korea is not only a closed country, but also has a unique system of choosing its leader, a hereditary monarchic system. North Korean analysts explain that the blood-succeeding system of North Korea has at least three advantages. First, a hereditary system may have greater predictability on the part of the successor. Once designated is the succeeding leadership, everyone will know who will be in power in the future. Such predictability gives less room for potential challengers to dispute against the leadership, unless the blood lineage is disputable. Second, the pre-modern hereditary system allows the regime (or the Kim family) to have stability. Because only a few family members are selected for possible candidates for the throne, the competition could be simple and sometimes cost-saving. It can also easily quiet factional infightings and challenges from other elite groups. Third, the continuity of existing policies is more likely, and this can give clear signal to observers outside. For instance, Kim Jong-il never changed the DPRK’s foreign relations with China when he took over the full authority from his father. For a few years immediately after the takeover, Kim Jong-il followed his father’s will. This period of time is often called yoohoon tongchi, meaning the successor rules with the instruction of the predecessor. This transition period enables the successor to have more time to complete the takeover process.

Those advantages are, however, only realized when the leader has a strong control over the entire political bodies of the regime. Kim Jong-il seemed to have that reflect its bilateral relationship with the PRC. These information are limited, but still useful in gauging how struggling the domestic politics of North Korea was around 2010.
such power until 2008 when he fell down from a stroke. Since the first heart attack, Kim was not able to lead all of major institutions any longer. The period between the first stroke and the death of Kim Jong-il is one of the most critical moments for the North Korean regime. Jang Sung-taek, Kim’s brother-in-law, was chosen to take some of Kim’s responsibilities. Under such circumstance, the political stability of the regime had to be weakened.

In fact, North Korea’s succession was not a new phenomenon. The regime experienced the same situation in 1994, when Kim Il-sung, Kim Jong-il’s father, died. However, the succession in 1994 was completely different from the one that Kim Jong-il had to prepare in 2008. The succession in 1994 was planned in well advance, and taken gradually to minimize oppositions and challenges. Before the takeover, Kim Jong-il had taken several parts of state running under the guidance of his father for nearly twenty years. The succession from Kim Jong-il to his son, however, was rather hectic. Until 2008 when the health issue emerged, Kim Jong-il did not appointed a designated heir. Not having a designated successor, Kim Jong-il and the leadership of North Korea made the succession process as fast as possible. Kim Jong-il’s poor health condition didn’t seem to afford a gradual and orderly execution of the succession process.

47 In most media coverage, Kim Jong-il didn’t make appearance for several weeks. For an analytic comparison between two successions, see Lim (2012).
48 Some argue that Kim Jong-il debuted to the DPRK politics around 1967, when the monolithic system was first introduced. In 1967, Kim Il-sung purged his colleagues as well as rivals to transform the regime into a family business. With more tangible evidence, Ji (2011) explains that Kim Jong-il had great autonomy in running state affairs. See the footnote 19 of Ji (2011).
49 Some news reports said that Kim Jong-il began to think about the next leader around 2001 when he had a car accident. At that time, Kim Jung-nam, the first son, was the most favorite candidate. Kim Jung-un was not known to the public or North Korea analysts at that time. Kim Jung-un was selected as the heir in either early 2007 or late 2008. For the analysis of those arguments, see Jung (2012).
Between 2008 and 2010, Kim Jong-il took important steps to finish the succession.\textsuperscript{51} In April 2009, Kim Jung-un joined the National Defense Commission as a low level post, called ‘instructor.’ More importantly, the young Kim was also appointed to the director of the State (Political) Security Department.\textsuperscript{52} Since then, it seemed that the Kim Jung-un began to take over major authorities to control the military and security-related agencies. On April 15, 2010, the 98th \textit{Taeyangjeol},\textsuperscript{53} North Korea used an unusual language to celebrate the day: “Let’s defend the Central Committee of KWP to the death.”\textsuperscript{54} It was strange to highlight the Central Committee at the biggest governmental ceremony, because the Central Committee was believed to be degraded since Kim Jong-il took over power. No single Central Committee plenum was held between 1993 and 2010.\textsuperscript{55}

The unusual emphasis on the KWP’s Central Committee meant that the succession was already in process. In June 2010, the Third Session of the 12th Supreme People’s Assembly occurred. It was an unusual convening, because sessions have typically called once per year since the constitutional revision in 1998.\textsuperscript{56} The third session, convened only two months after the second session, witnessed some important

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\textsuperscript{51} According to observers of North Korea, Kim Jong-il decided to designate Kim Jung-un, the youngest son, as his successor in early 2007. An internal document of North Korea shows that the DPRK army was using a training and education material that explicitly raised Kim Jung-un. The National Intelligence Service of South Korea also mentioned the possibility that Kim’s ‘third son’ could be designated as the next leader. Jung (2012).
\textsuperscript{52} The State Security Department is the national intelligence agency, equivalent to the CIA. Its major mission includes the monitoring of political elites. Therefore, having the youngest son take the control of the intelligence department should be viewed as the first step to seize the power over other experienced political and military elites. Jung (2012).
\textsuperscript{53} \textit{Taeyangjeol} is the birthday of Kim Il-sung and the biggest national holiday in North Korea. The government and the entire country is celebrating and attending the ceremony for the day.
\textsuperscript{55} Park and Snyder (2012, 2013).
\textsuperscript{56} Choi and Shaw (2010).
\end{flushleft}
reshuffle in the leadership. First of all, Jang Sung-taek, Kim Jong-il’s brother-in-law and Kim Jung-un’s uncle, was promoted to the vice chairman of the National Defense Commission (NDC). Jang was known as the de facto second powerful person in North Korea, because he had assisted Kim Jong-il and been deeply connected to the process of succession.\(^{57}\) By adding Jang as the vice chairman of the most powerful institute, Kim Jong-il would expect Jang to play the key role in orchestrating the succession process. Another major shift was the appointment of Choe Yong-rim to the new head of the cabinet. Promoting Choe to the Premier was believed to give two messages. First, as a long-time servant to the regime,\(^{58}\) his presence in the leadership provided Kim Jung-un with continuity and legitimacy by showing that he was connected to elites of previous generations. Second, for the people of North Korea Choe was stamped as an important figure involved in the construction of a hundred thousand of new houses in Pyongyang. Therefore, his promotion boosted the image that the Party was concerned about the lives of the people. Those two messages – the legitimate and continuing heritage from the founding father, and the leader who could improve the people’s living – were crucial in justifying Kim Jung-un’s succession.

In September, just two month before the shelling, the most noteworthy change took place. The KWP Delegates’ Conference was held after 34 years of dormancy.\(^{59}\)

\(^{57}\)Some analysts even foretold that Jang could be ruling as regent when Kim dies.

\(^{58}\)Choe was the secretary to Kim Il-sung since 1980, and continued to serve the Party and Pyongyang until 2010.

\(^{59}\)The last time the Party convened its delegates was in 1966. The Conference was announced in June and scheduled to happen in early September. But the Conference was postponed two weeks. Given that delegates were summoned from all around the country and that they had arrived and been waiting for the conference a few days before the scheduled date, it was very unusual to postpone a national-level conference because of floods (Choi and Shaw, 2010).
In the Delegates’ Conference, Kim Jung-un was appointed to the vice chairman of the Party’s Central Military Committee, which is one of the most powerful decision-making body in North Korea. To make the promotion feasible, the 28-year-old Kim was given the military rank of four star general, a day prior to the Conference. Another surprising appointment was that Kim Kyung-hee, Kim Jong-il’s sister and Jang’s wife, was also promoted to a four star general and joined the Politburo. Besides the young Kim and his aunt, a nationwide rearrangement was made at the Conference, which filled several positions that had been empty for years. Newly assigned or rearranged figures were all close ties to Jang Sung-taek or Kim Jong-il, so that the core members of the ruling family were all lined up to back up the succession. The political reshuffling between 2008 and 2010 was directed to make the succession quick and safe as Kim Jong-il’s health deteriorated. The direction was clear: to support the succession; to replace old generals; and to control and/or eliminate old militants who would object against Jang and Kim Jung-un.

In sum, the instability of North Korean politics in years between 2008 and 2010 is characterized by three aspects. First, it was impossible to finish and consolidate organizational changes and rearrangements in a short period of time. Since most of the state power was concentrated on the military, the new leadership should be powerful enough overwhelm generals. The party has been weakened for decades, and could not provide strong support to the young prince. There was little balancing power against the military. Even though Kim Jong-il placed his sister and brother-in-law in dominant positions, the risk remained high. Second, Kim Jung-un, the designated heir was not well prepared for the position. He was only in his late 20s,
and had limited experience both in military and politics. His inexperience could evoke political elites’ antipathy. Making him a four star general does not seem to gain solid loyalty from veterans and military officers of high ranks. Finally, the health condition of Kim Jong-il was not favorable at all. He didn’t have time to prepare his son as his father did to him. The advance of new and young figures in the leadership could bring uncomfortableness, which required some time to be resolved.

4.4.2 Economic instabilities

In evaluating the North Korean economy, I pay special attention to two points. First, the economy of the DPRK is based on a planned, state-run, and closed system. Therefore, the fundamental of the national economy of North Korea is built on different soil from what most advanced economies are. For instance, the size of trade may not be an efficient indicator to assess the national economy of North Korea. Indices of productivity or domestic crop production, however, can capture the economic atmosphere of a closed economy, because North Korean economy has emphasized ‘self-supply’ or ‘independent’ of social economy based on its juche ideology. Second, therefore, the importance of economic performance to the regime is no smaller than to democratic counterparts. Theories of political survival argue that autocratic leaders may have advantages in maintaining their political survival due to relatively small size of their winning coalitions. This, however, does not mean that leaders of non-democracies are free of any threats or vulnerabilities to their political
power. In fact, a leader of an autocratic regime may face severe challenges if he failed to win the competition. Poor performance in economy, thus, could put Kim in a struggling position. Even though the political (and physical) survival of the regime should not be endangered by low performance in economy, the ruling elites, including the ‘dear leader,’ may have inevitable burdens if they are believed to be unsuccessful in feeding the population. In this regard, several economic changes in 2009 and 2010 deserve scholarly attention in evaluating possible effects of economic hardship on the Kim Jong-il regime.

North Korea experienced severe famine throughout the 1990s, which caused chronic health and nutrition issues across the country. Reports from international organizations estimate that 250 thousands to 3.5 million people died from hunger in the 1990s.\footnote{Bluth (2011, 70).} Facing economic difficulties, Kim Jong-il introduced some reforms, including constitutional changes. The wind of change, however, did not last long enough to bring its economy back to life. Along with the political burden, North Korea’s economy was heading down for years. There were increasing rumors in 2010 that economic difficulties were severe enough to threat the regime’s stability.\footnote{Although information about the domestic economy of the North is still very limited, several reports and analyses indicate that overall DPRK economy was nearly hitting the bottom in late 2009 and early 2010. Abundant are anecdotal episodes telling how bad the economy of and the life in North Korea were.} The economic instabilities of North Korea in the 2000s were driven by several factors.

First, the food production dropped significantly in 2009 and 2010. As a closed economy pursuing autarky, the self-sufficiency in food is one of key parameters that the ruling elites in Pyongyang should be concerned. According to the report of the
United Nations’ Food and Agriculture Organization (FAO), the total production of North Korea’s major crop (rice, maize, potato, and winter wheat) decreased or only marginally improved when compared with previous years.\(^{62}\) Others reported that the food production of 2009 was estimated 4.11 million metric tones, which was at least 5% dropped from 2008. The decrease was reportedly to cause about 1.3 million metric tons short to its national need in 2010 to feed the population.\(^{63}\) Given its decades long shortage of food, the continuous decrease in food production was a serious threat to the regime.

Second, the amount of foreign aids to North Korea also dropped in 2009. As he made clear messages and pledges during his presidential campaign, the Lee Myunjbak administration took a more conservative and hardline approach to North Korea. The result was the opposite direction of the ‘Sunshine Policy,’ the soft-landing engagement policy by Kim Dae-jung. The new administration stopped accommodating demands from the North.\(^{64}\) In 2009, the gross quantity of inter-Korean trade fell by 8% points from the previous year, particularly attributed by the significant drop (16%) of South Korea’s export to the North.\(^{65}\) International community was no longer generous to North Korea, because of its incompliance with several agreements on the nuclear program. In an attempt to increase its bargaining chip, North Korea

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\(^{62}\)The World Food Program of the United Nations estimated the crop production in 2009/2010 season would increase in its initial report, but the actual production in 2010 showed “only a marginal improvement over 2009.” The report analyzes that the weather condition of 2010 was unfriendly so that the total production did not improve enough to recover its chronic food problem. The unusually cold and prolonged winter in 2009/10 and the flooding in the summer of 2010 badly damaged the local farms and fields nationwide.


\(^{64}\)Lee Myung-bak as well as his senior staff criticized the sunshine policy. Lee sought for a reciprocal and principled approach toward the North.

\(^{65}\) *Yonhap News*. February 10, 2010.
conducted underground nuclear tests in 2006 and 2009. As responses to infringements, the Security Council adopted Resolution 1718 and 1874 to impose sanctions. An important difference between two responses is that South Korea did not speak for the North Korea’s sake any more in 2009.66

Third, the failure of currency reform in November 2009 shows that the DPRK government was not ready to embrace meaningful changes in its economy. One of the main objective of the reform was to restore the government’s control over the financial market. As it had allowed some rooms for private exchanges and market economy, the national economy seemed to revive. People gathered in markets, and goods and products were exchanged autonomously. However, as the public economy got more vitality, the elite economy didn’t improve much. At last, the state power intervened and stopped on-going market exchanges. Under the name of currency reform, the government recollected profits that were generated through market activities. Understandably, those quasi-reform froze the economy and changed the overall direction of economic development. The impact of currency reform failure was more destructive than many could expected. Daily NK, a South Korea based expert group on North Korea, estimated that the price of rice raised nearly three times as the price before the reform. Some experts told that the drastic inflation and food shortage together increased difficulties way more than the people of North Korean could tolerate (Lim and Lee, 2011).

Finally, as a more fundamental reason behind the economic challenges, there

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66 During the first nuclear test in 2006, then Prime Minister Han Myung-sook spoke to the National Assembly that South Korea would not support any military measures against North Korea in response to the nuclear test.
remained little hope for North Korean economy to revive. It was no longer a secret that the economy of North Korea was totally failed. Since the mid-1990s only one out of four factories was operating in North Korea. The energy shortage, which has lasted for several decades, does not allow the regime to stand on its own feet. Cha (2012) points out that North Korea made bad decisions in terms of economic development in the 1960s. For example, the regime put everything it had into military, instead of investing in industrial infrastructure and common economy. The current North Korea is the result of decision such bad decisions. The increasing shortage of energy and industrial infrastructure are now one of fundamental threat to the regime.67 Since 1995, North Korea has relied on China for most of its energy needs. Being unable to pay its debt, the trade between China and North Korea is a bartering system: North Korea exports natural resources and minerals to China at low prices while China sells oil and other industrial products at higher prices. The result was obvious: China has more leverage on the DPRK as the trade deficit has tripled for the past ten years (Aden, 2011; Nanto and Manyin, 2011). As North Korea putting itself in a vulnerable position, the regime stability becomes also dependent on its bilateral relationship with Beijing.

4.4.3 DPRK foreign relations

Since the collapse of the Soviet Union, North Korea’s foreign relations have been narrowed down to target only a handful number of countries. Among those remained relations, two countries are of great importance: China and South Korea. In

both practical and ideological sense, Sino-DPRK relation became central to North Korea. Its tie with the PRC is not only in economy, but also in political and military matters. However, recently two countries seem to have conflicting objectives in many policy issues. As China opened its door and adopted capitalist elements for its own economy, China wanted a stable regional security environment. Thus, China needs North Korea to remain quiet and compliant with existing agreements. To assure the stability in the region as well as on the Korean peninsula, China has to maintain its influence on Pyongyang so that it could control Kim Jong-il’s nuclear ambition. At the same time, the PRC should maintain strong economic ties with the DPRK so that the bellicose ally should not go for risky adventure. Chinese leaders believe that the costs of any contingencies shall be on their shoulders. On the other hand, North Korea prefers more confrontational environment. The main objective of North Korean policy is the survival of the regime. Facing challenges from both inside and out, Kim Jong-il and the political elites of Pyongyang sought ways to justify its policy direction, which is represented by the term ‘songun’ or military first. For this end, North Korea had two objectives at least. First, it needed crises to justify its over-investment in military. Second, it had to show its military capabilities against ‘the imperialistic Americans and South Korean puppets.’ Thus, North Korea continuously issued threats and militarized provocations. Consequently, in making a preferred security environment in East Asia, China faced three North Korean issues: Kim’s nuclear aspiration, North Korea’s economic predicament, and

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68 Liu (2003); Nanto and Manyin (2011).
provocative behavior. The bellicose behavior of North Korea, therefore, was hardly welcomed by China. Hu Jintao and the succeeding Xi seemed to have growing concerns about Kim Jong-il’s provocative actions, including the nuclear program. For instance, China voted for the Security Council Resolutions 1718 (2006) and 1874 (2009), which imposed and/or tightened sanctions on North Korea in response to its missile and nuclear tests.

As China’s priority changed, its perception toward North Korea also changed. A recent survey shows that more than 56% of Chinese scholars and political elites see the Six Party Talks as a major diplomatic venue in resolving Pyongyang’s nuclear drive.\(^70\). This result not only tells about China’s perception of how the nuclear issue to be addressed, but also shows that Chinese elites view the nuclear issue as a problem to be resolved via political channels. They no longer understand North Korea’s nuclear armament as a self-defense measure, but a proliferation issue. At the same time, Chinese leaders understand North Korea’s political risk and concern of regime survival (Han, 2004, 2012). Some experts carefully argue that China could accept the unification of two Koreas under Seoul’s initiative.\(^71\) In the new world order, China’s role changed as it had more power. Patronizing Pyongyang is no longer of China’s interests for reasons. First, the international community does not support North Korea’s provocative behavior. As a new global power, China faces criticism if it advocates Pyongyang. Second, Kim Jong-il’s aspiration to nuclear weapon contradicts to China’s efforts for the denuclearization of the peninsula. Whenever

\(^70\) Lee (2012b)  
\(^71\) Oliver and Dyer (2010).
North Korea breached agreements, Kim’s nuclear adventurism itself became a significant challenge to China’s interest in East Asia. Third, the *juche* ideology, which emphasizes self-reliance, is obviously heading for the opposite direction of China’s increasing openness and interdependence toward the world. Fourth, North Korea’s provocations induces negative externalities to China’s bilateral relations with major powers in the region and the United States.

Inter-Korea relationship, the other pillar of the DPRK’s foreign relations in the 2000s, was also in a worst situation. The new government in Seoul shifted its gear to a realist approach, or so called ‘principled’ approach. Unlike two pro-North government, the Lee administration cut major channels of communication as well as direct aids to the North. He even considered the elimination of the Ministry of Unification, which did not happened due to a strong objection from the public. Lee maintained a view that the bilateral relationship with North Korea should not be differentiated from other bilateral relations. In this vein, inter-Korean relation did not receive any special attention from the South Korean government. In his memoir, Lee describes North Korea and its approach to the South as “unprincipled, abnormal, and unacceptable” (Lee, 2015).

4.5 Analysis

How should we understand responding behavior of South Korea in the 2010 crisis? Did it respond less than the initial aggression? Or can we define it as a reciprocal response? In this study, I interpret the response of South Korea as a
reciprocation outcome, rather than a concession, because of two reasons. First, South Korea reacted to the attack both immediately and extendedly for several weeks. There was an immediate counter-shelling by the marine unit on the island. Also, there were a dozen of show-of-forces, including the first-ever maritime joint exercise with a US carrier fleet in the Yellow Sea. Besides military mobilizations, Seoul also took diplomatic actions. To press the North diplomatically, Lee held the hands of the United States and Japan. Second, the decision making process during the crisis includes serious discussion of retaliative attacks. Written records and interviews, as well as news reports and analyses, indicate that the use of air force was seriously considered. Although a retaliatory strike was not implemented, the preparation of air force showed the response was to involve the use of force. Regardless of the type of force used in its response, obviously South Korea’s response to the shelling was greater than a non-response or a concession outcome.

The case of Yeonpyeong poses two questions about South Korea’s responding behavior. First, why didn’t retaliate? Given the severity of the aggression and the security environment, the lack of strong response or retaliation needs some explanation. Why didn’t South Korea go further to conduct retaliatory attack against North Korea’s artillery base? A few months prior to the bombardment, the South Korean government strongly condemned Pyongyang’s hostile action causing the sinking of Cheonan. Moreover, at the backdrop of domestic critics and controversies on the sinking incident, Lee Myung-bak ordered a revision of the rules of engagement, allowing stronger reaction when provoked by the North. Also, he was known for a hardliner toward North Korea, criticizing the Sunshine Policy during the presidential
campaign. As he took the office, his staff and the cabinet, including key positions of national security and North Korean policy, were filled with more hawkish politicians and realist scholars. The actual circumstance of the incident in November also showed that retaliatory measures were seriously considered and likely.

