

# Do Reassurance Measures Reassure? Political Ideology and Sender-Receiver Gap in Asymmetric Alliances\*

Chamseul Yu<sup>†</sup> and Hankyeul Yang<sup>‡</sup>

This Draft: May 6, 2025

## Abstract

Conventional wisdom dictates that a patron can reassure its protégés by sending costly signals. Are reassurance measures effective for reassuring protégés? We argue that a sender-receiver gap may exist between the patron and the progressive constituencies of the protégé as the latter's political ideology inhibits interpreting the costly signal from the patron as reassurance measures. We test this argument on the South Korean case using a mixed-methods strategy. First, we examine how the major media outlets describe security issues of nuclear umbrella and the deployment of the Terminal High Altitude Area Defense (THAAD) missiles using Structural Topic Models. Second, we examine the speeches of the political elites and conduct regression analysis to investigate whether progressive political elites are more likely to express the deployment of the THAAD missiles in negative terms. Third, we extend two prior experimental studies examining the effect of patron's reassurance measures on the protégé's support for the acquisition of independent nuclear arsenals and show that progressives are likely to express greater support for the acquisition of independent nuclear arsenals when the patron offers a high credibility commitment of nuclear use or promises to deploy nuclear weapons to the protégé. The findings from the three studies collectively confirm our expectations that progressives have been less likely to be reassured from the costly signals sent by the patron. Our research has important implications for understanding the role of political ideology in asymmetric alliances and reassurance dynamics.

---

\*Thanks to..

<sup>†</sup>Department of Political Science, Texas A&M University, Email: [cham3.yu@tamu.edu](mailto:cham3.yu@tamu.edu).

<sup>‡</sup>Department of Political Science, Texas A&M University, Email: [yanghankyeul@tamu.edu](mailto:yanghankyeul@tamu.edu).

# Introduction

Do reassurance measures from the patron reassure the protégé? Conventional wisdom suggests that this is so, as long as the signal is sufficiently costly. In other words, the patron can convince, or reassure its protégé that the former would be willing to come to the latter's aid by sending costly signals. However, recent research suggests that there may often exist a “sender-receiver” gap in signaling (e.g., [Quek, 2016](#)). In other words, a sender might send certain costly signals to communicate its intention, but the receiver does not update its beliefs as intended due to different foreign policy preferences. What explains the conditions under which a protégé could be sufficiently reassured by the patron?

This question has important theoretical and practical implications for the literature on foreign policy and alliance politics. The extant models of alliance politics largely overlook the role of domestic foreign policy preferences of the protégé which could play in alliance relations as they often assume that various measures of support from the patron help to reassure their protégé ([McManus and Nieman, 2019](#); [Blankenship, 2020](#)). However, this is often an untenable assumption as the domestic political constituents are likely to have different perceptions regarding the patron's intentions (e.g., [Moller, 2022](#)). Addressing the question also has important implications for the dynamics of great power competition between the United States and China. For example, many International Relations scholars have noted that U.S. protégés in East Asia are hedging (e.g., [Lim and Cooper, 2015](#)). Our research has implications on why political elites might choose to opt for hedging behavior in light of the domestic political situation.

Much of the International Relations scholarship implicitly assumes that the patron sends

costly signals to the protégé such that the latter can correctly discern the reliable type from the unreliable type (e.g., [McManus and Nieman, 2019](#); [Blankenship, 2020](#)). For example, [McManus and Nieman \(2019\)](#) simply assume that the deployment of troops and nuclear weapons to a protégé state serve as signals of “support.” We argue that the current framing of the debate is problematic because it overlooks how individuals could instead believe that the patron is of the *revisionist* type after observing the reassurance signals. In particular, we argue that political ideology could be an important factor that influences how receptive an individual is to reassurance measures from the patron. Receivers who have a strong skepticism regarding the intentions of the sender might not be reassured by the signals from the sender even if they are deemed to be sufficiently costly according to game-theoretic models.

We argue that different foreign policy preferences motivated by political ideology may inhibit a significant proportion of the protégé’s population from being reassured by costly signals from the patron. In particular, we suggest that progressives are less likely to be reassured compared to conservatives in the context of South Korea.<sup>1</sup> Such divergence in the degree of reassurance arises because of the difference in perceptions of the patron’s intentions. Progressives are more skeptical of the reassurance measures offered by the patron than conservatives due to their dovishness and egalitarianism.

We test our theory on the South Korean case by examining the issues of nuclear umbrella and the deployment of the Terminal High Altitude Area Defense missiles. We show that there was a divergence in reaction between the conservative and progressive media over these issues. In particular, we find that the progressive media and elites show skepticism

---

<sup>1</sup>We use the terms progressive and liberal interchangeably throughout this paper.

towards reassurance measures from the patron the conservative media and elites emphasize the security benefits provided by the reassurance measures.

This study makes an important contribution to the literature on interstate communication by showing how costly signals are not sufficient for reassurance between allies. Scholars have long contemplated the conditions under which costly signals could be used to communicate intentions (e.g., [Fearon, 1994, 1997](#); [Kydd, 2000](#)). There are important reasons to think about costly signaling mechanisms between allies more seriously: whether protégés are properly reassured has direct implications on whether they continue to rely on patron's extended nuclear deterrence or seek outside options including nuclear weapons ([Bleek and Lorber, 2014](#); [Blankenship, 2020](#)). Furthermore, grasping why reassurance sometimes fails between states with relatively similar foreign policy preferences will help us understand the causes of alliance termination. Much of the formal literature on alliance dynamics simply assume that allies have overlapping preferences and focus on the problem of deterring a common threat (e.g., [Benson and Smith, 2023](#)).

The rest of the paper proceeds as follows. We first explain why it is important to examine the preferences of the protégé's domestic constituents to understand the nature of asymmetric alliances. We then present our theory on how political ideology of the domestic constituents of the protégé influences the perceptions of making policy concessions to the patron. Next, we present our research design and conduct text analysis of the mass media and the statements of the political elites in how they perceived incidents in which Seoul could be characterized as making a policy concession to Washington.