Second, what was the purpose of the show-of-force, including the belated exercises and mobilization? Until January of the following year, the crisis was not resolved completely. Throughout the course of crisis, some important military and political maneuvers were made. Among those measures, the extended exercise on December 20 constituted the climax of the crisis. The belated mobilization, however, leaves some questions. If the purpose of response was to demonstrate its capabilities and resolve, wasn’t the joint exercise with the United States enough to fulfill such objectives? The exercise itself seems to be redundant at best. Compared with previous clashes in the area, the shelling of Yeonpyeong is an outlier in many aspects, including additional exercises after the aggression. That is, the timing and scale of the belated force demonstration need some explanation.

In the following, I apply the logic of strategic interaction to the case of Yeonpyeong incident, arguing that South Korea’s response was not a miscalculated or constrained course of action. Instead, it could be a strategic decision based on the consideration of domestic politics in both Seoul and Pyongyang. For this end, I focus on two predictors of my model: the responding leader’s belief about the initiating leader’s domestic bargaining power and the responding leader’s own domestic political concerns.
4.5.1 The assessment of motivations behind the aggression

During the crisis, the president and his staff in the Blue House had one concern in mind, which many of them were already aware of: the possibility of domestic disorder in Pyongyang. By 2009, the president and his key advisors received reports and intelligence about the possibility of an internal collapse of North Korea. As the health condition of Kim Jong-il worsened, such speculation seemed to receive more attention.\(^{72}\) There are several direct and indirect evidences that the decision makers in Seoul were seriously holding the view that instabilities within North Korea was increasing.

First of all, Lee Myung-bak holds a pragmatic view of politics, not only for his own presidency, but also for other leaders, including Kim Jong-il.\(^{73}\) He views Kim Jong-il as an independent and utility-maximizing politician, rather than an unpredictable and cult-based charismatic leader. For instance, he believed that Kim

\(^{72}\)Between 2008 and 2010, there was a sharp increase of reports and articles about so-called ‘North Korean contingencies.’ Most of South Korean analyses of the attack convey similar conjectures about the incentives behind the attack. By and large, those conjectures can be categorized into four as follows: (1) domestic politics driven; (2) challenging the status quo; (3) brinkmanship for raising the bargaining chip; and (4) signaling important information to change regional security environments.

\(^{73}\)His background of business man as a CEO of Hyundai Engineering and Construction as well as his achievements as a politician tell something about his mindset. When North Korean authority unilaterally declared a temporal limit of access to the Kaesong Industrial Complex, Lee did not agree to the idea of shutting down the complex because much investment had been made already in Kaesong. It seems that the loss in business in case of abrupt closure of the complex should be his top concerns. He explains himself that the only reason to shut down the complex, if he has to, would be the expected loss or negative growth from business activities in the complex. In 2009, Lee ordered to conduct a field investigation of the complex and other foreign investments. It gave North Korea a signal that Lee would withdraw the entire business in Kaesong at any moment if figures turn to negative. To him, Kaesong is not a symbol of inter-Korean relations, but another business model that is supposed to produce profits. Interestingly, he himself invested in the complex a lot, and advertised his achievement in terms of business success in Kaesong during his presidency. Therefore, the option of shutting down Kaesong Complex should not be his choice of action at any rate.
Jong-il would look for monetary profits, not a symbolic or ritual values, in making the deal of tourism contract in Mountain Keumkang. In his recall of meeting with an investor to North Korea, he argued that Kim Jong-il would make the deal with Hyundai, a business conglomerate of South Korea, instead of the investor from the Unification Church. Lee Myung-bak accounted that even if Kim Jong-il publicly announced that he should rule following Kim Il-sung's dying instruction, he should eventually look for economic interests. The investor from the Unification Church believed that Kim Jong-il would make deal with him because Kim Il-sung's instruction was so. However, Kim Jong-il reversed his father's will, and gave the contract to the conglomerate. Therefore, to some extent, Lee believes that Kim Jong-il and North Korean leadership have interests in making rational choices to maximize their utilities. Given that all-out war on the peninsular would jeopardize both countries' economies and regimes, he believed that no leadership with capability of rational calculation would initiate a war. Lee Myung-bak doesn’t expect radical or irrational moves by North Korea even if Kim Jong-il dies:

In December 2012, all inter-Korean relations went literally frozen as Kim Jong-il died. North Korean government, which lost the top decision maker, could do nothing but dragging on the given situation, while continuing its verbal attacks on us (translated from Korean).

The quoted remark of Lee shows that he does not view the probability of war initiation by North Korea high. Before the death of Kim Jong-il, Lee’s major concern regarding North Korea was the odd of sudden collapse of the regime in Pyongyang. Only a few days before the crisis broke out, Lee Myung-bak and his staff read an intelligence report on the possibility of Kim Jong-il’s death. South Korea had also
acquired detailed intelligence on Kim’s health problem, including diagnosis results of hemorrhage and images of Kim’s cerebral scan. In July of 2010, Robert Gates, the US Secretary of Defense, visited Seoul and discussed some speculations about the motivation behind the Cheonan sinking.\textsuperscript{74} By the time of the attack, it was obvious that both the United States and South Korea were well aware of Kim Jong-il’s health issue, which could lead to dramatic turmoil. As a matter of fact, the domestic situation of North Korea was far from ideal for a major transition. As discussed above, Pyongyang was facing crucial challenges both in economic and political realms. What we need to know is how Lee Myung-bak was evaluating such domestic circumstance of Kim Jong-il. If the president put the domestic power of Kim Jong-il into his consideration, what was the administration’s speculation about the Kim Jong-il’s domestic standing? As discussed earlier, the situation inside Pyongyang was not very friendly to Kim Jong-il: the poor health condition of himself grew risks, the national economy dropped as the currency reform failed, and the traditional support from China was about to change as the new generation of Chinese leadership emerges with new regional order. The most pressing issue, however, was the transition of power from Kim Jong-il to Kim Jung-un.

Regarding the motivation of hostile action by North Korea, in his memoire, Lee articulates that he believes North Korea provokes, not because of dissatisfaction of inter-Korean relations (e.g. to increase bargaining power vis-a-vis South Korea and the US, or to threaten its counterparts for greater compensation or concession),

\textsuperscript{74}The visit was the scheduled meeting of “two plus two” or “ROK-US Foreign and Defense Ministers’ Meeting,” where Secretary Clinton and Gates met Korean counterparts.
but because of its internal issues. He wrote:

[Even] if I had treated and supported North Korea as my two predecessors did, I do not think North Korea would have not provoked. I believe that North Korea’s provocative actions are mainly due to its internal problems, rather than inter-Korean relations. Whenever the North Korean leadership faces challenges to its foundation of power, they repeatedly provoked South Korea with the purpose of increasing the tension and reinforcing internal coherence (translated from Korean).  

The decision circle of South Korea also viewed that Kim Jong-il might have strong challengers. The power of the militant in Pyongyang has been over-emphasized and grown corpulently. After the death of Kim Il-sung, Kim Jong-il needed the military’s support to secure his position. During the 1990s, the arduous March period, the role and power of the military became even more crucial, because Kim Jong-il had to mobilize armed forces to maintain his control over society and possible critics. The *Songun* system was a necessary evil for the junior Kim. The military has sucked up all national economy, including labor, capital, harvests, and trading companies. As *Songun* became the state-running ideology, military elites gained more power through their monopolized revenues. Some members of NDC became so influential that they could have own patronage groups.  

The belief about North Korea’s domestic challenges was reinforced by words from China as well. In May, 2011, Premier Wen Jiabao spoke to President Lee. In the unscheduled dialogue with Lee, Wen suggested that the president should meet Kim Jong-il. He mentioned what he had sensed during the communication with North in 2009 regarding the chance of inter-Korean summit:

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75 Lee (2015b).
76 Park (2009a).
Kim [Jong-il] did not make any conditions for the summit. But President [Lee] told me that the Northern counterpart had imposed several conditions for the summit to be held. *To be frank with you, I sensed that the subordinates of Kim Jong-il possessed unusually strong power*. That is why I urge you to meet Kim in person (emphasis added, translated from Korean).\(^{77}\)

Whether the Chinese Primer spoke of the truth or of strategic calculations, Lee and his staff took it seriously that Kim Jong-il was facing domestic challenges.

4.5.2 The responding leader’s domestic bargaining power

If Lee knew that Pyongyang was facing internal challenges, this can explain why he did not order a retaliatory strike. However, it remains unanswered why South Korea chose to mobilize and demonstrate military power. During the following few three months, the island was heavily armed (as of December 2010, the number of marines stationed on the island outnumbered the total civilian residents). The president also ordered a restructuring of the navy and the marine corps. Moreover, there were more than 30 times of naval exercises in December only, including the joint naval exercise with the United States. Ironically, the joint drill provoked Beijing, who would never accept the presence of the United States forces in the Yellow Sea. The joint exercise invited USS George Washington and allowed the entire carrier strike group to proceed up to Pyongtaek harbor. In this location, the operational range of the carrier covers most territories of the mainland of China. Furthermore, the electronic surveillance equipment of the United States forces could intercept and catch any communication signals of China. Therefore, the joint exercise with the

\(^{77}\)Lee (2015b).
United States in late November and early December was the last thing that China would accept. The strong objection of China means additional costs for Seoul. The military exercise itself might not be seen as costly action, but the twisted relation with Beijing should not serve the interests of South Korea in any way, especially if Lee Myung-bak wanted to use the Chinese leverage to engage in North Korea’s policy change.

In Chapter 2, the model of response predicts two conditions for the responding state to make a concession or a non-responding choice: the responding leader believes that the initiating leader has weak bargaining power against its domestic challenger, and the responding leader himself has strong bargaining power at his own domestic level. The crisis of Yeonpyeong met one of those two conditions. As discussed above, Lee Myung-bak and key decision makers in the Blue House seem to share a common evaluation about the North Korea’s domestic situation. Kim Jong-il had a serious health issue, which could cause domestic instabilities. The economy of North Korea was also going through a hard days since the latest currency reform failed to boost the economy. Between 2009 and 2010, the Lee administration was obsessed with the idea of internal collapse of North Korea. However, the other condition was not fulfilled. Lee Myung-bak was, on contrary, facing serious challenges against him at domestic level.

Lee came into the office in 2008. He won more than 48% of votes, which made a landscape win because the second candidate received only 26%. The 17th Presidential Election was mainly a fight over economy, which made Lee stand out due to his background of a successful businessman. He pledged to boot the national growth,
and he did make some accomplishments in so-called his ‘business diplomacy.’ However, overall economic performances during the first three years of Lee’s presidency was not supporting the president. The GDP growth rate continued to drop since Lee took the office. The figure started at 5.5% of GDP growth in the first quarter of 2008, and went down until it turned into negative growth (the GDP growth rate dropped down to -1.9% in early 2009). The unemployment also increased. Overall unemployment soared to 4.7%. At younger ages, the unemployment rate nearly hit 10%. The consumer prices, on the other hand, jumps up to 4.7% in 2008, which usually remains 2.5%. While the prices continued to increase, the rate of minimum wage dramatically dropped (from 12.3% in 2007 to 2.8% in 2010).

Although Lee enjoyed high level of public approval (or expectation) during first few months of his tenure, his approval rating continued to drop as the major economic indices didn’t improve. Over the entire period of his tenure, Lee Myung-bak did not enjoy high approval ratings. As shown in figure 4.3, Lee was never approved over 50%.

Public support for the president dropped even further during the crisis. One research shows that overall approval rating for the president was about 52% on November 2. However, it dropped to 44.7% on November 27. A survey conducted immediately after the provocation also shows that the majority did not approve the government’s response. More importantly, the criticism was not only from the liberals (76.5% disapproving), but also from the conservatives (66.7% disapproving).  

\[\text{Consumer Prices Index (CPI)}\] is announced by the central bank of South Korea on a regular basis, which is calculated using prices of 154 items of necessities. The data is obtained from the national statistics bureau of South Korea.  

\[\text{Kim and Woo (2010). The survey was conducted against 1,000 adults respondents on Novem-}\]
As Lee lost support from the conservatives, the president must have felt anxious for loosing core supporters. The president’s indecisiveness on the first day of the crisis had negative influence: the conservatives wanted stronger response. The crisis was indeed a political one to the president.

The president and his advisors were taking the downturn of approval rating and the withdrawal of support from the conservatives seriously. Therefore, the belated and extended reaction, including joint exercise and rhetorics against the North, was likely to be driven by political purposes. Kim (2013), who also interviewed generals

Figure 4.2: Key Economic Indicators of South Korea, 2007-2010 (quarterly). The solid line with square symbol represents the unemployment rate, while the dashed line with circle symbol is for the GDP growth rate.

ber 27, 2010. It concludes that the crisis did not incur a ‘rally-around-the-flag’ effect, but that the public was disappointed with the Lee administration’s response to North. The sharp drop of approval rating (from 60% to 44.7%) shows that Korean public was not mechanically react to North Korean threat, but that they critically assessed how the government had replied.
Figure 4.3: Lee Myung-bak’s approval ratings, 2008-2013 (monthly). The date is based on the survey conducted by TNS. Missing data is filled by a linear interpolation.

and key decision makers during the crisis, finds that the Lee administration’s most concerned agenda was his political position, rather than sending credible signal to North Korea. An evidence of such calculation is that Lee and his advisors were making strong denial on the wrongfully conveyed report on the president’s first order. News agencies reported that the president ordered to respond firmly but be careful not to escalate the situation. Hearing the news, Lee was upset and harshly scolded the spokesman and the presidential aide of political affairs. What is interesting is that the order of “be careful not to escalate” is not considered as wrong under the Kim Dae Jung administration. In fact, it is exactly what then president Kim ordered during the maritime crash in 1999.

Immediately after the attack was reported, the president initiated an emer-
gency call in the situation room, located at the underground level of the Blue House.\footnote{One of interviewee attended the meeting at the situation room. So, I could ask about details of the meeting.} The president entered the room with the National Security Advisor, Chief of Staff, Military Advisor, and several other close members.\footnote{Kim describes that the situation room was packed with too many persons.} While the president was briefed a situation report from his staff, a second round of shelling was reported. Still the president did not make clear decision, and did not receive a roughly sketched list of options. When the president asked about retaliatory options, the security advisor and the military advisor answered that the use of air force was difficult because it should be consulted with the Combined Forces Command. Then, for a few minutes, a discussion went hot over the appropriateness of using air power. The main issue was whether it was South Korean government’s right of self-defense or not to strike North Korean military facilities using aircraft. After the exchange of fire halted, Lee called an emergency meeting, where ministers of security related departments were to attend. At 16:35, the meeting started with the president’s charing. Surprisingly, the Minister of Defense was not there. Minister Kim Tae-young was attending the National Assembly hearing at that time. Lee ordered an immediate return of the Minister in angry voice. As Kim entered the room, the president retorted angrily. Then, a news headline was put on the screen. The line read “President Lee ordered to avoid military crashes and escalation.” Shortly, most screens in the situation room were showing similar messages. Later, it was reported that one of spokesmen mis-briefed the press due to the unexpectedness and pressure of time. However, public atmosphere was already irreversible. One of staff in the
room claimed that the inappropriate news message could make serious backlash. My interviewee said that he thought the crisis was no longer military, but now a political one. The meeting continued until 20:00. With only a handful members, the president went to the cafeteria.\textsuperscript{82} One of the president’s staff denounced the news report. He added that the president’s domestic standing could be endangered if he didn’t take any action against North. The president dropped his spoon without finishing the food, then rushed into the Joint Chiefs of Staff. The staff didn’t forget to notify news agents of the president’s unscheduled visit to Yongsan.

As the nature of crisis changed from military to political, the response and its objective also need to be aligned to serve specific goals. Lee Myung-bak wanted to show Pyongyang how serious and resolve he was about the confrontation. Initially, Lee asked the military to propose options of retaliatory strike via air forces. When the president wanted to know about the plausibility of air strike, the military answered skeptically. According to the president’s memoire and interviewees I met, the military was more careful than the president throughout the crisis. The Minister of Defense and the president’s military advisor refused to the idea of striking North Korean shore using air-to-surface missiles. Their rationale was that the use of fighters against North Korean military base was beyond the South Korea’s operational authority.\textsuperscript{83} As discussed later in this chapter, President Lee was infuriated with the military and came to distrust the military for its bureaucratic nature. It

\textsuperscript{82}By that time, the dining area was not ready due to the extended meeting. Only the cafeteria for secret guards was available.

\textsuperscript{83}The wartime control of military of South Korea remains under the authority of the United States since the end of the Korean War. It has been recently discussed for the United States to hand over the wartime operational authority to Seoul, which only has peacetime control.
was, however, the president who made the final decision. Lee believed that North Korea had no reason to initiate a war at that time. His concern was more about the internal instabilities of Pyongyang, which could be quickly going out of control.

I didn’t think that [North Korea] had guts to begin all-out war at the risk of regime collapse. Even China would not accept such an irresponsible move. I concluded that the shelling was a surprise attack for other purposes, and stepped in the situation room while thinking of possible options of response (translated from Korean).\(^4\)

4.5.3 The president’s distrust of the military

A few days after the attack on the island, high rank officials of North Korea’s State Security Department (SSD) made a secret visit to Seoul.\(^5\) They attempted to contact President Lee. However, Lee refused to meet them, who allegedly came to deliver Kim Jong-il’s letter.\(^6\) An interviewee from the Unification Ministry, who didn’t say anything about the secret visit, made a strong voice against the military’s reaction during the crisis.

In sum, during the crisis of 2010, Lee Myung-bak, the responding leader, seemed to have concerns about not only making credible deterrent threat, but also securing his domestic reputation. To satisfy his core supporters (i.e. the conservative voters) Lee Myung-bak needed to look tough and competent against North Korean aggression. Then situation of poor economic performance and downing of

\(^4\)Lee (2015b, 346).
\(^5\)The SSD is North Korea’s security and intelligence agency, which serves the Kim family by surveilling and investigating politicians, government officials, and public activities. According to Lee’s recall, four officials entered Seoul on December 5, 2010.
\(^6\)About a month after the visit, it was reported that the messengers were executed. Both the truth and the reason of execution are unknown. But it was said that they were accused of not delivering the message and of breaching the secrecy of their visit.
presidential approval ratings are all aligned with the account of the leader’s concern for political survival. As one of my interviewees recalls, the crisis was no longer a military, but a political. On the other hand, Lee did not view the chance of North Korea’s revisionist motive, or the willingness to initiate an all-out war high. He believed that Kim Jong-il would not initiate a war and that the provocation was for domestic political purposes. The president’s account of North Korea’s domestic politics provides a supporting episode that the target state would not retaliate if it believes that the initial aggression is targeted on the initiator’s own domestic audiences.

4.6 Discussion

According to Mintz and DeRouen (2010), there are five types of decisions: one-shot or single, interactive, sequential, sequential-interactive, and group decisions. South Korea’s responding behavior during the Yeonpyeong Island Crisis of 2010 shows an example of sequential-interactive decisions. The decision of response was made on a sequential basis and its process involved strategic considerations. While theories of decision making focus on the individual or organizational nature of the decision making units (Allison, etc.), the interactive nature of crisis bargaining is less discussed. The case study of Yeonpyeong incident attempts to fill such gap as it emphasizes how Lee Myung-bak and the South Korean government assessed North Korea’s motivation of aggression and the internal instabilities of Pyongyang. The analysis finds supportive evidence for the model of response I presented in this
In addition to findings from the case study, I will discuss the repeated confrontations between two Koreas and how this study’s argument can be helpful. One of outstanding pattern of the inter-Korean confrontation is that South Korea tends to under-respond, especially until early 1990s. A strong counter-move against North Korea’s militarized provocation was first made under the Kim Dae-jung administration, during the First Battle of Yeonpyeong in 1999. It is ironical because Kim Dae-jung is known for his ‘Sunshine’ policy, which, baed on a liberalistic approach, aimed to the soft-landing of hard issues like the nuclear program. How can the model of response explain such variation of South Korea’s responding behavior?

The conventional wisdom of the balance of power has something to speak. During the 1960s and 1970s, the distribution of power was not in favor of South Korea. Relying on the military alliance with the United States, South Korea had little resources and power to use against its rival. Therefore, the lack of reciprocating behavior is understood as what the weaker side had to suffer from. In addition to what the balance of power theory would tell, the model furthers our understanding of foreign behavior based on the domestic variables. South Korea could tolerate North Korea’s provocations during the 1960s through 1980s because not only Seoul’s relatively weak power, but also the leadership of South Korea had sufficient bargaining power against its own domestic challengers. Park Chung-hee, the president of South Korea between 1962 and 1979, took the power through a coup. Based on

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87 It is reported that North Korea experienced much more damages than South did. As many as 30 North Korean soldiers were killed in the battle, while only 9 navy men were wounded on the South Korean part.
the strong control over the military as well as the entire society, the dictator was in much more advantageous position in terms of competing against his domestic political challengers. The successive leader, Chun Doo-hwan (in office from 1980 to 1988), also had strong power against his domestic political rivals. Under the autocratic leadership, in fact, it was nearly impossible to make opposing voices against the regime in South Korea. Until the 6th president, Roh Tae-woo, who was also from a militant group, political pressure or burden on the South Korean leadership was very trivial. The strong grip of South Korean leadership at its domestic level even allowed to manipulate and use North Korea’s hostilities as a justification of anti-democratic acts and government repressions.