## Reassurance Measures as Costly Signals

Our argument proceeds in two parts. First, we briefly explain the logic of costly signaling in the context of reassurances in asymmetric alliances. Next, we theorize how political ideology could be an important factor in creating a sender-receiver gap in asymmetric alliances. The literature on costly signaling is one of the most important components in the International Relations scholarship. Scholars have used the logic of costly signaling to explain various outcomes such as deterrence, reassurance ([Kydd, 2000](#)), and coercion. The main intuition behind the logic of costly signaling is simple: if there exists a sincere type and an insincere type and only the former is willing to pay for costly signals to communicate its type, the receiver can update its beliefs accordingly after observing the costly signal from the sender.

We first clarify what we mean by reassurance in this paper. International Relations scholars use the concept of reassurance in two senses. First, states that are in adversarial relationships might seek to reassure each other through costly signals (e.g., [Kydd, 2000](#)). The sender of the signal tries to communicate to the receiver that the former harbors no hostile intentions and is of the “benign” type. Second, allies might seek to reassure each other to show that one would come to the aid of the other should the latter be attacked by an adversary ([Bleek and Lorber, 2014](#); [Blankenship, 2020](#); [Blankenship and Lin-Greenberg, 2022](#); [Sukin and Lanoszka, 2024](#)). In the context of asymmetric alliances, a patron might seek to reassure its protégé that the former is a reliable major power patron such that the latter has no need for acquiring independent nuclear weapons or pursue security policies that are misaligned with those of the patron. It is this latter sense of reassurance that we concentrate on in this article.

Scholars have presented competing perspectives on the feasibility of reassurance among alliance members. On the one hand, past research suggests that robust security guarantees could be effective in reassuring allies. For example, Bleek and Lorber (2014) shows that major powers could deter their protégés from seeking to acquire nuclear weapons by reassuring them with formal security guarantees. However, recent works suggest that it may be more difficult than previously thought (e.g., Blankenship and Lin-Greenberg, 2022). Others have also expressed skepticism at the notion that reassurance could be so easily achieved among allies. For example, Mercer (2018) argues that promises between allies are inherently unreliable.

In practice, a patron seeks to reassure its protégé by sending either hand-tying or sunk cost signals (Fearon, 1997). For example, McManus and Nieman (2019) identify various signals of support that major power patrons could provide to protégés, such as arms transfers, alliance pacts, and joint military exercises. While the formal literature on costly signaling has rendered many important insights, recent experimental works on costly signaling has cast some doubt on whether costly signaling works as postulated in formal models. Quek (2016) shows that “receivers do not acquiesce in line with signaler expectations, despite the sunk costs suffered.”

## Sender-Receiver Gap based on Political Ideology

Although scholars have long contemplated on the role of human biases, only recently have political scientists begun to consider whether costly signaling works as stipulated in signaling models (e.g., Quek, 2016; Köllner, 2024). In particular, what explains the variation in the magnitude of this gap between the sender and receiver has been underexplored in IR.

Broadly, there may be two sources from which this sender-receiver gap arises: systemic

biases and individual heterogeneity ([Yarhi-Milo, Kertzer and Renshon, 2018](#), 2155). Systematic biases refer to the inherent bias present in humans in how they process information. In addition to systematic biases, there might be an additional source for the gap between the sender and the receiver, namely individual heterogeneity. According to [Yarhi-Milo, Kertzer and Renshon \(2018\)](#), sender-receiver gap arising from individual heterogeneity refers to the gap due to “different experiences, beliefs, and orientations”: while some individuals may interpret the message as intended by the sender, others may misinterpret this message and be suspicious of the intentions of the sender.

A simple example in the context of courtship may help to clarify what we mean here. Sociologists, biologists and psychologists have presented the theory that various aspects of courtship such as gifts may serve as costly signals (e.g., [Camerer, 1988](#); [Cronk and Dunham, 2007](#); [Seymour and Sozou, 2009](#)). According to this perspective, an expensive gift with little practical value from a suitor to a potential mating partner could serve as a costly signal: while both the rich and poor types of the suitor may find it costly to buy the gift, the very fact that gift is costly enables the mating partner to differentiate the rich type from the poor type and thereby helps the mating partner to select the rich type.

One critical assumption in the above analogy is that both the sender (suitor) and the receiver (mating partner) not only understand, but also agree on the significance of the gift. For example, while all mating partners may understand how costly an expensive engagement ring is in materialistic terms, what the ring signifies for the mating partner may be different depending on the individuals’ beliefs and values ([Ogletree, 2010](#)). For costly signaling to be effective, it would be crucial for the receiver to understand the *meaning* behind the gift as intended by the sender.

Why might progressive constituents be more skeptical of the patron's intentions? We highlight two characteristics of progressives, namely dovishness and egalitarianism, which jointly work together to explain why progressives might be more skeptical of the patron's intentions than conservatives. There is a long line of empirical research showing that individuals with rightist ideology are likely to be more hawkish, or exhibit a greater willingness to use military force, than their leftist counterparts (e.g., Palmer, London and Regan, 2004; Arena and Palmer, 2009; Wagner et al., 2018; Bertoli, Dafoe and Trager, 2019; Onderco, Etienne and Smetana, 2022). For example, Onderco, Etienne and Smetana (2022) show that German and the Netherlands citizens who are more conservative are likely to express support for using nuclear weapons. Similar patterns are found at the level of leaders as well. For instance, Bertoli, Dafoe and Trager (2019) use a regression discontinuity design to show that rightist leaders who win close elections are more likely to initiate militarized interstate disputes compared to leftist leaders. One potential reason why individuals of rightist ideology might be more hawkish may be due to the prioritization of maintaining order and the pessimistic outlook of human nature (Conover and Feldman, 2004; Rapport and Rathbun, 2021) whereas their leftist counterparts are more open to the prospects of international cooperation (Vignoli and Onderco, 2024).