The increase of reciprocating behavior by South Korea was observed only after democracy had established to some extent. The Kim Dae-jung administration is a good example. While Kim Dae-jung was known as his ‘Sunshine’ policy toward North Korea, his decision of response during the naval crash in 1999 was not generous. As the society was democratized and the information of foreign affairs was no longer monopolized by the government, the leadership of South Korea had to deal with domestic audience and political oppositions more seriously then it used to. Although the belated military mobilization and over-extended naval exercises during the Yeonpyeong crisis received harsh criticism, the choice of cost-inefficient measures must be understood in the context of South Korea’s domestic politics (or the president’s political concern at domestic level). Lee Myung-bak’s choice of mil-

\[88\] For the implication of democratization of South Korea to its North Korean policies, see Park (2009b).
itary exercise was intended to signal his domestic constituencies, who prefer strong actions.

Lastly, the model of response also emphasizes how and what kind of intelligence is processed during the crisis, especially those about the aggressor’s domestic political environment. As Lee Myung-bak and his key persons evaluated the motivation of attack as North Korea’s domestic purposes, previous provocations were often believed to be attributed by internal changes of Pyongyang. Kim Young-sam, the first civilian leadership in democratized South Korea, faced a similar problem. During his tenure, Kim Young-sam experienced two major aggressions by North Korea in 1996 and 1998 (both were failed attempts to infiltrate using small submarines on the eastern shore of Korea). Policymakers and analysts paid attention to the internal changes of North Korea during the period between 1994 and 1998. Kim Il-sung, the father of Kim Jong-il, died in 1994, and the young Kim Jong-il was believed to have challenges in consolidating his political power. It was a rare case because North Korea expressed a “regret” regarding the infiltration incident.\(^{89}\) Regardless of what the true situation of the internal situation of North Korea, as the model predicts, the South Korean decision makers began to pay attention to the possible instabilities of Pyongyang. This change has led the direction of responses to more reciprocating behavior, while the democratization has diminished the dominant power of South Korean leadership.

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\(^{89}\) On September 20 of 1996, then President Kim, unlike previous militant leaderships, declared the possibility of war against North Korea using a strong rhetoric: “any further provocation against South Korea would bring a real possibility of war.” In a few days, North Korea expressed a regret on the inevitable breakthrough of the submarine, which allegedly ‘strayed’ due to an engine failure. Dies Jr (2004); Gauthier (2012).
Some international crises receive little attention and quickly evaporate, because they ended without escalating to serious conflicts. When the provoked country refuses to respond, the crisis fades away without further interactions. The model in Chapter 2 predicts that the target state will not react to external aggression if some conditions are met. If the target state knows that the initiating state suffers from domestic instabilities, the responding leader would view the aggression as an attempt to win a rally-around-the-flag effect for its domestic politics. Also, if the leader of the target state has strong domestic power vis-à-vis its domestic challengers, such competence would give the leader more freedom to choose whatever action it believes best serves its interest. Given these two conditions are met, the target is more likely to ignore the crisis trigger or to under-respond to the aggression, because the initiator has incentives for diversionary conflict to overcome its weak position in the domestic arena.

The downing of EC-121 in 1969 is a good example of an ‘unresponded’ crisis. When North Korea shot down a US Navy reconnaissance airplane and killed 31 crew members on board, Nixon and Kissinger ignored the attack and did not respond to the shooter. A few weeks later, the incident was forgotten by the public as well
as the leadership of the country. Even today the incident receives little attention. On the contrary, the Pueblo Incident in 1968 has been a focal point in US-DPRK relations since the Korean War. One of reasons for such a contrast lies in the fact that the Pueblo Incident lasted for over 12 months while the shootdown ended on the scene. Why didn’t Nixon and his security advisor pursue any responding measures against North Korea? Didn’t the Pueblo Incident drive them to take a tough stance against Pyongyang? Regarding the choice of non-response by the United States, the shootdown incident leaves some serious questions. First, the personal image of Nixon as a hardliner in foreign policy does not accord with the ‘weak’ response in 1969. Second, given that it had been only a year since the infamous Pueblo Incident occurred, it is hard to believe that Washington turned a blind eye to Pyongyang again. That being said, why did the United States not take any action against North Korea? According to his memoir, Nixon wanted to respond with military measures when he first learned about the shootdown. However, his decision changed in a few days and the final choice was to ignore the attack and to continue the reconnaissance mission in the area.

As Kissinger recounts in his memoir, he characterizes Nixon’s rejection of forceful response as a “weak, indecisive and disorganized” decision (Kissinger, 1979). One possible explanation for such a decision is that there could be no room for the United States to conduct another military campaign in East Asia since it was then preoccupied with the conflict in Vietnam. However, it is also possible that a soft response or backing down in East Asia could weaken its position and morale in Vietnam. This consideration was, in fact, carefully discussed during the 1969 crisis.
It is also arguable that the United States could have made a carefully calculated response, as a credible deterrent threat to Kim Il-sung, without opening another full-scale military campaign. The response did not necessarily have to be strong (or even proportional). How can we explain Nixon’s final decision of non-response?

In this chapter, I use the model of response from Chapter 2 to explain the United States’ responding behavior during the 1969 shootdown crisis. The remainder of the chapter is organized as follows. First, I provide background information on the reconnaissance mission in East Asia. This mainly discusses the benefits and importance of reconnaissance activities requiring the United States to continue in spite of potential cost and high risk. Then, I describe the downing of the aircraft with as much details as possible. Relying on declassified documents, I present the scene of the shootdown and information related to the mission of the downed plane. Next, I trace the decision making process within the White House. The shootdown was the worst and largest loss in the post-war history of US reconnaissance operations. The scale and urgency of the incident called for an immediate discussion at the highest level. I mainly use memoirs, official memoranda, and declassified records of conversations and meetings among key decision makers of the crisis. Along with the investigation of what they discussed in Washington, I also look into Korean documents and scholarly works that focus on North Korea’s domestic situation during the late 1960s. This may reveal how confidently policymakers of the United States relied on intelligence about North Korea. In the final section, I examine the validity of the model in explaining non-response behavior, or a concession outcome.
5.1 Background

The first question that we may ask about the shootdown incident is why the United States continued the reconnaissance mission after paying significant costs in the Pueblo Incident. The United States had two similar incidents within 14 months in the same area by the same enemy. The military records show that the reconnaissance operation was never suspended or seriously revised even during the Pueblo Crisis.\footnote{Mobley (2003).} Reconnaissance planes were flying over the peninsula while the crew of the Pueblo were taken hostage in North Korea. Why did the United States keep running risky operations? What did the United States expect to gain from the reconnaissance mission at the expense of many lives?

5.1.1 Reconnaissance missions in East Asia

Since the World War II, intelligence collection has earned critical importance in military operations. Immediately after the attack on Pearl Harbor, the Navy joined the National Defense Research Committee (NDRC) and conducted major intelligence operations against Japan’s air defense system and the disposition of naval forces. Since then, the Navy and the NDRC jointly established and ran national reconnaissance programs.\footnote{The Radiation Laboratory, later known as Lincoln Laboratory at MIT, was the first of many programs from the coordination. The Navy’s early investment in intelligence was due to its experience of Japanese kamikaze suicide attacks, which ignited the development of a radar system for long-range and low-flying aircraft.} Shortly after the war ended, the interest and investment in the intelligence community decreased. However, the need for intelligence operations...
in peacetime rapidly increased as Cold War competition intensified. In 1952, President Truman established the National Security Agency (NSA). As a replacement of the Armed Forces Security Agency, the NSA took responsibility for all intelligence activities across the Department of Defense. In 1958, the National Security Council readjusted the NSA’s mission and authority to be placed under the Secretary of Defense. The Cold War in the 1960s reinforced the need for the ‘spying’ on each other, because a contingency plan necessarily required detailed information of the enemy force.

Since the Cold War began, the United States had an important interest in East Asia and the Pacific area. First, major targets of intelligence were in this area: the Soviet Union, Communist China, and North Korea. Second, the outbreak of the Korean War was a turning point for the intelligence community as well as overall Asian policy. The sudden outbreak of the Korean War was a traumatic shock to US intelligence, because they failed to notice the coordination between Kim and Stalin and the large scale mobilization along the 38th line. The entire process of war fighting in Korea also gave intelligence activities a higher priority. As the first ‘limited war’ after the Second World War, decisions should be made based on both political and military considerations, and such decisions required complicated calculations based on accurate and confident intelligence. Wartime reconnaissance was highly dangerous and crucial. Those special missions often involved a deep infiltration of an enemy’s territory and intercepting radio communication to detect the disposition

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3 The CIA was, of course, still playing a key role in intelligence activity. Its role, however, was more aligned to foreign policy than to defense or military policies and plans.

4 For a detailed discussion and examination of US intelligence activities during the Korean War, see Aid (1999).
and movement of enemy forces. Such electronic reconnaissance operations became the major reconnaissance task of the Air Force and the Navy after the war.

The end of the Korean War created a new environment in which the Pacific Theater Command and Fleet Command must conduct routine reconnaissance operations. For the part of Air Force, the Fifth Air Force continued its reconnaissance efforts from wartime missions.\(^5\) The Navy also ran diverse reconnaissance programs. As an early joiner in the intelligence business, the Navy organized two reconnaissance squadrons specialized in reconnaissance: one in the Pacific theater (VQ-1) and the other in the Atlantic theater (VQ-2).\(^6\) After the Korean War, naval aircraft and vessels kept traversing the peninsula and the surrounding waters for reconnaissance purpose.

In the 1960s, two types of aerial reconnaissance were widely conducted: imagery intelligence (IMINT) and signals intelligence (SIGINT). A well-known case of IMINT is the use of the U-2 aerial photographs during the Cuban Missile Crisis in 1962. The other reconnaissance, SIGINT, is literally intercepting radio and/or elec-

\(^5\) Project Blue Sky, the use of RB-29 during the Korean War, was now further developed and increased the Air Force’s capability to intercept very high frequency (VHF) communications, to which the Soviet just switched from high frequency (HF) communication. The 6091st Reconnaissance Squadron in Japan began to fly the RB-29 in April 1954. In the following years, the Air Force began to extend the reconnaissance program as a part of the Peacetime Aerial Reconnaissance Program (PARPRO). The budget also increased, which enabled the Air Force to be better equipped. In 1956, ten RB-50 were approved for use in Europe and East Asia. The new planes were capable of intercepting various types of transmissions, including HF, DF, and even manual Morse signals. These planes were replaced with C-130 in early 1960s.

\(^6\) During the 1950s, the Navy initiated two different approaches to the airborne electronic reconnaissance: the ‘mission support’ type approach and the ‘dedicated’ reconnaissance. The mission support approach was a less specialized branch, which utilized regular aircraft with the electronic reconnaissance equipment installed. This line of reconnaissance operation was usually conducted by normal squadron personnel while supporting the squadron’s original missions like area surveillance, bombing, and anti-submarine patrol. The ‘dedicated’ reconnaissance approach, on the other hand, required more specialized resources and gave birth to two airborne reconnaissance squadrons, VQ-1 and VQ-2. Committee (1969); CPAT. East (1987).
tronic signals in the air. In order to intercept electronic signals, the reconnaissance unit needs a radar or a wave receiver/detector placed near the point of dispatch. Therefore, the Navy flew signal intercepting aircraft over the East Sea in the 1950s. The problem with such SIGINT missions was how close and long the aircraft could be present in a certain area. Unlike IMINT aircraft such as U-2, SIGINT mission planes were slow. SIGINT aircraft, moreover, were usually larger than IMINT aircraft, because they needed to load heavy electronic equipment and specialists. The use of a vessel was explored under the name of the Auxiliary General Environmental Research (AGER) program; but it turned out to be less successful as evidenced by the Liberty incident in 1967 and the Pueblo incident in 1968. For the Navy, the use of “fat and slow” planes in aerial reconnaissance was more promising.

5.1.2 The costs and benefits of aerial reconnaissance

What was the value of airborne collection of intelligence? From the late 1950s and the early 1960s, policymakers in the United States were increasingly interested in aerial reconnaissance because timely intelligence about the Soviet and China was required for the containment policy. From the military point of view, the value of peacetime reconnaissance is determined by the contribution of obtained intelligence to the formulation of military plans. In order to build a (war) plan that can assure minimum losses, some information is crucial. For instance, the location of surface-to-air missile bases and the range of enemy radar are essential in the planning of air strikes. One way of obtaining such information is through aerial reconnaissance by
either IMINT or SIGINT. In 1954, President Eisenhower approved the concept of a high-flying reconnaissance aircraft to fly above the Soviet air defense system, and this concept developed into aerial reconnaissance.

In the Pacific and East Asia theater, the benefits of aerial reconnaissance were not trivial. The 1969 annual report for VQ-1 shows that reconnaissance missions were providing useful information about North Korea’s air defense system. Through repeated mission flights, VQ-1 was able to obtain specific information and evidence of North Korea’s increasing air defense capabilities. Collected intelligence between 1966 and 1969 showed that the DPRK had installed and operated various types of high quality radars, including ground-controlled intercept (GCI), early warning, missile control, and height finders. Such information was to be used in developing contingency plans to determine which sites should be destroyed first.\(^7\) The main objective of VQ-1 reconnaissance missions was to intercept North Korean radio communications and electronic signals. But it was never excluded from their list to intercept signals from China and Soviet.

The reconnaissance missions, of course, were not free of costs. Under PARPRO, the United States flew several ‘spy planes’ over the land of communist countries. The response from the Soviet Union and North Korea, who were major targets of reconnaissance in East Asia, were fierce. The most infamous case is the shootdown of U-2 in 1960. A few months after the shootdown, the United States successfully placed

\(^7\)In the late 1960s the United States had a contingency plan for the Korean Peninsula, which contained three large scale operations, including the use of nuclear weapons (Operation ‘Freedom Drop’) and a conventional invasion into the North(Operation ‘Fresh Storm’) (Spivy, 1968). Since both plans were aimed toward the assured elimination of North Korea airpower, intelligence of North Korean air power and defense system were crucial.
its first space reconnaissance satellite in orbit. The use of satellite, however, did not lead to the halt of other reconnaissance flights over and around territories of enemy states. Many imagery intelligence missions continued to back up the satellite reconnaissance. The SIGINT missions were still irreplaceable. As manned aircraft continued to fly in dangerous airspaces, the risk never disappeared. The naval aircraft on reconnaissance missions were more vulnerable to enemy attacks. They were slower, bigger, and less armed, all of which made them easy targets for fighters and anti-aircraft weapons. Between 1950 and 1969, the Navy lost 79 lives and about a dozen planes from reconnaissance missions. The attack on easy targets did not stop with the ceasefire. On September 4, 1954, a P2V Neptune of VQ-1 was attacked by the Soviets. Fortunately, the damaged aircraft was able to make an emergency landing; but an officer was lost. In 1956, the People’s Republic of China opened fire on a Naval reconnaissance plane. A P4M-1Q Mercator was flying about 32 miles off the Chinese coast and 180 miles north of Taiwan and suddenly encountered fighters. The unprovoked attack on Mercator killed 16 crew members on board (only one body was collected from the following search and rescue operation).

Nonetheless, reconnaissance flights continued. The fact that dangerous missions continued despite several incidents shows that intelligence from PARPRO was vital to the United States. The solution for increasing risk was to increase protection and careful operational planning. In fact, highly dangerous and risky missions required more advanced risk assessment prior to execution. And such demands were addressed by national-level intelligence agencies such as the National Security Agency and Defense Intelligence Agency.
5.1.3 Problems with the EC-121 mission

The Fleet Air Reconnaissance Squadron (VQ-1) was responsible for the collection of intelligence in the area, particularly electronic intelligence (ELINT). The primary target was the DPRK. Being aware of such activities, North Korea was reacting sensitively to any “spying” activities by the United States near its borders and waters. In April of 1965, two MiG-17s scrambled and attacked the US RB-47 which managed to escape the ariel fighting scene. The Defense Department knew the risk was increasing, particularly along the eastern coast of the Peninsula as the North began to build air power in that area. The Pueblo Incident in 1968 was a serious warning to reconnaissance missions in the area. Immediately after the seizure occurred, the Navy canceled ship-based reconnaissance programs and ordered all reconnaissance flights to be escorted by fighters. By the summer of 1968, Pacific Command (PACOM) recognized the risks posed to the reconnaissance planes. Pacific Air Forces (PACAF) put considerable resources in the protection of those aircraft. For instance, the Fifth Air Force created operational order (OPORD 501-68), which formally recognized the requirement of fighter escort and tanker support for reconnaissance flights.

If the Air Force and the Defense Department emphasized the protection of reconnaissance flights, why didn’t the downed EC-121 receive any protection? There was no fighter escort or fighter combat air patrol nearby the operational site on April 15. Joint Chiefs of Staff and CINCPAC canceled the escort requirement on February 9, 1969. Only the Air Force (PACAF) continued the requirements on
some of its reconnaissance flights. Why did the order of heavy protection and the assessment of increasing risk simply disappear or change in less than a year? On July 28, 1969, the subcommittee on the Pueblo and EC-121 incidents of the House Committee on Armed Services released a lengthy report of its inquiry. The report summarized its inquiry by noting there were several deficiencies within the Navy and the Defense Department in terms of organizational and administrative structure. It also noted that neither military intelligence authority nor operational chain of command even questioned the premise of North Korea’s observing international law. The Committee went on to argue that there existed serious discrepancies between intelligence agencies like the NSA and the operational units of the Navy as well as the Defense Department. For instance, the NSA issued a warning message regarding the risk of North Korean hostile action on the Pueblo. However, according to the inquiry report, no defense authorities – Joint Chiefs of Staff, CINCPAC, CINCPACFLT, Naval commanders – paid attention to the message. Other declassified post-incident reports and expert analyses draw similar conclusion. It seems there were at least three issues with respect to the mission assigned to the EC-121.

First, the risk assessment process was not fully operated. A post-incident report claims there had been about 190 reconnaissance missions of kind between January and March in 1969. None of them encountered a threat or a sign of threat. Along with this line of insensitivity to risks, historians and military experts point out that the risk assessment for the EC-121 was based on a false premise. The related

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8 The NSA’s description of the incident also points out the disconnection between the Navy and the Agency: “the NSA message sent during the height of the holiday season was virtually ignored.” Schorreck (1989, 12).
authorities simply believed that North Korea would comply with international law on the right to traverse high seas. There had been several warning signs, such as the disposition of additional MiG-21s on the eastern coast airfield of North Korea and the increasing number of North Korean hostile activities. However, for some reasons, the risk assessment did not reflect those signs with depth.

Second, there was a serious rift between the Navy and the intelligence agencies. While the National Security Agency, the central agency of military intelligence at that time, was in a close coordination with the Air Force, its ties with the Navy were not well coordinated. The Chief of K17, a sub-organization of the NSA, complained about the Navy’s lack of communication with the Agency. For instance, when the NSA suggested that front-line units should adopt (or consider adopting) a new warning program to secure air-to-ground communication during their missions with far distances, the Air Force accepted and put the new system in use by 1969 (the system was approved by the Joint Chief of Staff in March 1968). However, the Navy didn’t comply. The mission of the ill-fated EC-121 was also problematic in terms of inter-agency coordination. Operation Beggar Shadow was originally categorized as a communication intelligence (COMINT) mission. The CINCPACFLT, which was in the immediate chain of command of the EC-121, distributed a message on April 1, 1969, stating that the primary task of the reconnaissance was COMINT. However, a Defense Intelligence Agency (DIA) memorandum of April 18 categorized the same mission under an ELINT program. If the mission was designated as a COMINT mission, coordination with the NSA was required (the role of the NSA increased); but the coordination requirement could be avoided for an ELINT mission. From
the viewpoint of the Navy, an ELINT mission gave more autonomy.\textsuperscript{9}

Third, the Navy was short of air powers in the late 1960s. The escort requirement could not last long due to the limitation of air power in the Navy. Most Navy air power, including major aircraft carriers, had been deployed to Southeast Asia. The Navy was not receiving budget allowances sufficient enough to develop its own high-speed aircraft for reconnaissance missions. Since the mid-1950s, the United States invested in the development of reconnaissance techniques. The Air Force proposed the Fighter-Conveyance (FICON) Program, which was dedicated to the development of high-speed jet fighter/bomber-based reconnaissance planes. The inter-branch competition between the Air Force and the Navy over the acquisition of bombers as well as budget was fierce, and Congress’ decision was in favor of Air Force. In 1964, the NSA and DIA jointly assessed the capabilities and weaknesses of the Airborne Communications Reconnaissance Program (ACRP). The joint report concluded that more aircraft were needed to maintain and meet the objectives of the SIGINT missions. It further suggested that the Navy should continue using EC-121s.\textsuperscript{10}

\textsuperscript{9}The NSA claims that the unusually crowded list of crew on the plane was of same purpose. Ten crew members were electronic technicians and outside of NSA authority. By adding that many electronic technicians and outnumbering communications technicians, the mission could be easily justified as an ELINT mission.