The second characteristic of progressives that is relevant for our theory is egalitarianism. It has long been noted that individuals with leftist ideology value economic equality in domestic settings (e.g., Alt and Iversen, 2017). The role of leftist ideology and its emphasis on egalitarianism in the realm of international politics have also been noted by scholars who have argued that progressives are more likely to be open to international cooperation and multilateralism based on egalitarianism (e.g., Rapport and Rathbun, 2021; Vignoli and

Onderco, 2024). For example, Vignoli and Onderco (2024) argue and show that leftist leaders are faster at ratifying multilateral treaties. On a similar note, Rapport and Rathbun (2021) argue that leftist governments care more about forming alliances in which all parties to the treaty have a voice. One direct implication from the above is that leftist individuals are more likely to be opposed to other states undertaking *unilateral* policies. There is abundant face-level evidence to support the theory that there is a divide between the left and the right regarding U.S. unilateralism. For example, Chiozza (2009) shows that leftist individuals in Europe were more critical of Washington's decision to invade Iraq without the approval of the United Nations Security Council. Catalinac (2010) also shows that New Zealand's desire for increased autonomy under the Lange administration in response to the unilateral policy pursued by the United States was a crucial factor behind the termination of the alliance between Wellington and Washington.

Given the above explanation of the two characteristics of progressives in the realm of international politics, we now return to the question of why progressives of a protégé state are less likely to be reassured by reassurance signals from the patron. Dovishness, by itself, is not necessarily incompatible with reassurance signals from the patron if the only function of reassurance measures is to enhance deterrence. After all, if reassurance signals such as nuclear umbrella are supposed to deter the regional adversary from attacking the protégé, it seems that even individuals who hold dovish preferences should *support* reassurance measures taken by the patron since they are supposed to enhance deterrence and thereby preserve peace.

However, in the context of *asymmetric* alliances, progressives are likely to have a greater fear of entrapment after observing reassurance signals from the patron because of the inherent tension between egalitarianism which progressives value and the reassurance measures

undertaken by the patron. Reassurance measures in asymmetric alliances imply that the patron has the unilateral authority over the protégé’s security policy. For example, the very notion of extended deterrence under nuclear umbrella suggests that it is up to the patron state that can decide when to use nuclear weapons. In other words, the unequal power relations between the patron and the protégé is made more salient with reassurance signals from the patron because it highlights that the patron is in charge of the protégé’s security. This lack of equality in the control of security policy deepened by reassurance measures in asymmetric alliances creates entrapment fears for progressives who fear that the protégé state is unlikely to be able to control its security policy.

In this context, progressives might doubt the utility of strengthening security ties with the patron because reassurance may only serve to aggrandize the patron’s influence. Empirical research shows that deepening alliance ties with the patron increases the likelihood of involving the protégé into conflicts with other countries, especially their own rivals or those of the patron ([Crawford, 2011](#); [Izumikawa, 2013](#); [Huang, 2020](#)), as the rival alliance camps and their increasing solidarity or military capabilities would be security concern of other countries ([Waltz, 1979](#); [Kim, 1989, 1991](#); [Levy and Thompson, 2005](#)). Thus, progressives, who have dovish preferences, would be more skeptical of the patron’s reassurance signal.

Various accounts and survey data offer some credence to this theory. [Catalinac \(2010\)](#) shows that Wellington’s elites had concerns of entrapment in an unwanted war due to U.S. unilateralism. In the case of West Germany in the early 1980s, SPD and the Greens were vehemently opposed to the deployment of the Pershing missiles out of entrapment fear. As Frau Kelly of the Green party once remarked during the debate on the deployment preceding

the vote, "we are not ready to sacrifice Hamburg for Chicago."<sup>2</sup> A regression analysis of the roll-call vote for motion for deployment of the missiles show that the right-wing parties were more likely to be in favor of the deployment compared to the left-wing parties.<sup>3</sup> Willy Brandt was also concerned that it would raise the risks of a nuclear war (Brandt, 1984). A recent survey also shows that left-wing political elites and citizens in Germany have been more skeptical of the utility of stationing nuclear weapons on German soil (Onderco and Smetana, 2021). In particular, it is noteworthy that progressives are more skeptical than conservatives of the idea that stationing US nuclear weapons gives Germany a greater political weight, consistent with our argument.

In summary, reassurance inherently means that the protégé relies on the patron for its own security. Sukin (2020) shows that robust reassurance measures in the form of a nuclear security guarantee may actually increase the perception of risk of unwanted use of force and the protégé. However, the protégé could not handle the entrapment problem by itself since the protégé is not to take their security into their own hands under the reassurance. As a result, progressives is more likely to perceive the reassurance as costly than conservatives because the reassurance because relying on the patron for the security could lead to the loss of control in conflict situations.

---

<sup>2</sup>"Eugene Rostow hat treffend gesagt: Wir leben in einer Vorkriegsära, nicht in einer Nachkriegszeit. Bei einem Treffen, welches ich im September vor dem Council of Foreign Relations in New York ge habt habe, wurde mir deutlich gesagt, daß die amerikanische Regierung niemals bereit sein werde, Chicago für Hamburg zu opfern. Doch wir sind nicht bereit, Hamburg für Chicago zu opfern. Das ist unsere Antwort." *Deutscher Bundestag Stenographischer Bericht 36. Sitzung Bonn, Dienstag, den 22. November 1983*

<sup>3</sup>The results are presented in OA1.

## The Case of U.S.-South Korea Alliance

Before we delve into our main empirical analysis, we briefly explain the left/right divide with respect to the relation between Seoul and Washington. In the context of South Korean politics, [Shim \(2019\)](#) argues that “left/right favours a more dovish/hawkish approach to North Korea, while holding a position of less dependence/dependence on the US too.” Numerous other works on South Korean politics echo the same theme of the divide between the left and the right with respect to the attitude on the use of force against North Korea (e.g., [Hix and Jun, 2009](#); [Bae, 2020](#)).