\textsuperscript{10}The NSA report acknowledged that EC-121 was not considered “as good as” the RC-135B or C-130B for reconnaissance tasks. Schorreck (1989).
5.2 Aggression

It is still unclear what happened to the EC-121 on April 15, 1969. There are three reasons for this. First, the incident happened in a very short period of time. The attack itself was believed to last 10 to 20 minutes, and the immediate response to the shootdown was not clearly delivered to the site of the attack. Second, nobody survived the attack. Only two bodies were collected from the ocean of the incident. The attack left no witnesses, except for the attacker. The collected debris of the plane were also very limited so that it was difficult to make significant inferences. That the plane and crewmen were completely lost also dominated the decision of response to North Korea. Unlike the Pueblo case, there was nothing to negotiate with North Korea. Thus, the incident could evaporate quickly. Finally, most records about the mission are classified or disorganized. Only a few have been recently declassified. Military historians and researchers, therefore, have to rely on limited sources. Given limited information about the incident, it might be impossible to restore every detail of the picture. In describing the incident, I mainly rely on three sources: the report on the Pueblo and the EC-121 incidents by the House Committee on Armed Services; a special report by the National Security Agency; and Richard Mobley’s book. The first two sources were recently released to the public in 2012 and 2013, respectively. The book, published by the Naval Institute Press, is the only published research on the shootdown incident based on declassified materials in 2003.
5.2.1 Operation Beggar Shadow

On April 15, a EC-121-M of VQ-1 took off from Atsugi Naval Air Station, Japan, at 7:00.\textsuperscript{11} The flight was a scheduled one for a routine reconnaissance mission. The mission, known as ‘Beggar Shadow’, was a routine SIGINT mission that intercepted and collected electronic signals and communications over the East Sea (the Sea of Japan). The route had been briefed several times, and the pilots and crew seemed to know their job fairly well. According to the plan, the total flight duration was eight and a half hours. After take-off, the plane was supposed to fly north across Japan until turning northwest toward the North Korea. It continued to fly about 600 miles and approached the reconnaissance area. Approximately 90 miles from the North Korean coast, the plane began its racetrack reconnaissance flight. That was the most dangerous part of the mission. The plane was supposed to follow this elliptical orbit path for two and half rounds to gather intelligence. As it finished the reconnaissance operation, the plane was supposed to head southwest to land at Osan Airfield, South Korea.

A reconnaissance aircraft of EC-121 type had some advantages. First, the prop-driven EC-121 could fly 6,500 miles staying aloft for more than 20 hours. It could carry about six tons of electronic equipment and a crew of 31, which was large enough to conduct technical and strategic missions in the plane on a continuous basis. The EC-121 type were also running with two long-range radar above and below the fuselage. This double radar installment allowed the team on board to

\textsuperscript{11} All dates and times here are local time unless specified otherwise.
cover a 40,000 square mile area. The main objective assigned to Deep Sea 129, the
call sign of the EC-121 on the April 15 mission, was signals intelligence.

Lieutenant Commander James H. Overstreet was in charge of the reconnaissan-
cce mission of April 15. It was his sixth dispatch of the same mission since
January.\textsuperscript{12} Some veterans remembered him as a “by the book” officer. He was
recounted as a person who would follow instructions and discuss as much details as
possible during preflight briefings. On April 11, only four days before the flight, he
received a message that North Koreans had acted in a vehement and vicious man-
nner in recent Military Armistice Commission (MAC) meetings at Panmunjom. Such
behavior by North Korean representatives was marked as ‘unusual’ by the USFK.
It was a warning. He mentioned the message during the preflight briefing and told
his crew to stay alert. The Fleet Headquarters and CINCPAC, however, did not
change the mission. Instead, he was only told that the flight should approach the
Korean coast no closer than 50 miles to the North Korean coast. The mission was
‘go.’

As described above, the flight track was clear and familiar. The only differ-
ences for the flight on April 15 was that the flight was unable to get full support
from ground sites due to communication problems. A high risk reconnaissance mis-
nion, like the one that the EC-121 was on, was supported by several ground-based
radar facilities in Japan and South Korea. Those facilities were supposed to cover
the tracking of the flight and to coordinate through operational communications.

\textsuperscript{12}\textsuperscript{The Navy flew the same track of the EC-121 14 times between November 1968 and April 1969.
The one on April 15 was the fifteenth flight on the track 8263. Schorreck (1989, 10-11).}
However, two supporting ground facilities in Japan had a minor issue with communication during the EC-121’s flight. Shortly after takeoff, around 07:17, LCDR Overstreet contacted USN-39 for a ground check, and this was received several minutes later. After that contact, USN-39 couldn’t directly communicate with the EC-121 due to communication problems. At 09:45, the EC-121 transmitted a message to Kamiseya that it would not contact for a while since it had some activity on a radio-telephone position. Such break of communication was usual for planes using KW-7 circuit. While the EC-121 continued to approach its mission area, another ground facility in Osan received the mission at 09:08. The NSA document confirms that the plane’s signal was reflected over the East Sea, about 150 miles southeast of Vladivostok, at 10:05. About twenty minutes later, USN-39 checked that the EC-121 received with its sync pulse. It seemed that the flight was proceeding smoothly. Around 12:00, the plane conducted a routine communication check. From that point, USA-58, another ground facility in Hakata, Japan, was supposed to cover the plane. However, for a unknown reason, USA-58 was unable to assist. the EC-121 entered its elliptical orbit flight area. In less than twenty minutes, the EC-121 began to fly along its elliptical orbit in a southwest bound direction.

5.2.2 The shootdown

For some reason, USA-58 was unable to track the EC-121 for 19 minutes, starting from 12:00. That is, the EC-121 was lost for the first 19 minutes once it initiated the orbital flight. Ironically, it was USA-58 that first detected the sign of
coming danger. It is unclear when USA-58 first noticed the reflection of unknown aircraft in the area. At 12:15 USA-58 informed Osan of reflections of unknown aircraft, suspected to be fighters, in the Vladivostok Bay area. At that time everything was still blurred. There was only a minor information that the reflection was not of the Navy plane. Moreover, the reflected aircraft were far away from the EC-121. In about a half hour, a report came in that those aircraft were heading back toward North Korea. Nearly thirty minutes later, the EC-121 reached the most southern point of the ellipse. Shortly after 13:00, the EC-121 made a communication check to Kamiseya. Then, the plane turned around and headed northeast. In twenty minutes, USA-58 received a report that fighter reactions were detected again over 100 miles east of Hoemun-ni North Korean airfield. After ten minutes, at 13:30, the two MiG-21s appeared on radar. They were scrambling across the East Sea toward the reconnaissance plane. It looked like a well-prepared and calculated maneuver. LCDR Overstreet was not aware of the existence of MiG-21s in the area. The NSA discovered two MiG-21s were dispatched to Hoemun-ni airfield on March 28, and the Joint Sobe Porcession Center (JSPC) in Okinawa sent out a message to all SIGINT sites to warn about those fighters. Since the airfield at Hoemun-ni was known as a training airbase for NKAF, the dispatch of MiG-21 to Hoemun-ni seemed unusual enough to attract some attention from the intelligence community. No one, however, had briefed the VQ-1 or LCDR Overstreet about the unusual dispatch of MiG-21 to Hoemun-ni. In any circumstance, it was obvious that those MiG-21s remained at Hoemun-ni on the morning of April 15. Two MiG-21s flew to the target as if they knew where to go exactly. At 1:35 pm, the reflection of the fighters were first picked
up by one of the ground sites. Within two minutes, the supervisor of the unknown ground facility issued a condition 3 warning that the enemy aircraft were within 51 to 55 miles. This site also checked that the EC-121 was reflected as heading away from the area and turning easterly at that time. Without directly communicating with the EC-121, monitoring sites transmitted second warnings, a condition 5 warning that the enemy fighters were within 50 miles at 13:40 and 13:48 pm. It was unclear whether and when the EC-121 received the transmission. At 13:42, an OPSCOMM direct warning message was sent to the 314th Air Division Warning Center. Within a few minutes, a SPOTREP was issued. The SPOT read that “two fighters were probably reacting to the Beggar Shadow mission.” This report, however, was not sent to VQ-1 or USN-39. On receiving the report, Brigadier General Holderness, the Commander of the 314th Air Division at Osan, ordered an immediate launch of two F-102s. They were ordered to search for the EC-121 and rescue it from enemy’s attack if still in flight. However, it was already after the time of attack. By the time when F-102 pilots were receiving the order, the MiG-21s reached the EC-121. The NSA report describes, in retrospect, that one MiG-21 performed a defensive patrol over the water at about 65 miles west of the reconnaissance plane. The other fighter continued on eastward and approached the flight track of the EC-121. At approximately 13:44, the fighter arrived at the EC-121’s position. As soon as they merged on the reconnaissance plane, they opened fire at the unarmed aircraft. Less than five minutes later, one of the friendly radar sites confirmed that the reconnaissance plane went off the track at 13:49. The shootdown time was probably around 13:47, and the location was around N41°12′ E131°48′. At 13:51, another direct message
was sent to the 314th Air Division at Osan, citing the merged position of the fighters and the reconnaissance plane. At 14:04, the F-102s scrambled to the Combat Air Patrol orbit, 140 miles off Kangnung. It was about 100 miles away from the position of shootdown. They waited for the EC-121 in vain. The enemy fighters were reflected until 2:07 as they returned toward Hoemun-ni.

5.2.3 The search and rescue

Without knowing about the shootdown, USN-39 made its usual hourly communication check with the EC-121 at 14:00, about fifteen minutes after the shootdown. They didn’t get any response from the plane. They attempted to contact the plane for the next hour. At that time, they were not aware of a shootdown since they did not receive the SPOTREP of 13:42. The stoppage of communication with the EC-121 was not taken seriously. Rather, they took it as a usual communication difficulty because such static communication was common for aircraft at a distance. It was only after an officer copied the warning message from the station at Fuchu that VQ-1 began to worry about the plane. At 14:58, VQ-1 sent a flash message to USA-58 requesting any information of the EC-121, such as a reflection of the plane. About fifteen minutes earlier, a USAFSS sites issued a critical intelligence report (CRITIC) to the Director of the NSA about the possible shootdown of the EC-121. This message was addressed only to the NSA. Sensing that something went wrong, the director immediately forwarded the CRITIC to the White House and other high-level addressees in Washington. VQ-1, the home of the EC-121,
received a copy of the CRITIC from USN-39 at 15:01. It was the first indication of a shootdown, shared with VQ-1. After the scheduled arrival time of the EC-121 at Osan air base passed, the case of a possible shootdown became convincing. Within less than an hour, the foreboding turned into a real tragedy. At 15:55, the Foreign Broadcast Information Service (FBIS) caught that a North Korean broadcast from the Pyongyang Domestic Service announced the downing of a U.S. reconnaissance aircraft as of 13:50. The FBIS confirmed the shootdown as it monitored an English report from the Korean Central News Agency (KCNA), praising its victory against the “U.S. imperialist aggressor troops.”

As the shootdown became no longer a theory, a search and rescue (SAR) operation followed. The first call for SAR was made at about 15:11 by VQ-1. It requested an SAR operation to the Fifth Air Force Combat operations Center at Fuchu. It also informed Vice Admiral William F. Bringle, the Commander of the Seventh Fleet, of the shootdown. At that time he was on board the USS Oklahoma near South Vietnam. He immediately ordered two destroyers – the USS Dale and USS Tucker – to enter the shootdown area for the SAR mission. The Fifth Air Force also sent an HC-130 to assist the SAR operation with the escort of F-106 fighters. The first report from the HC-130 was pessimistic. The smoke flares and seeming survival beacons turned out to be rescue vessels and aircraft. There were also some difficulties in conducting the rescue operation in a timely manner: the Fleet Commander was in South Vietnam; multiple ground SINGT sites had communication problems, even during the flight of the EC-121; and the location of the shootdown was fairly far from the U.S. bases in South Korea or Japan. With those
physical and technical obstacles, Washington decided to ask the Soviets for help. U.S. Ambassador James D. Beam in Moscow asked Georgi M. Kornienko, the head of the USA section in the Soviet Foreign Ministry, for aid. At that time, two or more Soviet submarines were near the shootout area. In Washington, Secretary of State Rogers called Soviet Ambassador Dobrynin to his office to discuss the shootdown. He again clarified the U.S. request for Soviet aid for the rescue mission to Dobrynin. In order to avoid unnecessary confrontation, the Joint Chiefs of Staff ordered all U.S. forces in the rescue operation not to interfere with rescue attempts by Soviet ships.

The first debris from the EC-121 was found by a Navy rescue plane the next morning. It was found at N41°14′ E131°50′, about two nautical miles northeast of the reported shootdown location. The rescue plane dropped smoke flares, and the Soviet destroyers proceeded to pick up the debris. At that time, the first official radio communication between the United States and the Soviet forces was made. In the HC-130 was a Russian-speaking crew member for clear communication with the Soviet force. That evening, two U.S. Navy destroyers arrived at the area for the SAR mission. On the following morning, two bodies were found about 17 nm north of the shootdown area. They were identified as Lieutenant Joseph R. Ribar and AT1 Richard E. Sweeney. The winds and currents of the water was believed to cause the drift of the bodies as well as the debris. The SAR area had to be extended to the waters as close as 20 miles off from the coastlines. However, no more bodies were found even after intensive effort from both the Soviet and U.S forces. On April 18, the USS Tucker rendezvoused with the Soviet destroyer Vodokhnovenny to collect
the debris from the EC-121. The Soviets handed over debris, which were about 50 pounds in total, consisting of a 20-man life boat, three leather jackets, a parachute, two exposure suits, uninflated life rafts, paper, dye markers, and some aircraft parts. Beside this debris, the USS Tucker and Dale collected several items from the waters around the incident location, including classified materials like operator’s notes, photographs, and radar antenna. After the Navy ships returned to Sasebo, Japan, the JCS terminated the SAR operations as of 05:00 on April 19.

5.3 Response

It was the first foreign crisis for Richard Nixon, whose presidency was only three months old at the time of the incident. Although it is hard to tell whether it was good or bad for the president to have a major foreign crisis in the early days of his presidency, the shootdown incident was a litmus test for the new administration before both domestic and international audiences. The news of the incident dominated headlines of major newspapers and magazines for several days and weeks. As shown in many documents, Nixon was obviously concerned about domestic critics and the possibility of loosing strong footsteps toward his Asian policy. On April 18, three days after the incident, Nixon held a press conference. Unlike his ‘hawkish’ image as a hardliner in foreign policies, he did not mention any military retaliation against North Korea. An interesting contrast to the Lee Myung-bak administration during the 2010 Yeonpyeong Crisis is that the press and public reaction to Nixon’s choice of no retaliation was quite acquiescent. The press described Nixon’s non-response
decision as “cautious” or “deliberate calm”. This allows a possible conjecture that Nixon felt relieved, at least, of the domestic pressure for retaliation after the press conference. For the international audience, allies and enemies alike, the incident was a good place from which they could assess the new American leader’s resolve and willingness to fight. The ongoing conflict in Vietnam constrained the United States from taking retaliatory action on the DPRK. At the same time, however, Vietnam also served as a driving force to take a strong stance for the reason of reputation. In fact, the conversation between Kissinger and Nixon shows such concern: the showing of weakness in one area could damage the morale and significance of the presence of the United States in other regions like the Middle East, Southeast Asia, and eventually the Soviet Union. In short, if Nixon had decided to retaliate against North Korea, it should have been driven by the international audience cost or reputational concerns, not by the domestic pressure. As described below, Nixon did not pursue a direct retaliation to North Korea. The only military action taken throughout the 1969 crisis was the bombing of Cambodia, except for the show of force and the resumption of reconnaissance flights.

5.3.1 Possible options

On April 15, Kissinger telephoned Nixon at 7:16 in the morning to inform him of the downing of EC-121. On day one of the crisis, the staff of the White House as well as other related officials were busy with preparing and discussing possible options. The first list was prepared by the Joint Chief of Staff. It listed a wide range
Table 5.1: Military and diplomatic options. The list is based on the conversations and reports during the National Security Council meeting of April 16 and follow-up talks between Nixon and key security advisors, including Henry Kissinger.

<table>
<thead>
<tr>
<th>Military Options</th>
<th>Diplomatic Options</th>
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<tr>
<td>Non-combat options</td>
<td>Panmunjom options</td>
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<tr>
<td>– Show of force, including a dispatch of</td>
<td>– Accept NK’s request of Military Armistice Commission</td>
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<td>a carrier flotilla</td>
<td>meeting</td>
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<td>– Resume reconnaissance flights with</td>
<td>– Reject the request and call for another meeting</td>
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<td>escort</td>
<td>– Call for a closed meeting</td>
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<td>– Boycott all Panmunjom meetings</td>
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<tr>
<td>Combat options</td>
<td>UN options</td>
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<td>– Destroy a DPRK aircraft off the coast</td>
<td>– Call a Security Council meeting</td>
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<td>– Selected air strike against a military</td>
<td>– Letter to the Security Council</td>
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<td>– Shore bombardment</td>
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<td>– Ground raid across DMZ</td>
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<td>– Attack military targets near DMZ by</td>
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<td>– Attack an DPRK naval vessel by sub-</td>
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<td>marine</td>
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<td>– Blockade of DPRK ports</td>
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<td>– Mining or threatening to mine DPRK</td>
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<td>waters</td>
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<td>– Seize DPRK assets abroad</td>
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<td></td>
<td>Third country channels</td>
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<td></td>
<td>– Message to USSR to pressure DPRK</td>
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<td></td>
<td>– Approach DPRK via other governments</td>
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of possible courses of action, from diplomatic demands for appropriate redress to air strikes to a ground attack on North Korean units or installations near the DMZ. By the evening of the fifteenth, Nixon and Kissinger added a few more options on the list. By the morning of April 16, all possible military and diplomatic options were displayed for discussion.

Each of the suggested military options – combat and non-combat – was accompanied by a series of supporting diplomatic actions. For instance, diplomatic action through the United Nations Security Council varied depending on the choice
between combat and non-combat options. If they go with combat option(s), the appeal to the UNSC should be adjusted for the justification of their military action. If they go with a non-combat option, the UNSC action is to be more focused on accusation of the DPRK (along with checks on the Soviet). The diplomatic options in table 5.1 were considered on the assumption that the United States takes no military option – either involving combat or not – at all. In the mind of the top decision maker, all of those options were eventually boiled down to two options: “hard response” or “soft response”.

The hard response option was to make one or more combat-involved military actions. It was most likely to include a retaliatory strike against North Korea. On the other hand, the soft response option was limited only to the non-combat military options. The likely scenario of the soft option was that the president ordered the reconnaissance flights to resume with fighter escorts. It also included a show of force for certain period of time. In this case, the diplomatic action would also be limited to forums at Panmunjom. Nixon, in fact, wanted all diplomatic actions to be done at a ‘low key’ from the beginning. General Wheeler, the Chairman of the Joint Chiefs of Staff, briefed the pros and cons of each options at the National Security Council meeting on the sixteenth. Whatever the specification of the response would be, the hard response option could guarantee the conveyance of U.S. resolve to the DPRK. It would also likely have a strong deterring effect. However, the combat-involved options would entail some costs and risks of escalation. The payment for escalation was believed to be large given the situation in Vietnam. The most feasible action of combat involved military option was carrier-based air strikes
on North Korean airfields. If they choose the soft response option, the crisis would likely end without further escalation. The problem with this option was that the United States might look indecisive. And looking like a ‘paper tiger’, in turn, should cause some domestic repercussions as well as damages to international reputation. By the end of the meeting, Nixon had not decided whether he preferred a hard or soft response option.

5.3.2 Speculations about the DPRK’s motive

Within a few hours after the shootdown news reached the White House, Nixon and Kissinger knew that the plane never intruded into North Korea’s territorial airspace. Then, why did North Korea come out almost 90 miles from its coast and shoot down a U.S. aircraft? If the EC-121 was certainly outside DPRK sovereign airspace, the shootdown was not a defensive measure, but an aggression. With regards to the motives behind the North Korean attack, Washington had three concerns: (1) the chance of accidental attack; (2) the involvement of external powers like the Soviet Union or China; and (3) the chance of escalation to all-out war.