According to [Chae and Kim \(2008\)](#), progressives are more anti-American and more likely to believe that the United States is responsible for the partition of the Korean peninsula, and does not consider South Korean interests in dealing with North Korea. [Moller \(2022\)](#), moreover, argues that the progressive political elites in South Korea prioritize autonomy while the conservative elites prioritize security.

The above dovish features of progressives and their emphasis on egalitarianism has often created tensions in the relation between Washington and Seoul. For example, progressive media in South Korea has often expressed concerns that Washington’s (aggressive) nuclear weapons policies with respect to the Korean Peninsula could be detrimental to the security of South Korea. There is some evidence to suggest that such perceptions may exist at the elite-level as well. While there may be reasonable doubts regarding the veracity of the statement Robert Gates describes Roh Moo-hyun, the former progressive president of South Korea as apparently having told Gates that “the biggest security threats in Asia were the United States and Japan” ([Lee, 2014](#)).

We present some preliminary descriptive findings across two different surveys first show that there is a significant difference between progressives and conservatives in terms of how they view their relation with the patron. Table 1 presents some basic descriptive results from a past survey in 2021 ([Lee, Yang and Son, 2025](#)) showing that ideology is a strong predictor of one's perception of the United States' regional dominance. The dependent variable is agreement with the statement "it is in South Korea's national interest for the United States to dominate the Asia-Pacific region" on a 0 to 10 scale with 0 (10) expressing complete disagreement (complete agreement). Respondents were asked to rate their ideology on a 7-point scale with 1 (7) being conservative (progressive). Model 2 includes demographic controls such as age, sex, region, education, income, and partisanship. In general, individuals who identify themselves progressives are more likely to disagree with the statement that it is in South Korea's national interest for the United States to dominate the Asia-Pacific region.

Table 1: Perception of Washington's Domination of the Asia-Pacific Region

	Model 1	Model 2
Ideology	-0.373* (0.0509)	-0.193* (0.0606)
Constant	8.992* (0.208)	7.041* (1.209)
Demographic Controls		✓
N	1931	1931

*Note: Robust standard errors in parentheses* \*p<0.05; \*\*p<0.01

The extant discussion generates the following hypothesis:

**H1:** *Progressives are likely to be more skeptical of the reassurance measures from the patron compared to conservatives.*

# Research Design

## Case Selection

We now proceed to test our theory on the South Korean case. South Korea represents a good case to study because it is a key ally of the United States in East Asia with a robust democratic system that allows various political factions to express independent views. We examine two security issues. The first issue we examine is the controversy over the deployment of the Terminal High Altitude Area Defense (THAAD) missiles to South Korea. In February 2016, the United States and South Korea announced the deployment of the THAAD system in South Korea. This defense system is designed to intercept ballistic missiles of short, medium, and intermediate ranges ([Jakes, 2024](#)). South Korea's conservative Park Geun-hye administration explained that the deployment was to enhance South Korea's security and protect United States Forces Korea (USFK) from potential nuclear missile threats North Korea poses. However, some were more doubtful of its utility and outright expressed concerns that the United States was exploiting South Korea's position for its own benefits. China imposed economic sanctions on South Korea in retaliation to the deployment. What makes this case particularly interesting is that the deployment of such missile defense system are regarded as reassurance measures from the perspective of conventional alliance models in the literature (e.g, [Blankenship, 2020](#); [McManus and Nieman, 2019](#)). However, a significant proportion of the South Korean population did not perceive these missiles as reassurance measures from Washington. On the contrary, they expressed concern about the

deployment out of concern that it would worsen relations with China ([Choe, 2016](#)).

The second security issue we analyze is the nuclear umbrella issue. We choose this issue for both theoretical and practical reasons. Theoretically, nuclear umbrella is one of the strongest reassurance measure from the patron. In practice, not all issues pertaining to the alliance relation between the Washington and Seoul receive wide and long coverage. For example, the THAAD issue was discussed widely but only for few years during the deployment. On the contrary, the nuclear umbrella has been covered by media steadily since North Korea revealed its ambition for nuclear arms. Moreover, the debate about the nuclear umbrella as the reassurance measure can be widely applied to other contexts of asymmetric alliance, while the controversy over the THAAD deployment is the issue mostly limited to South Korea. Therefore, examining the second issue also helps to strengthen the generalizability of our findings.

While much of the scholarship on extended nuclear deterrence in asymmetric alliances often discusses the issues of reassurance of the protégés (e.g., [Bleek and Lorber, 2014](#)) and of moral hazard problems (e.g., [Cha, 2016](#); [Posen, 2018](#)), relatively little attention has been paid to how the protégé perceives the patron’s commitments of nuclear use.<sup>4</sup> What has often been overlooked in these accounts is the role of political ideology. For example, while [Rublee \(2009\)](#) discusses there have been widespread protests against the U.S. deployment of nuclear missiles, relatively little has been said regarding who would oppose such measures for what reasons.

We adopt a mixed-method approach by conducting text analysis and extending two prior survey experiments to test our theory. Although a survey experiment would help

---

<sup>4</sup>Some notable exceptions are [Rublee \(2009\)](#), and [Sukin \(2020\)](#).

to alleviate concerns of internal validity, some may wonder whether the findings could be generalized to other settings. Moreover, some readers may doubt that the findings from a group of survey respondents could render any important insights about what political elites think about costly signals from the patron. At the same time, while conducting a text analysis of all the relevant samples might show that our findings could be generalized beyond the sample of survey respondents, it presents additional challenges since text data are often noisy. We suggest that our research design helps to overcome the weaknesses of the respective approaches by examining both the responses of the mass public and the elite as well as maximizing both external and internal validity.

## Study 1: Media Analysis

### Research Design

For the first study, we conducted a text analysis of the major media outlets – *Chosun Ilbo* (조선일보), *Dong-A Ilbo* (동아일보), *Hankyoreh* (한겨레) and *Kyunghyang Shinmun* (경향신문) – and the speeches of the political elites. In analyzing the text from the major media outlets, we employed structural topic modeling (STM) to let the algorithm to discover the various topics discussed by the media. While we use diagnostic tests to determine the appropriate number of topics to be discovered, we expect the topics of *Security* and *Sovereignty* to be among the topics discovered.

We tried different specifications regarding the number of splines used to control for the potential heterogeneity in the distribution of topics covered over time. We also accounted for presidents' political orientation by controlling whether a president is progressive or not in the regression models to assess whether government's ideology affects the distribution of

topics. We used the `stm` package for conducting the main analysis (Roberts, Stewart and Tingley, 2019).

We first downloaded the newspaper articles from *Bigkinds*<sup>5</sup> and pre-processed the data by stemming and dropping stopwords. The main independent variable of interest is the ideological inclination of the four main media outlets, *Chosun Ilbo*, *Dong-A Ilbo*, *Hankyoreh* and *Kyunhyang Shinmun*. The first two of these four outlets are conservative outlets while the latter two are progressive. The keyword we used for searching the newspapers articles was “사드” (*THAAD*) for the first issue. We downloaded the articles of the four South Korean news media mentioning “사드” over a period of eight years, from June 2014, when THAAD was first mentioned in the Korean National Assembly, to June 2023, when the deployment was officially completed after the environmental impact assessment was conducted. We were able to find 12,405 articles covering the THAAD deployment issue during the specific period. In addition, for a broader discussion on the long-term reassurance measures, we collected 2,216 articles of the four South Korean news media mentioning “핵우산” (*nuclear umbrella*) from January 2000 to December 2024.<sup>6</sup>

Since STM is essentially a clustering technique and researchers can arbitrarily determine the number of topics around which keywords would form clusters, it is not guaranteed that each topic contains the expected contents because STM just summarizes and clusters a large collection of documents by their contents based on the number of topic researchers set. In implementing our models, we set the number of topics based on multiple diagnostic tests.

---

<sup>5</sup>See <https://www.bigkinds.or.kr/>.

<sup>6</sup>The amount of media coverage of each issue over time is in Appendix. See OA11 and OA12

## Empirical Findings

### THAAD Deployment

Table 2: Keywords with Topics (THAAD, 9 topics)

Topic	Keywords
1 Security	미사일 (missile), 북한 (North Korea), 발사 (launch), 요격 (interception), 방어 (defense), 미국 (USA), 사드 (THAAD)
2 Sino-Korean Relations	중국 (China), 대통령 (president), 외교 (diplomacy), 한국 (South Korea), 사드 (THAAD), 양국 (the two countries), 회담 (meeting)
3 Anti-THAAD	사드 (THAAD), 배치 (deployment), 국방부 (Ministry of National Defense), 정부 (government), 결정 (decision), 성주 (Seongju (city)), 반대 (opposition)
4 Geopolitics	중국 (China), 미국 (USA), 한국 (South Korea), 일본 (Japan), 경제 (economy), 외교 (diplomacy), 국가 (State)
5 Domestic Politics	후보 (candidate), 대통령 (president), 대표 ((party) leader), 국민 (people), 대선 (presidential election), 의원 (lawmaker), 문재인 (Moon Jae-in)
6 Economic Retaliation	중국 (China), 한국 (South Korea), 기업 (Company), 사드 (THAAD), 보복 (retaliation), 시장 (Market), 정부 (government)
7 Anti-Park Geun-hye	대통령 (president), 박근혜 (Park Geun-hye), 정부 (government), 집회 (protest), 국민 (people), 탄핵 (impeachment), 청와대 (Cheongwadae)
8 Inter-Korean Relations	북한 (North Korea), 정부 (government), 한반도 (Korean Peninsula), 미국 (USA), 대북 (in/on/for North Korea), 대통령 (president), 안보 (security)
9 US Foreign Policy	미국 (USA), 트럼프 (Trump), 대통령 (president), 한국 (South Korea), 행정부 (administration), 미군 (US forces), 워싱턴 (Washington)

We first present the results from the quantitative text analysis conducted on the major media outlets.<sup>7</sup> Table 2 presents the top seven keywords for the nine topics along with their labels.<sup>8</sup> Each topic contains keywords that are clearly distinct from those of other topics. For example, since the keywords in the third and seventh topics reflect opposition to the deployment itself and negative views on President Park, who approved the THAAD deployment, these topics can be easily labeled as *Anti-THAAD* and *Anti-Park Geun-hye*, respectively. In contrast, the first and sixth topics contain words related to North Korea's military ambitions and China's economic retaliation against the THAAD deployment, as well as South Korea's concerns about these issues. Therefore, we label them as *Security* and

<sup>7</sup>We designated the number of topics to be clustered as nine topics based on the diagnostic tests. See OA13.

<sup>8</sup>The distribution of the keyword probability is in the appendix. See OA5.

*Economic Retaliation*, respectively.

Figure 1: Treatment Effect Associated with Topics (THAAD, 9 topics)

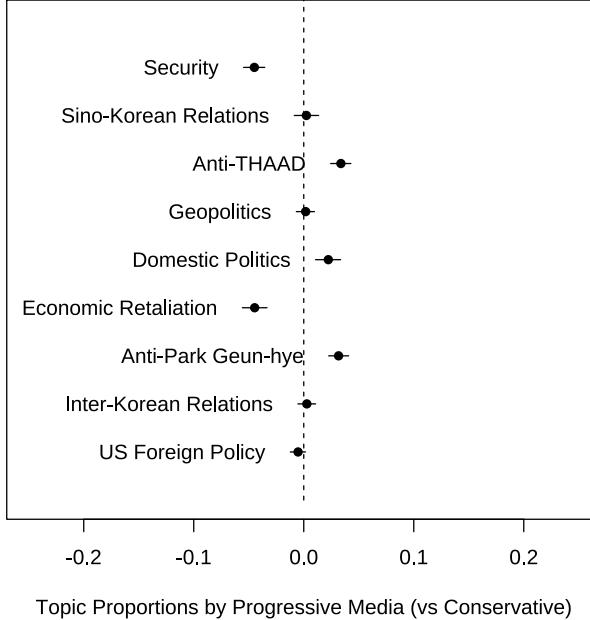


Figure 1 presents the treatment effect of media bias on the distribution of topics per document. The results clearly show that progressive media cover the THAAD deployment issue more negatively than conservative media. Progressive outlets discuss *Anti-THAAD*, a topic related to protests against the THAAD deployment, and *Anti-Park Geun-hye*, a topic related to protests against the president who decided the deployment, significantly more than conservative media. Additionally, progressive media frame the THAAD issue within the context of *Domestic Politics*, which could indicate that their coverage is linked to concerns over national sovereignty. In contrast, conservative media focus more on *Security*, a topic related to North Korea's military ambitions, and *Economy*, a topic addressing China's economic retaliation against the THAAD deployment, more than progressive media. These findings suggest that progressive media highlight domestic anti-THAAD movements, while

conservative media emphasize the legitimacy of THAAD by covering North Korea's military threats and attributing blame to China for its economic retaliation.