Regarding the question of premeditation, policymakers in the United States seemed to agree that the attack was not impromptu. There were several pieces of circumstantial evidence favoring the premeditation theory. First, the maneuvering of the North Korean MiG-21s was straightforward. The estimated trajectory of the fighters flight path was well-calculated so that fighters took the shortest path to intercept the EC-121. The estimated time of the shootdown was telling in that the
North Koreans carefully planned the attack so that the MiG-21s could reach the target within the fuel limitation. Second, the record of communication and signals from the EC-121 revealed that the North Korean ground-controlled interception (GCI) had detected the plane. In general, GCI at that time was operated by a centralized system to monitor and control flying objects in covered airspace. Those centralized systems were usually directed at high levels of combat commanders. If GCI was involved, the decision channel should include the highest level. Third, North Korea’s follow-up actions were quick. Less than two hours after the shootdown, North Korean broadcasting in Pyongyang announced the news of the incident. North Korean broadcasting was highly centralized and following the strict hierarchy of the DPRK government. If the news was delivered through the central broadcasting within two hours of the incident, the chance of accidental hostility should be almost zero.

Besides this circumstantial evidence, Kissinger and Nixon received several reports and letters analyzing North Korea’s motives of the attack. Immediately after the incident, the State Department provided a short report on possible motivations of the attack. Thomas Hughes, the Director of the Bureau of Intelligence and Research (INR) of the State Department, prepared the report. He concluded that the most likely motivation was “self-gratification and increased prestige for Kim Il-song”. It was Kim Il-sung’s 57th birthday when the plane was shot down. The North Korean broadcasting boastfully described the incident as the air force’s “one shot” skill of downing the imperialistic Americans. Such ‘achievement’ might be a good present for their “dear leader.”

Hughes added another possible motive

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13 Hughes also pointed out that North Korea promptly requested a MAC meeting at Panmunjom. \[\]
that the attack could bring about controversy around the renewal of the U.S.-Japan security treaty. Either way, the analysis viewed the attack was a ‘planned action’. Hughes was not the only one arguing the premeditation. On April 16, William J. Porter, the U.S. Ambassador to South Korea, sent a telegram message on the motive of the North Korean attack. He claimed that the attack order must have been from the highest levels and that North Koreans would anticipate no reaction or only limited military response from the United States. According to his analysis, it was not surprising as the North Korea regime was accustomed to accept risks. He also highlighted “political gains” to Kim Il-sung brought by a military response by the United States. The claim of pre-planned attack was also supported by some members in the United Nations Commission for the Unification and Rehabilitation of Korea (UNCURK). In his letter to the Secretary-General, Zouheir Kuzbari, the Principal Secretary of the Commission, mentioned that the North Korean army had been ordered for a state of combat readiness prior to the incident. The information was given to him by Czech and Polish members on the Commission. He also said that the North Koreans seemed to be preparing for a retaliatory attack from the United States.  

Another concern was whether the Soviet Union was orchestrating the shoot-scheduled for April 18. However, the request was made a day prior to the incident. Some still argue that the request was another calculated move to see how the U.S. would respond. It is, however, uncertain that North Korea tried to use the MAC meeting for that purpose.

down. An intelligence memorandum of April 17, prepared by the CIA, shows that
the intelligence community was viewing the shootdown as North Korea’s unilateral
action.\footnote{Hughes (1969a).} Several documents produced by U.S. intelligence concluded that North
Korea was building its own form of socialist country since the late 1950s by consolidating the \textit{Juche} ideology. By the end of 1968, the intelligence community seemed to confidently believe that Pyongyang was moving independently. For example, a
CIA report of November 26, 1968, pointed out that Kim Il-sung rejected Chinese
direction of launching guerrilla-type conflicts against the South in 1966:

In January 1966, the Chinese reportedly turned their attention to the
Koreans, challenging them to open a second front along the DMZ and to
begin guerrilla warfare on a large scale in the South in order to relieve
pressure on Communist forces. [...] Chinese had demanded the launching
of a major guerrilla warfare campaign in the South. \textit{Kim and his aids reportedly refused to comply}.\footnote{Cohen (1968, 3).} (emphasis added)

The same report went further to argue that the development of North Korea’s
relationship with Cuba was based on a “common anti-Mao grievance.”\footnote{Cohen (1968, 8).} On the
specific case of the EC-121, General Bonesteel, the Commander of USFK, saw the
possibility of the Soviet (or Chinese) involvement to be low. During the “private
briefing” to the Principal Secretary of the UNCURK, he gave the Commission his
assessment on this issue as follows:

As to the external influence on \textit{[N]orth Korea}, General Bonesteel believes that the \textit{[N]orth Korea} regime has shaped its own \textit{independent} communist line, and that neither the Soviet Union nor Communist China could

\footnote{Hughes (1969a).}
\footnote{Cohen (1968, 3).}
\footnote{Cohen (1968, 8).}
exercise an influence over [N]orth Korea.\(^{18}\) (emphasis in original)

In this letter, the chair of UNCURK clarified that General Bonesteel was believing in North Korea’s unilateral aggression, independent from the Soviet Union or the Communist China. As the Commander of the United States Forces in Korea, General Bonesteel was indeed in close touch with the White House from the beginning of the crisis.\(^{19}\) This shows that policymakers and the intelligence community presumed that Kim Il-sung’s North Korea was no longer taking orders from communist powers. It is, therefore, reasonable to believe that Washington placed low probability of Chinese or Russian involvement in the downing of the EC-121.

If the attack was deliberate and premeditated, did North Korea want to initiate a second Korean War? Regarding the chance of war initiation and escalation, declassified documents and conversation records show that Washington did not believe war initiation by North Korea was likely. Soon after Nixon came into the office, Rufus Taylor, Deputy Director of the CIA, submitted a Special National Intelligence Estimate (SNIE), which was a continuous effort of the agency from the Johnson administration. The SNIE of January 30 confirmed its previous estimate in May 1968 by concluding as follows:

> [W]e conclude that, under present circumstances, Pyongyang does not intend to invade South Korea; nor do we believe that Pyongyang is

\(^{18}\) “Letter, UN Chef de Cabinet C.V. Narasimha to Mr. Jean Gazarian, Concerning UNCURK Report,” April 19, 1969, History and Public Policy Program Digital Archive, “International incidents and disputes - Korea - correspondence (603.1),” Executive Office of the Secretary-General, S-0196-0002-04, United Nations Archives and Records Management Section (UN ARMS), New York, NY. Obtained for NKIDP by Charles Kraus. http://digitalarchive.wilsoncenter.org/document/117256. The Commission went busy after the incident. There was emergency meeting on the eighteenth and nineteenth. This excerpt is from the letter prepared by the Principal Secretary on April 19, 1969, likely after the meeting.

\(^{19}\) Kissinger directed him via General Wheeler Kissinger (1969b).
deliberately trying to provoke the Republic of Korea into a resumption of major hostilities.”  

The same report also warned that small conflicts and crises were likely. Therefore, war could break out from uncontrolled or unexpected escalations between two Koreas and/or two blocs:

Thus, the danger over the next year or two is not that war will arise from a deliberate decision of one side or the other, but that it might result from miscalculation – for example, in the process of probing for weaknesses and testing ROK and US resolve, North Korea may overplay its hand and lead the South Koreans to retaliate heavily. We believe that, even in these circumstances, North Korea would wish to avoid fullscale war. In a crisis, decisions in Pyongyang - as in Seoul - would be affected, perhaps decisively, by the attitudes of major allies. In our view, given no major change in Soviet or Chinese attitudes, both Moscow and Peking would probably urge North Korea to avoid a fullscale war.  

During the first two days of the crisis, two memos of analysis on North Korean intentions seem to be of particular importance because both of them were prepared by intelligence community: one by Hughes from INR and the other by Helms, the Director of Central Intelligence. Both agencies concluded that the attack was deliberate and planned in advance. Hughes and Helms were also placing more weight on domestic purpose of the attack. Hughes cited that April 15 was Kim Il-sung’s birthday, while Helms mentioned that the attack would be used for propaganda. He also argued that the attack could be used to hold “domestic attention” on its brave challenge rather than on “frustrating inequalities”. 

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22 Helms mentioned two inabilities: the failure of the “people’s war” tactic to stir up the South, and the outpaced economic progress by South Korea. Helms (1969).
In sum, the White House was informed of the low probability of all-out war initiated by North Korea. This claim was evidenced by the converging analyses from different actors like the CIA, the Defense Department, and the State Department. There, however, was some chance of escalation if Pyongyang reacted to retaliatory actions by the United States. Nixon was mostly concerned about possible escalation. On the surface, these two concerns are contradictory. If there is no intention of war initiation, any military action would not be escalated to war because it is never intended in the first place. As discussed later in the following analysis section, these two seemingly contradictory concerns were indeed driving U.S. response in the same direction.

5.3.3 The final decision

The NSC meeting ended without a conclusion. In the evening of April 16, the President went out of the office to attend the Seventeenth Annual Republican Women’s Conference. Nixon never took an initiative to gather key members of the NSC again. Later, Kissinger recalls that Nixon was not a big champion of closed group discussion like the gatherings in a situation room. He describes Nixon as another “victim of a Situation Room Syndrome.” Nixon avoided using the situation room. There was no sign of the President being pressed to hurry. Every step was to be carefully inquired and “played cool”, which slowed the whole process of crisis decision making. Washington split over two options of response: on the hard response side were Kissinger and Haig; and the other side were Laird and Rogers.
The President’s position was somewhat unclear.

Although Kissinger never defined his position clearly before anyone – he seemed to intend to confine his role to an ‘adviser’, he stressed the significance of their first ‘test’. By and large, he considered some retaliatory actions seriously. Another supporter of the hard response option was Haig, the President’s Military Adviser. He emphasized the danger of “no-action” by mentioning Vietnam. He continuously recommended some type of strikes or a submarine attack at least.\textsuperscript{23} The soft response option was preferred by Laird, Rogers, and Porter. The Secretary of State was opposed to retaliation from political and legal perspectives. Porter, the Ambassador to South Korea, continuously warned that the United States should not play into Kim’s hands.\textsuperscript{24} The opposition to retaliation by the Secretary of Defense came with some important points to discuss. In his memo to the president, he recommended that the response should not be of military and listed following reasons to refuse hard response option: (1) the reconnaissance is not of vital interest; (2) in case of escalation, the U.S. capability of fighting two wars simultaneously is not clear; (3) a military strike carries risks vis-à-vis the U.S. efforts in Paris as well as Southeast Asia; (4) Congress and the public are not necessarily opposed to the soft response option; and (5) there are alternatives to convey U.S. resolve and commitment to domestic and international audiences.\textsuperscript{25}

There was, in fact, diverging opinions within the Defense Department. For instance, commanders in key positions related to the incident were holding opposite

\textsuperscript{23}Haig (1969).
\textsuperscript{24}Porter (1969).
\textsuperscript{25}Laird (1969).
views on retaliation. The Commander of CINCPAC, Admiral John S. McCain Jr., was for strong retaliation. In a message to JCS on April 16, he insisted on utilizing Task Force 71, stating “If we operate again in the Sea of Japan only as a show of force, and without positive action, I believe that we continue to provide justification to their judgment of us as Paper tigers. The end result might well be the opposite of our intended purpose and encourage rather than discourage further belligerence.”

On the other hand, General Bonesteel, the Commander of USFK and UNC, held a more careful position. His major concern was the vulnerability of the South – including the USFK on the peninsula – in case of escalation. He said that the defense of South Korea required a “massive logistic effort over an extended period”.

The remaining actor was Nixon. It was uncertain if the president was truly favoring the retaliation option. His initial response was “force must be met with force.” In terms of costly confrontation, however, he preferred non-combat response to combat military options. On day one, Nixon was interested in seizing a North Korean ship, which was then believed to travel from the Netherland to North Korea.

In the late evening of the fifteenth, he telephoned Kissinger to ask his thoughts on a blockade of a North Korean harbor. In his conversation with Kissinger, Nixon repeatedly mentioned a response with “symbolic” meaning. The idea of blockade

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27 For instance, he mentioned that about 80% of Hawk missiles in Korea were unreliable for combat use. Message from CINCUNC to JCS, “Effect of Punitive Actions,” 1556Z April 17, 1969.
28 On April 15, intel came in that there was a North Korean-owned ship under Dutch registry in transit to the peninsula. Later, it turned out that there was no such ship in the first place. Kissinger (1979); Schorreck (1989).
and hijacking were likely to be drawn from the Cuban missile crisis and the Pueblo incident, respectively.\textsuperscript{29} His words sometimes seemed to favor the hard option, other times seemed to favor the soft. Nixon’s own account was that “neither hard nor soft option” was satisfactory.

Going with the soft response

Between the two options, Nixon did not like either of them. With the hard response option, the chance of escalation was not negligible given the risk. Nixon, based on analyses from different branches, was aware of the risk of escalation induced not only by the North Korean reaction, but also responses from other related actors, particularly South Korea. With the soft option, Nixon was worried about public disapproval. Either option, moreover, would impact the conflict in Vietnam. On April 18, Nixon stood in front of the press and spoke to the public for the first time since the shootdown. The press, as expected, asked the president about the shootdown (five out of seventeen questions on that day were about the shootdown). The president avoided mentioning military measures. He only declared the resumption of the reconnaissance mission with protection. It seemed that he had calibrated his answers to not disclose what the next steps would be. In replying to the question about the properness of responding to aggression, he seemed to pass the ball to the other side:

The problems with regard to a proper response are quite obvious: the question as to what reaction we could expect not only from the party

\textsuperscript{29}Nixon and Kissinger (1969b).
against whom we respond but other parties that might be involved [...] how responding in one area might affect a major interest of the United States in another area, an area like Vietnam, Vietnam being the top priority area for us. [...] Our action in this matter will be determined by what happens in the future.30

This answer (and other remarks on the shootdown) was carefully calculated in advance. The night before the press conference, Nixon had a long talk with Kissinger over the telephone as he was reading the briefing book for the next day. In their conversation, Kissinger explained that “option 2” (the soft response option) was low risk and would not endanger the president much.

Meanwhile, a force generation was proceeded in the waters around the peninsula. The Fifth Air Force moved its fighters to the Korean Peninsular and went to its maximum level of readiness for deployment. The Sixteenth Tactical Fighter Squadron was also ordered to redirect to fly to Kunsan in South Korea. General Bonesteel directed the missile batteries to stay at the highest readiness level. The Commander of the Seventh Fleet directed three attack carriers to maintain the highest level of readiness for deployment. On April 17, Nixon also ordered the halted reconnaissance flights to resume with armed escort. He ordered carrier groups – the USS Ranger, USS Ticonderoga, and USS Enterprise – to advance into the East Sea. Since those carriers were committed to Yankee Station and supporting operations in Vietnam, the USS Kitty Hawk and USS Bonne Homme Richard were redeployed to relieve them. After 48 hours had elapsed since the shootdown, the responding forces were ‘on ready’ for possible retaliatory strike. By April 19, the waters around Japan were loaded with fighters and carrier groups. Nixon wanted them to stay in

30Johnson (1978, 49-50).
the area for at least 48 hours. Of course, Nixon and Kissinger knew that the show of force would not be considered as an actual threat by North Korea. It was aimed to signal a message that Washington was able and willing to do something. In fact, the Task Force 71 was ‘standing by’ for further instructions from the highest level. No decision regarding the retaliation was made. The only issue resolved by that time was that the retaliation would be carrier-based strikes if the president approved the hard response option.\(^{31}\)

Nixon made up his mind not to retaliate against North Korea before April 19, 1969. He canceled the meeting scheduled on April 19, in which he was going to discuss the response with Kissinger and NSC members. The primary reason was opposition of his advisers, excluding Kissinger.\(^{32}\) On the night before the press conference, the president was concerned about the negative public reaction to the soft option. Even in the morning, two hours before the conference, Nixon was not sure whether his decision would be taken as calamity. However, another decision regarding the Vietnam issue bolstered the decision in Korea.

**Signaling resolve in Vietnam**

From analyses of North Korean motivations behind the shootdown, Nixon and Kissinger learned that Kim Il-sung might intend to aid his fraternal country, Vietnam, in its fighting against the United States. Even if such idea was not evidenced, there were reasons for the United States to consider the chained effect between Korea

\(^{31}\)Kissinger didn’t agree to send additional bombers to Korea. Because it required relocation of B-52s in Guam, which could impact their plan of bombing Cambodia. Kissinger (1979).

\(^{32}\)Haldeman (1994, 51).
On top of Nixon’s list of foreign policies was to end the Vietnam War. Delegations were sent to Paris a year ago and were waiting for the right time and format of talk. Soon after his inauguration, in February 1969, North Vietnamese forces mounted a new offensive against the U.S. forces in South Vietnam. Nixon felt obliged to retaliate. The idea of a secret bombing of Cambodia came out of this context of revenge. The biggest hurdle to the bombing plan was the secrecy of the plan. Americans were against the prolonged war in Southeast Asia. Given Nixon’s promise of ending the war and the preparation of talks in Paris, the bombing offensive, if leaked to the public, would certainly face strong opposition. In March, the first bombing, codenamed Breakfast, came off successfully. The following raids were also planned carefully and clandestinely. None of them were approved in Congress. The success of the March bombing, however, might drive Nixon to be optimistic and confident about the secret plan. When the EC-121 was shot down, Nixon asked Kissinger about the following bombardment on Cambodia: “[H]ow about doing the lunch plan and getting caught. They[North Korea] took the ship[the Pueblo] and we get Cambodia” (emphasis added). In a sense, the shootdown of EC-121 gave Nixon a good justification of continuing the secret bombing.

As described above, Nixon was seeking for something “symbolic” to send a strong signal to the Communist bloc as well as North Korea. The important link

33 The idea of secret bombing on Cambodian border was first coined by Kissinger in February 1969. Halderman recalls the scene that Kissinger was exited of the secret bombing, codenamed ‘Operation Breakfast’ on March 17, 1969: “Kissinger’s Operation Breakfast finally came off at 2:00pm our time. Kissinger really excited, as was President” (emphasis in original). Haldeman (1994, 33).
was, however, not as clear as other observed facts. It was how to link the shootdown and the raid on Cambodia/Vietnam. The basic assumption that the shootdown was a pre-meditated strategy by Pyongyang to support Vietnam needed to be confirmed in order to discuss the bombing option before the staff and Congress. Only a few analysis reports mentioned the Vietnam War as a possible motivation for Pyongyang. It was possible; but even the president could not afford the bombing on Cambodia without clear evidence. There was simply not enough evidence to disclose the bombing of Cambodia. Moreover, the initial bombing was already conducted on May 9. It would be best to keep it covert at that time. Throughout the shootdown crisis, Nixon wanted to talk with Kissinger exclusively. Even when the president had a meeting with other staff (e.g. the Defense Secretary, the State secretary, and the Chair of the JCS), Kissinger remained with the president until everyone else leaves. Kissinger also insisted that they should look ‘dangerous’. He advised that the move of carriers should be known to the public. Both the president and the National Security Adviser agreed with the necessity of a strong gesture toward the Communist bloc.

Kissinger’s idea of ‘looking tough’ to the enemy is found in his memorandum on April 22. In this memorandum, Kissinger said that additional targets in the tri-border area between Laos, Vietnam and Cambodia were considered. The final draft of the bombing plan included three operations: Operation Breakfast Bravo, Breakfast COCO, and Operation Lunch. The bombing was planned to run on April 24 and 25.\textsuperscript{35} In the section of ‘pros of plan’, it reads “Signals to Soviets and

\textsuperscript{35} The original operation Breakfast was already conducted in March. These two operations were
North Vietnam that EC-121 incident did not divert U.S. attention from the Vietnam conflict. At the end of the memo, Kissinger emphasized that the additional bombing would deliver a message to the Russians:

On balance, I [Kissinger] favor strike primarily because it represent a forceful U.S. action in wake of EC-121 incident and the message it conveys to the Soviets. It is probable that Laird and Wheeler will support plan on military grounds and that Rogers will oppose on political grounds. (emphasis added)

Although details of the secret operation and its planning process are unknown – the operation plans and orders were all fake in the first place in order to be destroyed for the sake of secrecy, policymakers recount how the secret bombing on Cambodia was related to the shootdown of EC-121. For instance Shawcross described the connection between the Cambodian bombing and the shootdown: “the next attack – codenamed Lunch – was mounted in the lieu of retaliating against North Korea for the way in which it had shot down an American EC-121 spy plane” (emphasis added). Cambodia was an easy target for Nixon to choose. The bombing in March had already proven successful, leaving no damage and no leak. The plan for the following bombing campaign was in hand at the time of shootdown. It was also supported by branches of the Armed Services. At that time, the Air Force claimed that at least equal resources should be allocated. They needed justification for the existence of a large number of bombers and sorties, and the bombing campaign could give them such justification.

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36 Kissinger (1969a).
37 Shawcross (1979, 92).
38 The only and most concerning issue of the bombing campaign was the secrecy. Kissinger had
Nixon himself was a critic of Johnson’s handling of the Pueblo Crisis as he stressed the “restoration of the respect for the United States” in his acceptance speech. During the crisis of 1969, Nixon was not making any decisions clearly. The National Security Council was not working as expected. Kissinger, the National Security Adviser, was the only one who the president was talking to for decision making. Warren Nutter submitted an evaluation report on the process of crisis management and contingency planning during the EC-121 incident. Although it was a preliminary assessment, it reveals some shortfalls of the administration in terms of crisis planning. After the incident, Nixon and Kissinger directed the Defense Department to renew the contingency plan for Korea. The Nutter’s report concludes that the process of response planning was not appropriate on three points. First, the existing structure and machinery of crisis management was not working for a military crisis like the EC-121 shootdown. He suggested that the inter-departmental approach be replaced by a special action group in a more focused manner. Second, there was no officially shared concept of ‘trigger’ that promptly activates crisis management procedure. Although emergency measures were made in a satisfactory manner, the more extended management of crisis didn’t come in sufficiently fast. Third, the overall process took a long time, which could have worsened the situation. The deficit of the Nixon administration’s decision making is not under the scope of this study, but the process itself provides interesting insight. In the following sec-

attempted to buy off Prince Sihanouk of Cambodia; but failed. Given the neutrality of Cambodia was recognized by international society, Nixon could not simply rage a war against a neutral country for the whim of a foreign prince. The bombing was leaked, finally, as the New York Times reported the bombing on May 9, 1969. Kissinger was outraged and ordered a wiretap on his assistant, Morton Halperin’s phone.
tion, I discuss how the decision of no retaliation can be explained using the model of response from the previous chapter.

5.4 North Korea’s instabilities

It is crucial to know about decision makers’ perceptions or beliefs about North Korean motives behind the attack, as opposed to North Korea’s true motive. However, it is also worth looking into what had happened inside Pyongyang. This can reveal (1) how confidently the decision makers in Washington could formulate the response strategy based on their speculation; (2) what reactions from North Korea were anticipated; and (3) how the domestic and international environment may (or may not) influence North Korea’s behavior.

The years between 1965 and 1969 are often referred as the Second Korean War because of the increasing number of North Korean provocations. Some historical references record that there were 348 individual incidents across the DMZ in 1967 alone, which was nearly one incident per day. What made North Korea vehemently resort to violent behavior? To give an early conclusion, the 1960s was not at all a good time for Kim Il-sung to initiate another all-out war or to seek the “liberation” of South Korea. Many historians and North Korea experts characterize this period as the most violent and volatile phase for North Korea in both international and domestic relations. Thus, it seems reasonable to ask if North Korea ever sought a rally-around-the-flag effect or a diversionary conflict strategy by creating crises outside. At the same time, it is also necessary to examine how the United States
understood the DPRK’s domestic situation, because this might influence its choice of response. Did the unusually heightened hostility of North Korea have anything to do with its domestic situation? The domestic and international environment of North Korea at the time of the shootdown can be examined at least from three areas: pressure on leadership due to poor economic performance; domestic political changes; and foreign relations with other communist powers.

5.4.1 Failure of development plans

The North Korean economy in the 1960s was far from being supportive to the regime. After the Korean War, Kim Il-sung rebuilt the entire country on the base of socialist ideas. The economy was also restructured into a socialist planned economy. The Soviet Union provided financial aid of a billion rubles for the rehabilitation of North Korea. The new regime in North Korea made significant progress in terms of economic revival and social restructuring. Unlike other economies in the Communist bloc, Kim Il-sung placed emphasis on ‘speed’, rather than ‘balance’. He understood the speed of economic growth as a goal, while the balance as a method. It seemed that the emphasis on speed indeed worked for North Korea. With enthusiastic support from the Communist colleague states, North Korea’s economy jumped up until 1960. Kim, Kim and Lee estimate that the growth rate of North Korea between 1954 and 1960 was at least 9.0 on average. At the fourth KWP Congress in 1961,

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39 North Korea also received aid from other communist countries in Eastern Europe. Between 1953 and 1954, they were provided with essential machinery and equipment like construction equipment and steel materials, with a total value of 120 million dollar.

Kim Il-sung announced the seven-year development plan as a part of his picturing of a new country. In the following year, at the Fifth KWP Central Committee Conference, he declared *Byungjin* line, which focused on simultaneous development in the military and the economy. The major task of these plans was to intensively foster the heavy industry, military in particular, so that the economy could leap forward in short time. The Party and Kim Il-sung seemed to have confidence about their plans. All of the previous plans – the Three Year Plan (1954-56) and the Five Year Plan (1957-61) – were over-fulfilled, and signs of decline did not seem significant. One negative sign within North Korea was an increasing voice against Kim Il-sung, by those who had difference approaches to socialist ideology than Kim’s. In 1958, Kim Il-sung purged his political opponents during the August Faction incident. After the purge, Kim Il-sung initiated the *Chollima* movement, a state-sponsored labor initiative based on ideological appeal (*Chollima* literally means a horse that can run over 300 miles a day).41

In spite of the ideological spur, the horse didn’t run as expected. The ‘speed’ strategy instead made the horse more fatigued: overall economic forces became rapidly exhausted. Moreover, foreign aid dropped in the 1960s, and there was no way for the announced plan to be achieved (or even implemented) without support from outside. The shortage of foreign aid in this period was not irrelevant to the so-called Sino-Soviet conflict, which is discussed in the following. After all, as shown

41 The *Chollima* movement was a North Korean version of the Russian Stakhanovite movement or the Chinese Great Leap Forward. There were debates over the originality of the movement. Some argue that North Koreans fabricated their record to make the movement look earlier than the Great Leap Forward, and that the *Chollima* in fact started in 1958 in the middle of its Five Year Plan. In any event, the *Chollima* movement spread nationwide and was adopted in various fields including education, science, and culture.
Figure 5.1: Key Economic Indicators of North Korea, 1956-1990. Plots are drawn using estimates from Kim, Kim and Lee (2007). Missing years are interpolated using a linear time-series assumption. The squared line represents the annual growth rate of GNP; diamond for labor force growth; triangle for capital stock growth; and circle for labor productivity.

In figure 5.1, the overall picture of the North Korean economy during the 1960s was rapidly deteriorating. GNP growth declined to below 4% in the 1960s. The productivity of labor went down below zero. Other key indicators declined dramatically as well. An East German diplomat in Pyongyang recalls the economy of North Korea at that time as “bogus”.\footnote{Ostermann and Person (2011, 71-72).}

At last, in 1966, Kim Il-sung decided to put off the completion of the Seven Year Plan for three years at the Conference of the Korean Workers Party. However, this measure was not enough to convince his audience. The economic malperform-
mance was threatening to the North Korean regime for two reasons. First, it could disapprove the regime’s competitiveness against South Korea. At that time the economy of South Korea was entering its high-growth era. The Park Chung Hee regime of the South won a large amount of foreign aids from the United States, Japan, and West Germany. Its growth rate outpaced the DPRK’s growth rate by the end of 1966. Second, there was also a looming threat to the legitimacy of Kim Il-sung’s rule. Backed up by the Kapsan faction, Pak Geum Chul and his followers officially objected to the military and heavy industry centered development plan. They even began to challenge the idolization of Kim Il-sung. Although opposing voices were controlled soon, the economy didn’t recover quickly.

5.4.2 Political purges in the late 1960s

In North Korea’s post-war era, the year 1967 is significant. To some extent the political restructuring during the period between 1965 and 1967 accounts for North Korea’s current regime, the Kim Dynasty. This background is also crucial for understanding North Korea’s unusual increase in hostile activities during the late 1960s.

The Seven Year Plan of 1961-1967 was not only about recovering from the economic impact of the Korean War, but also about reshaping the country into a ‘monolithic system.’ In 1967, Kim completed the transition to dictatorship as he

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43 The first appearance of the idea of monolithic system dates back to 1955. On December 28, 1955, at a gathering of the KWP’s propaganda and agitation workers, Kim Il-sung delivered a speech, titled “On Exterminating Dogmatism and Formalism and Establishing Autonomy in Ideological Work.” In this speech, he officially denounced political fragmentations, and the word “juche” made its first appearance in official document. The concept of *juche* has been North Korea’s central ideology since 1972, when Hwang Jang-yeop articulated the *juche* ideology (Bluth,
eliminated his political rivals. Although the purge of 1967 was not the first purge, the impact was greater than previous ones. In 1956, Kim Il-sung launched a massive expulsion of two major factions: the Soviet and Yonan (or Yan’an) factions. Since the purge of August 1956 was targeted at the two most powerful yet foreign-supported factions, it could be understood as a part of Kim’s plan to free North Korea from Soviet and Chinese influence. The purge of 1967 was, however, targeted against domestic factions, which had been the believed-to-be most trusted friends of Kim Il-sung. As the two foreign-supported factions were removed, the vacuum of power was filled with domestic figures, most of which were Kim’s combat friends. They were recognized as the Kapsan faction, named after their combat base during the independence. The new KWP leadership, which lasted until 1967, was characterized as the ‘emergence of the Kapsan faction.’ Pak Geum-cheol, the head of the faction, was in the fourth ranking in the Central Committee of KWP; Ri Hyo-sun in the fifth ranking; Kim Doman became the Secretary of the Central Committee and the Head of the Propaganda Section; and Ko Hyeok was the chairman of the Culture and Arts Section. The 1967 purge was earthshaking because all of those Kapsan members were eliminated. It was not only a purge on individual members or factions, but of any existence of diversities within the KWP. No partisanship was allowed. Any existence of factions should be denied and terminated. Kim Il-sung

44There were several factions in North Korea after the Korean War. Among those, powerful factions are the Southern communists, Yan’an faction, the Soviet, and the Manchurian guerrilla. Unlike domestic factions, the Soviet and Yan’an were backed by the Russians and the Chinese, respectively. The wave of de-Stalinization started by Khrushchev made Kim seek for an independent path, both materially and ideologically. In fact, during his visit to Moscow in 1956, members of the Soviet and Yana’an factions were preparing a coup against Kim (Bluth, 2011, 60).
was no longer a leader of the country; but now became ‘the supreme leader’.\textsuperscript{45} The sacrifice of the *Kapsan* faction for the Kim Dynasty would have brought agitation among the population of North Korea. They were, in fact, the closest aids to Kim Il-sung during the communization process. The purged members of *Kapsan* were former members of the Kapsan Operations Committee, so called ‘founding friends’ of Communist North Korea. They played significant roles in the overall politics of North Korea before the monolithic system emerged. There were some number of followers for Pak, the head of the faction. He was overtly critical of some of Kim’s policies.

After eliminating his right-arm men, Kim Il-sung re-established the regime on the idea of kingship: his family members and relatives were now in power to rule the country. Soon before the shootdown incident, several positions in the KPA were replaced. An (1983) explains the emergence of a new elite group between January and April of 1969 as an internal power shift. In a similar vein, Mobley (2003) argues that the shootdown is a result of the internal power struggle in Pyongyang.

### 5.4.3 Seeking balance between Moscow and Beijing

North Korea’s foreign relations in the 1960s were characterized as ‘oscillating’ between the Soviet Union and China. The sturdy bond between Pyongyang and Moscow began to show cracks as early as the twentieth Congress of the Communist Party of the Soviet Union (CPSU) in 1956. However, a more direct observa-

\textsuperscript{45}Since Kim Jong-II played a leading role in the process of monopolization of North Korean politics, the establishment of a monolithic system was also equivalent to the emergence of privatization of the regime.
tion was made immediately after the twenty-first Congress of CPSU in 1959, when
Khrushchev criticized Kim Il-sung’s economic plan as unrealistic and benign.\textsuperscript{46} The signs of discord were not limited to economic policy. While Kim Il-sung prepared strategies to unify the peninsula, the post-Stalin Moscow preferred the maintenance of status quo in Korea to risky changes and confrontations.\textsuperscript{47} Apart from differences in specific policies, the fundamental change emerged as the de-Stalinization began, which seemed to lead Pyongyang to create distance from Moscow. For instance, Kim Il-sung replaced his Foreign Minister, Nam Il, who was one of the leading politicians from the pro-Soviet faction.\textsuperscript{48} At the twenty-second Congress of the CPSU the clash between Moscow and Beijing was disclosed more directly than ever in the discussion of the Albanian problem. Although Kim Il-sung kept neutrality at the Congress, his position moved toward China as the Sino-Soviet rift intensified. In September, 1959, Khrushchev chose to visit Washington first, instead of Beijing, to promote the rapprochement between the two countries. Whilst the world was attentive to the Soviet leader’s visit to the United States, Kim Il-sung was not completely in support of the Soviet Union’s new foreign policy of ‘peaceful co-existence.’ Pyongyang started siding with China, instead. On September 9, 1959, North Korea announced a statement indicating its “full support” for China with respect to the Sino-India border dispute, about which Moscow declared neutrality.\textsuperscript{49} The assault on Stalin
\begin{footnotes}
\textsuperscript{46}Szalontai (2005, 136-140).
\textsuperscript{47}This Soviet approach was aligned with that of the United States, who also had great interest in preventing South Korea from provoking a war with the North. Szalontai (2005, 142).
\textsuperscript{48}In fact, Nam Il was one of the few from the Soviet faction who survived the purges of 1955 and 1958. Later, he was promoted to Deputy Premier of the DPRK, but it was no more than a symbolic position within the despotic regime.
\textsuperscript{49}Kiyosaki (1976, 55), Chung (1978, 45).
\end{footnotes}
was more than an ideological movement to Kim Il-sung, because Stalin and his ideas were regraded as the theoretical foundation of Kim Il-sung regime. In a more practical sense, Khrushchev’s new doctrine was threatening the legitimacy of the Kim Il-sung regime. For instance, the negation of the cult of personality posed a major interruption on its path to the monolithic system. After the de-Stalinization began, anti-Kim Il-sung voices indeed became louder.50

The coolness of Soviet-DPRK relations became more complicated in the mid-1960s, after the fall of Khrushchev. Passing through the Sino-Soviet dispute, China stood independently. As a consequence, the “fraternal” countries were being forced to side with either the Soviet Union or China. As a small country, North Korea did not have a wide range of choices. Pyongyang’s exacerbated relation with the Kremlin caused a disruption in its Seven Year Economic Plan, which was also accompanied by the skyrocketing growth of its southern rival. Following the Soviet Premier Kyosgin’s visit to Pyongyang, Moscow resumed its military and economic aid. However, the recovery of the bilateral relationship did not stop the DPRK’s desire for an independent front. Kim Il-sung refused to join the Soviet-dominated Council for Mutual Economic Assistance (also known as ‘Comecon’), which he believed was a way to promote the *Juche* ideology. China, however, was not on the same page as Kim. Beijing accused Kim of “modern revisionism,” arguing that a “clear line of demarcation must be drawn in dealing with the leadership of the

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50The purge of the pro-Soviet faction in 1958 is believed to be related to the deteriorating relationship between the Soviet and the DPRK during that period. For more on the DPRK relationship with the Soviet Union over time, see Chung (1978); Haggard (1965); Kiyosaki (1976); Koh (1969); Kun (1967). A more recent work by Szalontai (2005) discusses the Soviet-DPRK relations under Khrushchev with greater details obtained from diplomatic documents in communist countries.
In the end the changes within the communist bloc drove Kim to pursue a balance between Moscow and Beijing. North Korea perceived the international cooperation in the communist world was being shaken. At the Second Conference of the KWP held in October, 1966, Kim emphasized the “national independence” of Korea. Since the Conference of 1966, North Korea identified itself as a non-aligned country. Meanwhile, Kim invested enormous efforts to gain support and recognition from other non-aligned communist countries. An unexpected defiance came from South Korea. The ROK sent a large number of troops to Vietnam in support of the United States. North Korea aided North Vietnam by providing ariel support, but did not feel it was enough. Therefore, the initiation of the second Korean War was considered and executed in those contexts.

During the years between 1960 and 1968, North Korea was experiencing dramatic changes and challenges in domestic politics, economic development, and its foreign relations with other communist powers. The internal politics of the dictatorship was undergoing a reshaping process, which involved massive purges of ruling elites and gave birth to the monolithic system. At the same time, the transformation coincided with economic challenges, which included significant threats to the legitimacy and stability of the regime. The performance and strategic plans of de-

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51 Kiyosaki (1976, 71-77).
52 Kiyosaki (1976) points out that the call for a Party Conference itself casts an important message. Unlike a Party Congress, the Party Conference allowed Pyongyang to exclude foreign observers.
velopment did not meet the goal in every aspect. Opposing voices echoed within ruling elites, which needed to be controlled. The idea of unification through the internal communist revolution in the South did not happen. In sum, there existed sufficient evidences indicating that the frequent violations and hostile behavior of North Korea during the late 1960s were intended for diversionary purposes.

5.5 Analysis

The outcome of the EC-121 crisis can be called a ‘concession’ by the United States, regardless of its attempt to send tough signals to the Soviets through the secret bombing of Cambodia. In order to explain how the response against North Korea was formulated in the direction of a concession outcome, I use the model of response from Chapter 2. The model predicts that the choice of response is associated with several factors, such as the size of initial aggression, the relative power, and other domestic political environmental factors. Although many of them align with existing studies on action-reaction phenomenon, it sheds additional light on some undertheorized aspects like the interactiveness between the responding state and the initiating state and the distribution of power at the domestic level of each state actor.

5.5.1 The US assessment of North Korea’s domestic instabilities

The model of response in Chapter 2 shows that the opponent’s domestic politics (or the target’s beliefs about the opponent’s domestic politics) have influence
on the target’s responding behavior. How the United States viewed the domestic politics of North Korea during the crisis? From the viewpoint of the United States, the years between 1966 and 1969 were the most problematic period due to increasing North Korean activities involving serious violations of the armistice. Since long before 1967, the United States intelligence community was watching over the fluctuation of North Korea’s domestic politics. Their top concern was how structural changes in the DPRK leadership formulated its external behavior, particularly military actions. North Korea’s provocative actions changed in both quantity and quality after 1967. The DPRK’s breaches of the 1953 treaty increased both in quantity and quality. An intelligence report of the CIA, submitted in December 1968, identified four possible motives for the increasing hostilities of the DPRK as follows.

First, the tactic of inside insurgence did not work as the North Korean government expected. Contrary to the expectation that domestic unrest should lead to an internal revolution, the autocratic rule of Park Chung-hee and anti-communism was gaining more support and stronger footholds as the economy began to grow. The unwanted direction of South Korea’s economic growth and North Korea’s decline might forced Kim Il-sung to change his gear and switch to tactics of direct infiltration. Second, it might be an attempt to distract domestic oppositions from the deteriorating economy of North Korea. The propaganda that the North over-

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54 There were more than 280 incidents of North Korean attack on South Korea or the United States since 1967 (Downs and Lee, 1999). The boldness of the attacks was unprecedented. Some major aggression since 1967 includes the sinking of the ROK Navy patrol craft in the East Sea in January 1967; the Blue House Raid in attempt to assassinate the South Korean president in January 1968; the seizure of the Pueblo in January 1968; the attacking of a UNC truck in Panmunjom in April 1968; the intrusion of 120 North Korean commandos in the Uljin-Samchuck area in October 1968.
whelmed the South in economy as well as in military began to lose its ground. Third, Kim Il-sung might have felt pressure to help Vietnam in the “fraternal” country’s struggler against the United States. Moreover, South Korea’s decision to send its troops to Vietnam might force Kim to do something. Lastly, Pyongyang sought to create unfavorable conditions for the United States to make a commitment to the South. The ultimate purpose of such actions might be more focused on the reduction of the US presence in Korea.

All of the four points are related to the stability of Kim Il-sung’s leadership. The increasingly violent and aggressive behavior of North Korea led the United States to pay special attention to the internal workings of North Korea. A number of documents show that many policymakers as well as scholars were aware of the political change in North Korea. The transition to the monolithic system came with groundbreaking events like the purge of the Kapsan faction. A CIA report, again, pointed out that North Korean leadership was facing challenges, citing Porter’s evaluation:

Embassy Seoul has suggested that if the US response takes the form of a military threat or even a limited strike, “the benefit to North Korea will be manifold.” A very tough populace will be spurred to greater feats of production and sacrifice, and the dispute within the North Korean leadership that have been hinted at in recent pronouncements may be stilled in the face of tangible external pressure. Such gains for the regime, in the Embassy’s judgment, would outweigh the physical losses anticipated from a limited US retaliatory strike.55

Along the same line, Nixon and key policy makers in Washington could not find that Kim Il-sung had a revisionist aspiration to change the current status quo.55

The Nixon administration didn’t see the probability of Kim Il-sung’s war initiation as being high. When he came into the White House, Nixon directed the Defense Department to prepare a contingency plan for the Peninsula in February. He was also reviewing the intelligence report on North Korea. The Special National Intelligence Estimate (SNIE) on the confrontation in Korea was submitted on January 30. Regarding the chance of of the DPRK’s war initiation, the CIA report says, “[W]e conclude that, under present circumstances, Pyongyang does not intend to invade South Korea; nor do we believe that Pyongyang is deliberately trying to provoke the Republic of Korea into a resumption of major hostilities.”56 Other sources of intelligence and analyses of the DPRK’s intentions were in a similar direction that the attack was aimed at “political gains” (Ambassador Porter), “self-gratification and prestige for Kim” (INR Director Hughes), and a “propaganda campaign” (Helms, Director of CIA).