Given the importance and the salience of the issue, it is not surprising that the issue was discussed widely among the political elites in South Korea. There were diverse reactions from the elites within South Korea surrounding the THAAD issue. While there were understandably negative reactions towards China from a significant proportion of the domestic constituents to China's imposition of economic sanctions when South Korea ultimately pushed ahead with the deployment, others also expressed concerns that South Korea was becoming entrapped in a great power competition between Washington and Beijing. As one may expect, the THAAD dispute was an important foreign policy issue in South Korea.

## Nuclear Umbrella

We next present the findings on the nuclear umbrella issue to see if our theory could be applicable to a long-term and more generalizable issue regarding reassurance. Table 3 presents the top seven keywords for the 13 topics along with their labels.<sup>9</sup> The keywords for each topic show clear distinctions from those of other topics. For example, the eighth and tenth topics contain keywords related to North Korea's denuclearization and responses to its nuclear ambitions, such as sanctions. Therefore, we label these topics as *NK Denuclearization* and *NK Nuclear Issue*, respectively. Similarly, the eleventh topic is labeled as *NK Missile* because its keywords pertain to North Korea's missile threats. Moreover, since the keywords of topics 1, 9, and 12 all relate to the military relationship between the United States and South Korea, we label them as *US-SK Military 1*, *US-SK Military 2*, and *US-SK Military 3*.

---

<sup>9</sup>The distribution of the keyword probability is in the appendix. See OA7

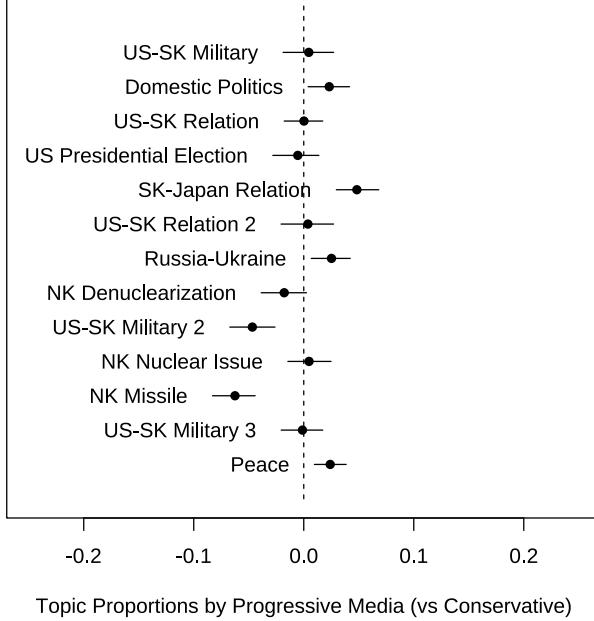
Table 3: Keywords with Topics (Nuclear Umbrella)

Topic	Keywords
1 US-SK Military	미국 (USA), 핵무기 (nuclear arms), 북한 (North Korea), 한국 (South Korea), 전술 (strategy), 핵우산 (nuclear umbrella), 한반도 (Korean Peninsula)
2 Domestic Politics	국민 (people), 후보 (candidate), 대표 (party leader), 대통령 (president), 정부 (government), 의원 (lawmaker), 생각 (thoughts)
3 US-SK Relation	한국 (South Korea), 미국 (USA), 미군 (US forces), 대사 (ambassador), 주한 (being in Korea), 중국 (China), 북한 (North Korea)
4 US Presidential Election	미국 (USA), 중국 (China), 대통령 (president), 트럼프 (Trump), 한국 (South Korea), 외교 (diplomacy), 안보 (security)
5 SK-Japan Relation	일본 (Japan), 미국 (USA), 총리 (prime minister), 핵무기 (nuclear arms), 정부 (government), 한국 (South Korea), 세계 (world)
6 US-SK Relation 2	대통령 (president), 한미 (USA-South Korea), 미국 (USA), 정상 (leader), 확장 (extension), 강화 (enhancement), 한국 (South Korea)
7 Russia-Ukraine	러시아 (Russia), 미국 (USA), 우크라이나 (Ukraine), 유럽 (Europe), 푸틴 (Putin), 대통령 (president), 전쟁 (war)
8 NK Denuclearization	북한 (North Korea), 미국 (USA), 회담 (meeting), 비핵화 (denuclearization), 한반도 (Korean Peninsula), 협상 (negotiation), 김정은 (Kim Jong Un)
9 US-SK Military 2	훈련 (exercise), 북한 (North Korea), 한미 (USA-South Korea), 한반도 (Korean Peninsula), 전략 (strategy), 미국 (USA), 전개 (deployment)
10 NK Nuclear Issue	북한 (North Korea), 미국 (USA), 대통령 (president), 제재 (Sanctions), 정부 (government), 대북 (in/on/for North Korea), 중국 (China)
11 NK Missile	북한 (North Korea), 미사일 (missile), 발사 (launch), ICBM, 도발 (provocation), 김정은 (Kim Jong Un), 미국 (USA)
12 US-SK Military 3	미국 (USA), (전작권) 전환 ((OPCON) transition), 북한 (North Korea), 핵우산 (nuclear umbrella), 한국 (South Korea), 전작(권) (operational control), 장관 (minister)
13 Peace	평화 (peace), 한반도 (Korean Peninsula), 남북 (North and South Korea), 북한 (North Korea), 미국 (USA), 정부 (government), 통일 (reunification)

In contrast, the thirteenth and fifth topics contain words associated with peace and South Korea's concerns about the impact of nuclearization of the Korean peninsula on Japan, including Japan's long-standing military ambitions. Thus, we label these topics as *Peace* and *SK-Japan Relation*, respectively.