On the day of the shootdown, Hughes prepared another intelligence note to the Secretary of State, titled “Estimated reactions of selected East Asian countries and the Soviet Union to possible US courses of action.” He estimated that both the PRC and the USSR would like to avoid the expanding of the conflict.57 It is possible that North Korea was aware of the wishful thinking of the Soviet and the Chinese. Knowing of the reluctance, Pyongyang had no reason to take the risk of being abandoned.

57Regarding the anticipated action of the Soviet Union, he argues that they would perceive any US presence near its borders as a threat. But he estimated that the USSR would contact Washington through private channels’ to dissuade the United States from taking any military actions. Hughes (1969b).
5.5.2 The responding leader’s domestic bargaining power

The model of response predicts that domestic pressure on the decision maker can drive the response in the direction of retaliation. When the leader of the responding state does not have a strong foothold on his/her own domestic soil, the choice of response is more likely to be in favor of a hawkish response or reciprocal at the least. On the other hand, if the leader has strong domestic political support and, thus, expects no or limited political loss by his choice, the choice of response is more likely to be inclined toward a dovish reaction or less than the initial aggression. The domestic background for Nixon was closer to the latter: favoring the leader of the responding state.

Regarding the domestic reaction to the government decision, Nixon’s concern was in both directions: one that a weak response might make him look indecisive and incompetent against the “fourth-rated” power, and the other that a strong retaliation might escalate to large scale conflict that the public was really opposing. On April 18, Richard Sneider, a NSC staffer, sent a memo to Kissinger with the, “The Korean Decision and Domestic Opinion.” In this memo, Sneider argued some important points regarding the public reaction. First, the public demands for retaliation were “limited and less vocal compared to the Pueblo incident.” Second, the public was “fatigued” by the Vietnam War and concerned more about other domestic issues. Third, public opinion was volatile in general and not expected to give sustained support for strong action against Korea, because most Americans would not
see the Korean problem as the vital national interest of the United States.\textsuperscript{58} Other experts gave Kissinger similar advice. When Kissinger talked to Fritz Kraemer, an military expert as well as Kissinger’s teacher, about the shootdown situation, he advised that the president should not have anything to fear about the domestic audience. Although Kraemer was favoring strong reaction, the main point of his words were simple and straightforward: “The nation will follow a strong leadership. The President doesn’t have anything to fear.”\textsuperscript{59}

The crisis occurred during the ‘honeymoon’ period of the new administration. Nixon was inaugurated in January, and the incident occurred in April of 1969, less than three month after the inauguration. Although there are downsides to a crisis in such an early period, there exists advantages as well: the general audience of the United States was optimistic and hopeful about their newly elected president. In retrospect, Nixon’s approval rating throughout 1969 was at a normal level, not low or high compared with other presidents. The rating went up to 65% in the middle of March. After the incident happened, the positive rating dropped to 56% and the negative jumped to 27%, which was the highest of the year. However, the difference before and after the incident was only 3% points. The negative rating went back to the previous level of 15% on May 6 1969.

The ‘honeymoon’ effect and the relatively fast recovery of public opinion also released Nixon from the pressure of additional response. In fact, Kissinger directed the Joint Chiefs of Staff to prepare detailed plans for a retaliatory strike against

\textsuperscript{58}Sneider (1969).
\textsuperscript{59}Kramer recruited Kissinger to the Army. In 1969, he also recommended Haig as the Military Assistant to Kissinger. During the conversation with Kissinger on the night of April 15th, he repeatedly insisted on a strong response, regardless of domestic reaction.
North Korea. The plan came in June, 1969. But the president decided not to retaliate. As Kissinger recalls, the incident was quickly forgotten by the public and it was too late to retaliate by the time the contingency plan came to the White House. However, if there were continuing voices of criticizing Nixon’s weak posture against North Korea, the idea of “too late to retaliate” might not have been adopted. The case of Yeonpyeong makes a good contrast. Lee Myung-bak, unlike Nixon, had to extend the response until almost a month after the aggression. After one month of the shelling, the South Korea government conducted another show of force (it was officially known as the resumption of the halted *Hokuk* exercise). Nixon had no reason to show how tough he can be to his domestic audience.
5.5.3 The costs of war

The cost of fighting was one of the key variables that prevented Nixon from going with the hard response option. The cost, in the case of EC-121, was in twofold: the cost of fighting against North Korea and the cost of fighting against North Vietnam. Both the Defense Department and the CIA estimated the fighting with North Korea would not be easy at all. The balance of force between the North and the South including the USFK was nearly 50:50. Without a rapid reinforcement of troops, it was even expected to lose the Peninsula. DPRK military force was viewed as strong enough to cause significant damage to the United States forces.

It was also noted that North Korea was the only country that was tied to both China and Russia by a mutual defense agreement. Policymakers were certain that the shootdown was not orchestrated by the USSR or PRC. However, if North Korea reacted to the retaliatory strikes of the United States, the situation could be out of control and may have gone up the spiral of escalation. Regarding the chance of escalation and expansion of conflict, the CIA estimate on the anticipated reaction of the USSR and the PRC gives an important point. The report concluded that the agreement-tied allies would try to avoid entrapment. This estimate, however, would place the United States in a more dangerous case of escalation. From the perspective of North Korea, the lesser likelihood of the Soviet (and the PRC) joining the confrontation between the DPRK and the United States might serve as a driving force to take more adventurous and daring action in case of escalation. Expecting the abandonment of allies or the commitment problem with allies, one possible
solution is to increase the chance of entrapment or the significance of the stakes. If Pyongyang believed that Moscow was not likely to come to its aid in the case of escalation, it would widen the conflict even farther to infringe on the interests of the USSR to a vital extent. This was the worst case scenario that the United States wished to avoid. Thus, once the escalation occurred, as experienced during the Korean War, the cost of fighting should skyrocket.

There was another possible scenario of escalation by an actor than North Korea. For example, it was suggested that South Korea might misperceive the response of the United States, if strong retaliatory action was taken, as a signal to ‘cross the line’.\textsuperscript{60} If the South went on the offensive against the North, there would be no way to escape the spiral to all-out war. North Korea’s incentive to enlarge the conflict to avoid abandonment should increase the chance of South Korea’s misunderstanding (or even militant aspiration of going north). This, in turn, increased the expected cost of fighting on the side of the United States.

\textsuperscript{60}Porter (1969). In his telegram on April 18, Ambassador Porter warned that President Park was demanding a strong reply against the North.
5.6 Discussion

The case of EC-121 has not received much scholarly attention.\textsuperscript{61} The reason for this is (1) there are many other topics that attracts researchers’ attention and interest in the study of the Nixon administration; (2) the case \textit{per se} didn’t have a significant impact on Nixon’s foreign policy thereafter; and (3) the incident occurred during too early stage of his presidency and ended too soon to be discussed. However, although the shootdown case was quickly forgotten and left relatively less touched in the study of the foreign policy of the United States, it provides some interesting observations in terms of crisis decision making as well as policy implications for recently increasing tension between China and the United States.

Implications for crisis decision making

First, the EC-121 shootdown shows that a large power could be constrained to accept a small power’s threat even with paying some costs. When the reconnaissance plane was shot down by North Korea’s unprovoked attack, the United States could have responded in a reciprocal manner. One of possible options included to

\textsuperscript{61}A simple comparison of Google Scholar search results gives a sketch of this. The number of articles and books that touch on the EC-121 incident is less than 1\% of the total scholarly works on Nixon’s foreign policy. This is an extremely small share, compared to the portion of Vietnam related articles (62.8\%) or Soviet related works (68.7\%). Note that this is a very rough quantitative look at the literature. I simply compare the number of returned results by changing the input of query. For instance, I entered a boolean search term of (“Nixon”) AND (“foreign policy”) for the total number of studies on Nixon’s foreign policy, which returns 118,000 results. When I input (“Nixon”) AND (“foreign policy”) AND (“EC-121”) for the EC-121 incident, only 301 results appear, while a boolean search using (“Nixon”) AND (“foreign policy”) AND (“Vietnam”) for studies on Vietnam issues gives 51,900 results.
destroy a North Korean aircraft or vessel.\textsuperscript{62} The propensity to reciprocate (or retaliate) was constrained by several factors, such as the domestic and international environments. Previous studies of crisis management and the decision making of the Nixon administration are centered around the domestic decision making mechanism and its shortfalls as highlighting the inefficiency of bureaucratic decision making processes (Evans and Novak, 1971; Hanhimaki, 2004; Hersh, 1983; McQuaid, 1990; Tart and Keefe, 2001). This study, however, focuses on the leader’s perception of the enemy’s domestic political environment as well as his own domestic standing. The increased instabilities within the North Korean regime was a variable of this kind: given the difficulties faced by Kim Il-sung in political, economic, and diplomatic realms, Nixon and Kissinger speculated that the attack was not with the intention of launching a second Korean war.

Second, an indirect international cost (i.e. the conflict in Vietnam) had influenced the choice of response. Other than domestic disapproval, Nixon was worried about the chance of escalation (this was also related to his fear of domestic response in that the public would not approve of another war in Asia given its fatigue with Vietnam). The risk of escalation was amplified as the conflict in Vietnam had been prolonged and the leader of the United States wanted to end the conflict. Because of his campaign pledge to end the 10-year-long war in Southeast Asia, the potential cost of escalation could be doubled. If another war broke out in East Asia, then ongoing conflict with Vietnam would have been prolonged or even lost down the

\textsuperscript{62}This option was rejected because there is little chance to intercept such North Korean military assets off its territorial waters and skies.
road. And this would be a significant political burden on the new president, who just came into the White House. Such costs worked against the United States in taking strong retaliatory action against North Korea.

Third, crisis decision making is a process of updating information, as we saw that Nixon changed his initial decision to use force. The case of EC-121 deserves more attention particularly for this reason, because it shows the updating process of the decision maker. Such a process was possible because (1) the crisis occurred at a very early stage of the new leadership that was in the process of formulating its principles and directions for foreign policy; and (2) it was Nixon who was on the top of the decision making process. The documents and records of conversation show that Nixon was jumping on different options from one option to another until he makes the final decision. At each bullet point of the option list, Nixon wanted to take some time to inquire about the expected outcome. This clear pattern is not usual, especially in a group thinking mechanism like the National Security Council or the Situation Room. In many other cases, the decision was pre-made by the top leader(s). The discussion – either via a group or a private channel – is then likely to be a ‘red tape’ procedure. Nixon, although he was avoiding the Situation Room meeting, frequently conversed with his advisers like Kissinger and Haldeman, and those conversations were more for seeking opinions rather than getting confirmation.

Fourth, responding behavior may have a wider spectrum when domestic audience costs are not high. While the ceiling of the response requirement was determined by the speculation (or the belief) of the intention of aggression, the bottom line of the response, on the other hand, is affected by the domestic political envi-
vironment of the responding state. Since Nixon had a favorable domestic political environment, the minimum response requirement could be lowered as to the non-response or concession outcome. It also aligns with the flipped side of the ‘rally-around-the-flag’ effect or the ‘diversionary’ incentive of conflict behavior. As the domestic standing of the leader is solid, there is no reason for him/her to take an adventurous action in hoping for resurrection.

Implications for other reconnaissance missions

The downing of EC-121 illustrates how aerial reconnaissance missions could be not only vulnerable targets, but also dangerous flash points. The shootdown incident had an immediate impact on existing aerial reconnaissance missions of VQ-1, particularly similar SIGNIT flights around the Taiwan Strait. For instance, the Joint Chiefs of Staff directed all aircraft not to go closer than fifty miles from North Korean coast, which had been twenty miles. Also, a maximum number of fighters stayed alert in Taiwan during any reconnaissance flights in the area.\(^63\) Measures of protection, however, could not prevent hostile actions against reconnaissance aircraft. During the 1960s and 1970s, more than 40 violent incidents occurred, which were targeted on reconnaissance planes.\(^64\)

\(^63\) However, the State Department expressed a skeptical view on such measures. In the memorandum of 29 May 1969, written by Winthrop Brown (the Deputy Assistant Secretary for East Asian and Pacific Affairs) to Alexis Johnson (the Under Secretary of State for Political Affairs), Brown highlighted that any buildup of airpower on Taiwan would be seen as a “significant escalation” and that it was against U.S. policy toward China at that time. The Deputy Assistant Secretary further suggested that “the number of aircraft and personnel sent to Taiwan should be the minimum necessary and be removed as soon as possible.” Brown (1969).

\(^64\) CPAT. East (1987); Pearson (2000).
tween regional powers. The Hainan Island incident in 2001 is an episode of kind, which will occur repeatedly in the future as well. On April 1, 2001, a U.S. Naval aircraft, EP-3 was approached by and collided with a Chinese fighter jet around Hainan Island. The collision caused the death of a Chinese pilot, and the 24 crew members on the EP-3 were detained by the Chinese government until April 11 when the United States issued the “letter of the two sorries.” The PRC claimed that the United States intruded into China’s territory according to its exclusive economic zone (EEZ) boundary, while the United States insisted the right of free navigation. Although the incident was settled without further escalation by exchanging diplomatic and ambiguous words to save face, the unfolding of the event suggests a possible path of escalation from the sensitivity involved in any reconnaissance flights.

As radar capacity and technology advances, the risk of reconnaissance plans has reduced. For instance, the use of unmanned aerial vehicles or remotely-piloted aircraft systems (i.e. drones) minimizes the potential cost of reconnaissance missions. At the same time, the new technology can also increase tensions between contending powers since flying drones over disputed area has become less costly. Such activities, however, remain to be viewed as hostile actions by the other, be-

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65 The incident area of the South China Sea was in the PRC’s exclusive economic zone. One legal issue in this incident was that China is a signatory to the United Nations Convention on the Law of the Sea, which specifies the jurisdictions of exclusive economic zone, while the United States is not. China interprets the Convention as allowing the coastal state to preclude other states’ military operations in the EEZ, but the United States interprets the Convention as granting free navigation for all countries, including military units. Article 58 of the Convention reads that “in the exclusive economic zone, all States, whether coastal or land-locked, enjoy, subject to the relevant provisions of this Convention, the freedoms referred to in article 87 of navigation and overflight and of the laying of submarine cables and pipelines, and other internationally lawful uses of the sea related to these freedoms, such as those associated with the operation of ships, aircraft and submarine cables and pipelines, and compatible with the other provisions of this Convention.”
cause flying drones can be used as a pretext for militarized initiatives. The tension between China and Japan over the Diaoyudao/Senkaku Islands illustrates such dynamics. The PRC recently flew drones over the disputed area and even further into Okinawa. On September 9, 2013, a Japanese F-15 fighter jet scrambled in response to a Chinese military drone flying over the Diaoyudao/Senkaku Islands.\textsuperscript{66} Anticipating more drone flights over the disputed islands, Japan’s Defense Ministry requested $2.4 billion to deploy extra missile intercepters and fighter jets. The Japanese Defense Ministry also reportedly received an approval from Prime Minister Abe for a defensive plan to intercept and shoot down any foreign drones. It is yet unclear how such changes in military operations and capabilities affect the power game between China and Japan, and possibly the United States. It is clear that the advanced military technology reduces costs of actions, which, in turn, could make it difficult to infer the motive of aggression. However, the model and the case study show that the target’s response is influenced by its own domestic politics and its beliefs about the initiator’s domestic situation. Therefore, policymakers should pay attention to others’ domestic political dynamics as well as their own domestic concerns.

Chapter 6:  Conclusion

“The course of conflict is not determined by the one who initiates, but by the one who responds.” You may have heard of this line if you’ve ever attended a marriage counseling session. If you do not respond to the other’s initiation, the conflict does not start. This study was initially inspired by a simple fact that many crises did not escalate to war. In other words, a peaceful resolution of crisis is essential to avoid the destructive consequences of conflict spiral. The question is how states can manage a crisis to resolve and exit the escalation spiral. The literature of crisis bargaining and conflict behavior tells that reciprocating – an eye for an eye – works best for the sake of the target state. However, there exists the chance of escalation in reciprocity, especially when it involves negative direction. To quote Gandhi, “an eye for an eye only ends up making the whole world blind.”

Both in theory and practice, most cases involve symmetric or reciprocal responses. However, the strategy of “an eye for an eye” does not cover the whole story. If the end of reciprocity in the context of violent confrontation is a war, how can we escape from the trap toward war? A key finding of this study is that the responding actor (the target) can find reasons to avoid conflict at the expense of its own, if she learns that the other (the initiator) is in fact facing troubles at home.
Individuals tend to be more forgiving after they learn about other’s internal difficulties (Chapter 3). Independent states act in a similar way. They make decisions of response carefully in a crisis not to exceed certain thresholds, especially when they put other’s domestic politics into their consideration (Chapters 4 and 5). This study makes several contributions to the literature on conflict behavior.

First, the escalation can be avoided by the target state who chooses to step back for strategic reasons, as well as material disparities. From realists’ accounts, backing down in a crisis is an outcome of power disparity, misperception, or a function of constraints, either domestic or international. However, there are reasons for a state to choose to back down intentionally. This study shows one of such possibilities through the logic of strategic avoidance. Following the literature, I use the term ‘strategic conflict avoidance’ to describe the logic: anticipating the initiator’s diversionary behavior, the target would acquiesce to the initiator’s demands in order to avoid conflict.

Second, domestic politics of both conflict actors matter in the decision of response. Given the logic of strategic avoidance, the domestic politics of the initiator as well as the target should be considered when making the final decision of response. For strategic avoidance to happen, the decision makers in the target state need to form a belief that they have strong domestic political standing while the initiator suffers from weak domestic standing. This study sheds new light on the role of domestic politics in explaining a state’s foreign behavior.

Third, decision making during a crisis is to be understood as a process, which retains high probabilities of change. In both cases investigated in this study, the
top decision makers changed their minds. Both of them initially thought of strong retaliation (over-responding behavior); but these intentions changed over time as they processed more information. This makes me doubtful about decision making theories based on psychological elements or personal traits alone. The strategic nature of a crisis pushes the decision maker to be prudent and carefully assess given information. Decision makers during a crisis can be as rational as the model predicts. In other words, this study finds that the more rationally the decision maker processes information, the less likely the crisis is to fall into the conflict spiral of escalation.¹

Finally, this study is a hard test for strategic interaction arguments. Previously, scholars argued that strategic conflict avoidance is plausible by observing states’ accommodating behavior toward potential initiators. However, this study directly examines whether a target might accommodate the initiator after hostile action has been observed. At the same time, the target’s behavior is also influenced by its own domestic politics, a diversionary incentive.

As summarized above, this study aims to develop a theoretical framework to understand a target state’s responding behavior in a crisis situation. What does this study tell about today’s world and the scholarly works on conflict behavior? Based on the findings of this study, I make some suggestions for the inter-Korean confrontation and directions for future research.

¹By ‘rational process,’ I do not mean that the decision maker has complete information and flawless calculation of expected utilities. It is used to refer to ‘soft rationality’ or the instrumentality of being rational.
6.1 Implications for future research

In Chapter 2, I present a model of response that incorporates the domestic bargaining structure of each crisis actor. As discussed earlier, the modeling process necessarily involves simplification. Although the model is a simplified drawing of the real crisis bargaining and the interaction between the foreign behavior and domestic politics, the basic logic and structure can be applied and extended to other studies with some modifications. For future research, I offer a few thoughts on how the model can be further developed and modified in various directions.

First, the domestic bargaining could be elaborated in terms of both the structure and the context. The structure of domestic subgames may differ from that of the international subgame. I use a simple bargaining game to delineate the domestic political process between the leader and the challenger. Scholars construct different structures to model domestic subgames in order to emphasize their interests of study, such as veto players, size of winning coalition, and representative systems. The bargaining structure should be differentiated depending on the institutional setting of the domestic political process. The domestic power of each state’s leader also can be further developed. The relative power of the leadership against its domestic challengers is not only a matter of modeling process, but also substantial questions. In this study, I simplify reality by using a bargaining framework to analyze domestic challenges. The simplification ignores the fine meanings and differences between public unrest, election cycles, anti-government movements, insurgencies, civil demonstrations, and other types of domestic challenges. The gov-
ernment’s reactions to those challenges may or may not be equivalent across them. As such, future research should unpack the nature of domestic challenges: further development of the model should consider the institutional settings and the type of domestic challenges faced by the leadership. This may undercut the parsimony of the model. But I believe each situation deserves further research.

Second, the commitment problem can be addressed using a two-level game. In general, the existing literature treats the commitment problem as the fear of the other’s noncompliance due to expected changes in relative power under the shadow of the future. However, there has discussion on how uncertainty at the domestic level could influence the bargaining behavior. A noticeable effort of modeling domestic bargaining is Wolford (2007). His model explicitly discusses the relationship between leadership turnover and conflict behavior. The model in this study assumes no institutional setting for leadership turnover. Since a crisis may or may not occur during a transition period, I discuss the influence of domestic politics per se on conflict behavior. Then, the model can contribute to the scholarly body of work on the foreign behavior of countries facing domestic challenges, such as civil war, democratization, or repression. Departing from treating domestic politics as a condition or environment, the model emphasizes the dynamics of domestic politics and their direct impact on the foreign behavior of the state.

Third, another plausible extension of the model is to explore the complexity of information asymmetry. This study only focuses on responding behavior under

\(^2\)Wolford (2007)’s model is examining the other way around: the effect of conflict on the leadership turnover.
complete information. What would be the model’s prediction be if the leader of the target state has incomplete information about both her own domestic bargaining situation as well as the initiator’s domestic situation? Would such complexity increase the chance of non-response, or the escalation? Once the information problem is introduced, the model should be able to discuss the outbreak of war as a result of bargaining choices. In the introduction to the study, I delineate states’ responding behavior using a spectrum, which ranges from non-response to retaliative over-response. The chance of war is determined by the type of response and the domestic variables of both states. A new argument here is that a specific type of response is not necessarily bounded to a success or failure of crisis management. Depending on the international and domestic environment of the state, over-response could be less likely to cause escalation than under-response, and vice versa. Therefore, the model enables more refined and nuanced discussion about responding strategies during crisis bargaining.

6.2 Implications for the inter-Korean relationship

I examined two militarized international crises in this study, and both of them were triggered by North Korea’s provocative actions. As noted earlier, North Korea has continuously provoked the South for a half century. The scale of North Korean provocations, however, varies over time. Some find that the aggressiveness increases during times of transition in the North Korean regime or times of challenged legitimacy (Byman and Lind, 2010; Lee, 2012a; Lim, 2012). The history of confrontation
has been long enough for the South Korean government to learn lessons and form predictions. What will Seoul’s reaction be to the next aggression? Will South Korea ever retaliate against North Korea for its provocative behavior? How does North Korea’s nuclear program affect the conflict behavior of the two Koreas in the future?

We have witnessed that South Korea has been very careful in responding to the North such that massive retaliation has never been observed for the past 60 years. The reason for Seoul’s reluctance to retaliate is multifold. First, the military action against the North is technically and substantially constrained by the US-ROK alliance. During the Yeonpyeong Island crisis, generals of South Korea were disinclined to use the air strike option, making excuses about the operational authority issue with the UN Command.\(^3\) Second, the model predicts that over-responding behavior is expected if the responding leader’s domestic bargaining power is lower than a threshold level. Major crises in past years did not meet this condition. Under the authoritarian regime, the leadership of South Korea had relatively strong power against its domestic challengers. Park Chung-hee, a former general who took power through a military coup, faced several aggressions from the North in the late 1960s. However, he could avoid retaliating against the North because his despotic power effectively muted any challengers. In fact, it is not likely that the South Korean government in the near future would retaliate against the North. Regarding its policy toward North Korea, the public of the South is divided in halves: hard liners and soft liners. The former originates from the anti-Communism tradition,

\(^3\)Technically, North and South Koreas are still in war, which was only frozen by a cease-fire treaty. During the war, South Korea’s operational authority was handed over to the United Nations Command. It is only recent that the return of operational authority to South Korea.
while most of the latter are supporters of the Sunshine policy. In such a divided
terrain of domestic politics, the president of the South can manage to escape a
crisis without resorting to the use of force. Because the domestic political terrain
is so stable, South Korean presidents typically don’t need to worry much about
domestic support when crafting policies toward North Korea. Lastly, the scale of
provocation should be capped so that the response won’t be massive at any rate.
Analysts and pundits assert that North Korea’s provocations are mostly designed
to facilitate its survival and not meant to challenge the regional order (Byman and
Lind, 2010; Lee and Hamre, 2011). Given the strategic value and the importance of
the stability on the Korean peninsula, neither China nor the United States would
ignore massive aggression on the peninsula. If the aggression is pre-calibrated to
be minor, the response doesn’t need to be disproportionately massive. Moreover,
knowing that any further action by the North is likely to be restrained – either
directly or indirectly – by China and the United States, the likelihood of retaliation
should remain low, unless the president of South Korea worried greatly about his
or her domestic standing.

Inter-Korean relations, then, are unlikely to become highly volatile or unstable.
The most precarious element is the nuclear program because it not only poses a direct
threat to the South and the United States, but also increases tensions on and around
the peninsula. Given several nuclear tests have already been conducted, the nuclear
weapons of the North will increase two elements of this study’s model: the cost of war
and the domestic power of Kim Jong-un, the initiating leader. The nuclear program
and its alleged success could ease some burdens on the young Kim. Ironically,
the aggressiveness of North Korea’s provocations have not increased immediately after nuclear related events. If nuclear and/or missile tests are targeted against outside audiences, they should be followed by more aggressive actions to increase North Korea’s bargaining power and to show resolve. It is, therefore, likely that Kim Jong-un uses the nuclear program to consolidate his domestic power, while using militarized provocations against the South to increase internal coherence or legitimacy by reemphasizing an outside enemy.

There are other possibilities, of course. Kim Jong-un is still young and the direction of the new regime could change at any time. The bottom line is, however, that South Korea should not expect any massive attack to be initiated by the North. The best response to the DPRK’s aggression will be something less than overresponse, because the South has learned that North Korea’s provocative actions are typically either (1) driven by the North’s own domestic instability, or (2) constrained in scope by other regional powers.
Appendix A: Formal Model

A.1 The bargaining range

From the view of $R$, it needs to make the response, or the demand of $x$ being indifferent to $A$, regardless of $A$'s choice of backing down or fighting back. Given the domestic bargaining within $A$ and the response, the payoff of choosing to back down $(r(1 - Q - k + x) + \delta_{A_C})$ should be greater than or equal to the payoff of fighting a war $(1 - p - c_A)$ to maximize $R$'s payoff. This gives,

$$x \leq k + 1 - \frac{1 - p - c_A - \delta_{A_C}}{r} \quad (A.1)$$

Consider the same situation from the view of $A$, who would not accept any demand less than its security level. The minimum level can be found by rotating the table. Assume that $A$ is making a demand that makes $R$ indifferent between rejecting and accepting. Given the payoff of $R$ from the concession and escalation outcomes, the demand $x$ should make $R$’s payoff from ‘not reacting’ $(q(Q - k) + \delta_{R_C})$ greater than or equal to the payoff of escalation $(p - c_R)$. This gives,

$$x \geq k - Q + \frac{p - c_R - \delta_{R_C}}{q} \quad (A.2)$$

Then, the condition $A.1$ constitutes the upper bound of the bargaining range, while $A.2$ the lower bound of the range. The bargaining range that the response of $R$ could be accepted by $A$ is defined as follows:

$$k - Q + \frac{p - c_R - \delta_{R_C}}{q} \leq x \leq k + 1 - \frac{1 - p - c_A - \delta_{A_C}}{r}$$

A.2 The condition of strategic conflict avoidance

In the bargaining model of war, the bargaining range tells us two things. First, the existence of a non-zero bargaining range means that bargaining actors should
be able to find a negotiated settlement to avoid the failure of the bargaining, which is *ex post* inefficient. Second, the range itself reveals the condition that a bargaining settlement is unlikely to be achieved. Powell (1999) finds there exist such conditions that bargainers may find the bargaining should be unsuccessful. In this model, however, the bargaining range reflects the spectrum of possible responding behavior. Therefore, non-existence of the bargaining range means that actor \( R \) should make a non-response choice or \( x = 0 \) in the first place. This difference is due to the structure of the game: \( R \) has an option to exit the bargaining by making no reaction at all at the first decision nod. That is, looking down the road, \( R_L \) is capable of avoiding the failure of bargaining. The non-existence of bargaining set, or the inefficiency condition (Powell 1999) is:

\[
k - Q + \frac{p - c_R - \delta_{RC}}{q} > k + 1 - \frac{1 - p - c_A - \delta_{AC}}{r}
\]

Rearranging the above gives:

\[
1 < \frac{p - c_i - \delta_{RC}}{q} + \frac{1 - p - c_A - \delta_{AC}}{r}
\] (A.3)

Also, recall that the concession payoff needs to be greater than the escalation payoff for \( R_L \)'s eyes. Otherwise, \( R \) would choose to react and fight a war. This gives,

\[
\frac{p - c_i - \delta_{RC}}{q} < Q - k
\] (A.4)

Those two conditions A.3 and A.4 together gives,

\[
1 < \frac{p - c_R - \delta_{RC}}{q} + \frac{1 - p - c_A - \delta_{AC}}{r} < Q - k + \frac{1 - p - c_A - \delta_{AC}}{r}
\]

After rearranging the above, we have the threshold level of \( r \) for \( R \) to make a concession as follows:

\[
r < \frac{1 - p - c_A - \delta_{AC}}{1 - Q + k}
\] (A.5)

The threshold level of \( q \) is drawn from the requirement that the payoff of \( R_L \) should be greater in the concession outcome than in the escalation outcome: \( q(Q - k) + \delta_{RC} > p - c_R \). This gives,

\[
q > \frac{p - c_R - \delta_{RC}}{Q - k}
\] (A.6)

Then, A.5 and A.6 together constitute the condition for strategic avoidance
in the first decision nod:

\[ q > \frac{p - c_i - \delta_{iC}}{Q - k} \quad \text{and} \quad r < \frac{1 - p - c_j - \delta_{jC}}{1 - Q + k} \]

A.3 Equilibrium response

From the above proofs, we know that \( R \) should make its response no greater than the upper bound of the bargaining range:

\[ k + 1 - \frac{1 - p - c_A - \delta_{AC}}{r} \]

This response can be realized only if the choice of non-response or concession does not yield greater payoff. If the concession payoff is expected to be greater than the above, \( R \) would choose not to react at all, or \( x = 0 \). Therefore, the subgame perfection equilibria of the model is:

\[ x^* = \begin{cases} 
0 & \text{if} \quad \frac{p - c_R - \delta_{RC}}{q} + \frac{1 - p - c_A - \delta_{AC}}{r} < 1 \\
\frac{p - c_R - \delta_{RC}}{q} + \frac{1 - p - c_A - \delta_{AC}}{r} & \text{if} \quad \frac{p - c_R - \delta_{RC}}{q} + \frac{1 - p - c_A - \delta_{AC}}{r} > 1 
\end{cases} \]
Appendix B: Experimental Game

B.1 Procedure

The experimental game is designed to observe individual subject’s responses to hostile action of others. For the simplicity and efficiency of the test, each subject is asked to play the game against pre-programmed computer. The structure of the game is illustrated in figure B.1.

1. When subjects arrive at the lab, I they are guided to be seated in front of any PC terminal as they want. Then, I distribute the written consent form and read them a brief introduction of the experiment. The experiment begins on a scheduled time (students voluntarily signed up for available time slots at their convenience), and lasts less than one hour. Each subject is to play the game repeatedly up to 20 rounds.

2. After collecting consent forms, I start the experimental software. At each stage of the game, students are provided with detailed information on the screen (a screenshot of the experimental game is in figure B.2).

3. When a subject finishes his/her experiment, the final screen shows the total amount of reward money the subject has earned in USD. Subjects are asked to remain seated until everyone in the lab finishes the experiment.

4. Once all students finish their games, the instructor come to each of them and pay the amount appeared on the screen and collect the signed receipts. Students are dismissed after the payment.

B.2 Parameters of the experimental game

The values of parameters in the experimental game play as treatments on subjects. To test the model’s prediction to the maximum level, all parameters in
the game are randomly generated and updated per each round. The key parameters of the experimental game are set as follows. The total number of tickets to be split between the player and the computer is set to 100 for each round. The initial distribution or the status quo is set by a random parameter yet closely related to $P_1$’s probability of winning the lottery, $p$. That is, the status quo is reflecting the distribution of power between two disputants. This manipulation has two purposes.

Figure B.1: Flowchart of the experimental game. The game starts by the computer’s move of hostility (aggression). Objects in green represent the input by the human subject, and objects in gray are for the computer’s input.
First, as the status quo is close to the distribution of power, actors have greater uncertainty about the rationale behind each other’s behavior. If the status quo is far from the distribution of power, then the commitment problem is likely to prevail the interaction. The model itself does not exclude the commitment problem; but its main argument is related to the domestic influence, not to the system variables’ effect. Thus, the commitment problem induced by system variables is not considered to be tested here. Second, by minimizing the interference from the system variables, I can observe players’ strategic concerns with domestic subgames. Upon an aggression from $P_2$, the human subject $P_1$ is not expected to rush into playing the lottery, unless the aggression itself was large.

Each player’s probability of winning the lottery is randomly drawn from a uniform distribution between 0 and 1. The cost of lottery is drawn from a narrower range of uniform distribution, between 10 and 40, which enforces such event of lottery to be always costly. Costs of lottery are equally applied to both players. These two parameters are corresponding to the system level variables of the model, the relative power of the responding actor and the cost of war, respectively.

The reward rate of each player (corresponding to each state leader’s domestic bargaining power) is randomly generated between .05 and .95. The agreement bonus that each player gets if the game ends without playing the lottery is analogous to the domestic challenger’s cost of fighting against the leader. The domestic competition
– whatever forms it might be – has some costs, and such costs should not exceed the total endowment each country has earned from the international bargaining. In the game setting, the bonus is set not to exceed 40% of the initial share.
Appendix C: Survey Experiment

C.1 The scenario of crisis

For the survey experiment in Chapter 3, I have subjects take a survey after they finish the experimental game. On the screen subjects read a scenario of international crisis between China and the United States. Then, subjects read different information about the domestic situation of China and the United States (treatment messages). Then, I asked them how the United States (the target state) should respond to China’s hostile action (the initiating state). First, the subject will read the following scenario of international crisis:

On April 1, 2001, one US Navy aircraft collided with a Chinese jet fighter and made an emergency landing on China’s Hainan Island. It turned out that the Chinese fighter made an intentionally close pass by the US plane, which resulted in a mid-air collision. One Chinese pilot was killed in the collision and 24 US crew members (21 men and 3 women) were taken into Chinese custody. The Chinese government claimed that the US aircraft had intruded into airspace under Chinese jurisdiction without permission. However, even though the collision took place within China’s exclusive economic zone, international convention allows for free navigation and air passage within such zone. As such, the US surveillance flight was not in violation of relevant international law. Upon the US request for the release of 24 US soldiers under custody, the Chinese government intentionally slowed the process while accusing the United States of spying activity. China further put its South Sea Fleet on the highest alert and moved several warships into the South China Sea, stretching south to Indonesia and east to the Philippines where the US Air Force and Navy were stationed. And finally, the Chinese government requested high-level talks to resolve the incident, but China’s true intention was to receive an official apology from the US government for intruding into China’s airspace.

The South China Sea (where the collision occurred) is crucial for the United States’ Asia policy. The President viewed China’s actions during the crisis as a significant threat to US national security interests. Immediately after the incident, the United States went through a careful investigation and reached three conclusions:

1. The US flight did not violate any international laws.
(2) The Chinese decision to intercept the US plane at dangerously close proximity was well planned and premeditated.

(3) The United States should put every effort into the safe release of the 24 US soldiers under Chinese custody.

To sum up, a US surveillance aircraft collided with a Chinese fighter jet in international airspace over the South China Sea. Twenty-four US soldiers were detained by the Chinese government. The United States had not violated any international laws or conventions concerning free navigation. Claiming its unilateral jurisdiction, the Chinese government advanced its naval forces into the disputed area. These moves by China harmed US national security interests as well as the reputation of the United States.

C.2 Treatment messages

Then, the subject is given following treatment message as he/she is assigned to one of four groups. The group assignment is randomly made at the beginning of the survey. Subjects in group 1 read the following information:

(1) The UN Security Council will not support either the position of China or the US. For now, diplomatic channels are available, but it is likely that China will shut those channels down in the near future. In the worst-case scenario, we may have a diplomatic standoff between the US and China that will last for an unpredictable amount of time.

(2) The current disposition of armed forces in and around the area may or may not be sufficient to conduct a retaliatory strike. At least 48 hours are required to build a sufficient force. The Chinese military may push its government to escalate to further conflict if we take retaliatory actions.

(3) At the time, Chinese leaders are facing a significant challenge from regime opponents within China. The risky intercept and the decision to detain the US crew members may be a deliberate effort to distract the Chinese public from other problems in China, and in fact Chinese leaders may be hoping for a strong US response that could then be used to rally the public behind the current Chinese government.

(4) The US public opinion is almost evenly divided between a careful response and a strong response. About 45% answered that we need to be prudent and careful with China given economic and diplomatic relations, and about 43% answered that we need to react strongly to China. The remaining 12% were unsure.
Subjects in group 2 receives the following message:

(1) The UN Security Council will not support either the position of China or the US. For now, diplomatic channels are available, but it is likely that China will shut those channels down in the near future. In the worst-case scenario, we may have a diplomatic standoff between the US and China that will last for an unpredictable amount of time.

(2) The current disposition of armed forces in and around the area may or may not be sufficient to conduct a retaliatory strike. At least 48 hours are required to build a sufficient force. The Chinese military may push its government to escalate to further conflict if we take retaliatory actions.

(3) The ongoing crisis may be used by other countries in East Asia to gauge the US commitment to the region. A weak or indecisive posture may cause severe damage to the reputation of the US. It is also likely that neighboring countries, including US allies in Asia, would view the Chinese as able and willing to challenge the current regional order.

(4) The US public opinion is almost evenly divided between a careful response and a strong response. About 45% answered that we need to be prudent and careful with China given economic and diplomatic relations, and about 43% answered that we need to react strongly to China. The remaining 12% were unsure.

Subject in group 3 receives the following message:

(1) The UN Security Council will not support either the position of China or the US. For now, diplomatic channels are available, but it is likely that China will shut those channels down in the near future. In the worst-case scenario, we may have a diplomatic standoff between the US and China that will last for an unpredictable amount of time.

(2) The current disposition of armed forces in and around the area may or may not be sufficient to conduct a retaliatory strike. At least 48 hours are required to build a sufficient force. The Chinese military may push its government to escalate to further conflict if we take retaliatory actions.

(3) At the time, Chinese leaders are facing a significant challenge from regime opponents within China. The risky intercept and the decision to detain the US crew members may be a deliberate effort to distract the Chinese public from other problems in China, and in fact Chinese leaders may be hoping for a strong US response that could then be used to rally the public behind the current Chinese government.
(4) The US public opinion is in favor of strong response to China. About 60% answered that we need to look tough and show what we can do, while 34% expressed worries about negative consequences for economic and diplomatic relations with China. The remaining 6% were unsure.

And subjects in group 4 receives the following message:

(1) The UN Security Council will not support either the position of China or the US. For now, diplomatic channels are available, but it is likely that China will shut those channels down in the near future. In the worst-case scenario, we may have a diplomatic standoff between the US and China that will last for an unpredictable amount of time.

(2) The current disposition of armed forces in and around the area may or may not be sufficient to conduct a retaliatory strike. At least 48 hours are required to build a sufficient force. The Chinese military may push its government to escalate to further conflict if we take retaliatory actions.

(3) The ongoing crisis may be used by other countries in East Asia to gauge the US commitment to the region. A weak or indecisive posture may cause severe damage to the reputation of the US. It is also likely that neighboring countries, including US allies in Asia, would view the Chinese as able and willing to challenge the current regional order.

(4) The US public opinion is almost evenly divided between a careful response and a strong response. About 45% answered that we need to be prudent and careful with China given economic and diplomatic relations, and about 43% answered that we need to react strongly to China. The remaining 12% were unsure.

C.3 Survey questions

Then, subjects read the following and answer the question.

On top of the effort to rescue the US soldiers in China, now the President had to make a final decision of how to respond to China. All staff and assistants to the President discussed possible options of response to China. The President also consulted with the National Security Advisor, who highlighted some key intelligence. In the following screen, you will see five possible options of response and key intelligence. Read them carefully.

1. Suspend and revise all existing surveillance activities in the area and seek high level talks with the Chinese military to address the issue.
2. Make an official statement accusing China of reckless behavior and illegally detaining the US crew members. Resume surveillance mission flights in the area with armed fighter escorts.

3. Blockade Chinese ports facing the South China Sea as a signal of strong opposition to China.

4. Deploy US aircraft carrier groups to the area in order to stop further advancement of Chinese forces into the area.

5. Find a Chinese aircraft or vessel in another area and attack it in retaliation.

Based on the key intelligence brought to the President, which of the above-listed options do you think the President should choose for an appropriate course of action?
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