Figure 2 presents the treatment effect of media bias on the distribution of topics per document. The results indicate that progressive media tend to cover the nuclear umbrella issue more negatively than conservative media. Specifically, progressive outlets frequently discuss the issue in terms of *Peace*, reflecting their emphasis on the desire for regional stability. Additionally, they mention *SK-Japan Relations* and *Russia-Ukraine* more often than conservative

Figure 2: Treatment Effect Associated with Topics (Nuclear Umbrella, 13 topics)



media, suggesting concerns about the potential destabilizing effects of the nuclear umbrella and its role in fueling regional arms races. Furthermore, progressive media often frame the issue within the context of domestic politics, potentially linking it to questions of national sovereignty. In contrast, conservative media focus more on security-related aspects, which may reflect their inclination to highlight the strategic necessity of the U.S.-provided nuclear umbrella. They frequently discuss topics such as *NK Missile*, which underscores North Korea's military ambitions, and *US-SK Military 2*, which emphasizes the strategic importance of the nuclear umbrella in the U.S.-South Korea military alliance. These patterns suggest that conservative media are more receptive to the patron's reassurance signals, viewing them as critical for national security. On the other hand, progressive media appear more skeptical of such reassurances, as they perceive nuclear weapons as ultimately detrimental to regional peace.

## Study 2: Elite Speeches

### Research Design

Readers might be concerned that conducting a text analysis of the major media outlets is irrelevant to our understanding of foreign policy since it does directly show what the political elites believe. Indeed, the extent to which the mass public influences foreign policy has been an ongoing debate among IR scholars (e.g., Jacobs and Page, 2005; Kertzer and Zeitzoff, 2017). Given the concern that the mass public has little to no effect on foreign policy, we further conduct a text analysis of the speeches of the legislative members of the “Foreign Policy and Defense Committee” in South Korea’s National Assembly from 2014 to 2023 and classified their statements regarding the deployment of THAAD missiles into three categories: *positive*, *neutral* and *negative*.<sup>10</sup> We classified the National Assembly members into two groups, progressive and conservative depending on their party affiliation.<sup>11</sup>

Because of the small sample size, we decided to hand-code the legislators’ responses depending on the stance on the deployment of the THAAD missiles conveyed by the speech act. As an example of speech acts that were classified as being opposed to the deployment, Kang Chang-il of the Democratic Party stated “THAAD is for the US national interest rather than that of South Korea.” As an example of a speech act that was classified as being supportive of the deployment, Won Yoo-chul stated that “it is necessary for the South Korean government to conduct a better PR effort that THAAD is being deployed in response

---

<sup>10</sup>These speech acts by South Korean legislative members can be downloaded from the National Assembly BigData website (<https://dataset.nanet.go.kr/>). We used the keyword “사드” (THAAD) to search for the relevant speech acts.

<sup>11</sup>During the period of the THAAD deployment, the New Frontier Party (새누리당) was a conservative and incumbent party, and the Democratic Party of Korea (더불어민주당) was a progressive party.

to North Korean nuclear and missile threats..."

Most of these speech acts were classified into the neutral category as we found that a significant proportion of these speech acts either contained insufficient information or were not relevant to the issue for us to categorize the speech as expressing support or opposition to the deployment of the THAAD missiles. For example, some speech acts included the word THAAD merely because the legislator in question was naming a host of diplomatic issues that South Korea was facing.<sup>12</sup> At the same time, many of these speech acts were generated when the legislators were questioning the foreign minister about the issue.<sup>13</sup> As these speech acts were more of a question asking for the opinion of the foreign minister rather than a statement expressing their own opinions on the issue, these speech acts were classified as being *neutral*.

We conducted a series of logistic regression analysis to probe the plausibility of our analysis. Our unit of analysis is legislator-session: if a certain legislator in a given session made at least one statement expressing opposition against the deployment of the missiles, we coded the legislator as being opposed to the deployment of the missiles for the given session.<sup>14</sup> For the control variables, we include the tenure and the sex of the legislator, the executive of the government as well as the ruling party during which the session was held.

---

<sup>12</sup>For example, at the 332nd meeting of the Foreign Affairs and Unification Committee held on May 4, 2015, Rep. Kim Hyun asked the Minister of Foreign Affairs about the impact of joining AIIB and deploying THAAD on diplomatic relations between South Korea and neighboring countries.

<sup>13</sup>For example, at the confirmation hearing for the Minister of Unification held on March 11, 2015, Rep. Lee Jae-oh asked the nominee for the Minister of Unification whether he supported or opposed the deployment of THAAD.

<sup>14</sup>While theoretically possible, we observed no legislator with speech acts both expressing support for and opposition against the deployment across different speech acts.

## Empirical Findings

There were approximately 560 speech acts by 59 legislative members across multiple parties in South Korea during the period examined. While the deployment of the THAAD missiles was an important issue, not all sessions of the committee meetings covered the issue. We examined how various political elites with potentially heterogeneous policy preferences reacted to the deployment of THAAD missiles.<sup>15</sup>

We next present our logistic regression analysis of the legislator responses to THAAD deployment. The results are presented in Table 4. Model 1 (2) uses opposition to (support for) the deployment as the binary dependent variable. Model 3 uses a ordered logistic regression where opposition, neutral and support are coded as -1, 0, and 1, respectively. All the models show support for our theory: members of progressive parties, on average, spoke more negatively about the THAAD deployment than those of conservative parties at the Foreign Affairs and Unification Committee meeting.<sup>16</sup>

One interesting aspect of the THAAD dispute is that all members of the committee ultimately voted to formally approve of the deployment of the missiles, including the progressive members. Given that there is a large body of literature suggesting that citizens do not like policy inconsistency (e.g., [Tomz, 2007](#); [Davies and Johns, 2013](#); [Levy et al., 2015](#)), it may be a little surprising that the members ultimately voted to approve of the deployment despite the rhetoric. One potential explanation is the hypothesis suggested by [Fearon \(1994\)](#) in his original argument: leaders of small powers may wish to bluff even at the risk of getting

---

<sup>15</sup>The speech acts of the legislative members on the nuclear umbrella issue were too few in number to conduct a meaningful analysis.

<sup>16</sup>We also replicate the findings in the appendix with legislator as the unit of analysis. See [OA10](#). Although the results are robust, we note that the control variables pertaining to the session and the administration are necessarily excluded in the analysis when using legislator as the unit of analysis.

Table 4: Legislator Response to THAAD Deployment

	<i>Dependent variable:</i>		
	Negative <i>logistic</i>	Positive <i>logistic</i>	Neg.-Pos. <i>ordered logistic</i>
	Model 1	Model 2	Model 3
Progressive Party	2.890* (1.160)	-4.889*** (1.212)	-2.549*** (0.654)
Tenure	0.386 (0.284)	-0.024 (0.480)	-0.103 (0.144)
Male	0.046 (1.321)	17.891*** (4.428)	0.121 (0.694)
Ruling Party	1.218 (0.849)	0.452 (0.986)	0.321 (0.420)
Observations	261	261	261
Meeting FE	Yes	Yes	No
Log Likelihood	-43.979	-27.491	-139.04
Negative Neutral			-4.343
Neutral Positive			1.423

*Note:* Legislator-session is the unit of analysis. Robust standard errors clustered by legislator in parentheses. +p<0.1;  
\*p<0.05; \*\*p<0.01

caught. As Fearon (1994, 580) notes: “leaders of small states may be rewarded for escalating crises with big states and then backing down, where they would be castigated for simply backing down. Standing up to a “bully” may be praised even if one ultimately retreats.” Of course, the irony here is that South Korea was not in a crisis bargaining situation with the United States – the conventional interpretation according to the rationalist framework would be that the United States was merely seeking to reassure South Korea by deploying THAAD missiles. Given such conventional wisdom, it is interesting to note that at least some segment of the population including political elites apparently believed that Washington was bullying Seoul into acquiescing to the deployment.

## Study 3: Extension of Ko (2019) and Sukin (2020)

### Research Design

We next extend two experimental studies on the effect of U.S. reassurance signals on the attitude of South Korean citizens regarding the acquisition of independent nuclear arsenals.

We first extend Ko (2019)'s study on the effectiveness of various measures that the United States could take to discourage the protégé from pursuing measures to acquire independent nuclear weapons. Theoretically, the deployment of nuclear weapons by the patron could be regarded as a form of sunk-cost signal (Fearon, 1997). Ko (2019) has four conditions – Control, Declare, Deploy, and Threat – in her study.<sup>17</sup> We interact the treatment conditions with ideology to test our theory. If our theory is valid, we should be able to observe a pattern with progressives being more likely to express support for the acquisition of independent nuclear weapons when treated with reassurance signals.<sup>18</sup>

We next extend Sukin (2020)'s study of the effectiveness of commitment to use nuclear weapons on behalf of the protégé in dissuading the latter from pursuing the acquisition of nuclear weapons. In this experiment, Sukin (2020) has one control group and two treatment groups.<sup>19</sup> The two treatment groups are intended to capture the different levels of U.S.

---

<sup>17</sup>Ko (2019) gives the treatments as follows: “a superpower ally publicly promised the country a nuclear umbrella.” (*Declare*); “a superpower ally deployed strategic nuclear weapons on the soil of the country, publicly promising a nuclear umbrella.” (*Deploy*); “a superpower ally, which publicly promised a nuclear umbrella, is opposed to any attempt at seeking nuclear armament, telling the country (that the respondents belong to) that it will withdraw from the alliance if the country develops indigenous nuclear weapons.” (*Threat*); “the country does not have a super power ally that can offer a nuclear umbrella.” (*Control*)

<sup>18</sup>The original study codes ideology on a 5-point scale with 1 being very liberal and 5 being very conservative. We recode this with 1 being the most conservative and 5 being the most progressive for the ease of interpretation and comparability.

<sup>19</sup>In the low-credibility (high-credibility) treatment group, the survey respondents are provided with the information that South Korean military officials think that the United States would respond with nuclear weapons with a low (high) probability in case of a North Korean attack.

nuclear umbrella credibility by providing the survey respondents with information that South Korean military officials believe that it is unlikely (likely) that the United States would respond with nuclear weapons in case of an attack from North Korea in the low credibility (high credibility) treatment condition. The counterintuitive finding from this study is that South Koreans show a *greater* level of support for acquiring independent nuclear arsenals under the high credibility treatment condition. The crux of the argument is that South Koreans seem to be fearful of becoming entrapped in an unwanted war when the United States maintains control over the use of nuclear weapons. We once again interact the treatment conditions with ideology to test our theory. If our theory is valid, progressives should be more likely to express support for nuclear weapons acquisition than conservatives under the high-credibility treatment condition.

## **Empirical Findings**

The above text analysis demonstrates that there is likely to be a partisan gap between progressives and conservatives in terms of how they perceive reassurance signals from the patron. However, readers may be concerned that text data are inherently noisy and lack internal validity. Thus, we also provide further evidence of our theory by extending two survey experimental studies on the attitude of South Korean population in support for acquiring independent nuclear arsenals to strengthen the internal validity of our argument ([Ko, 2019](#); [Sukin, 2020](#)). The top panel of Table 5 shows that there is a positive and statistically significant interaction effect between *Deployment* and *Ideology* suggesting that progressives are more likely to espouse support for independent nuclear arsenals compared conservatives when exposed to the treatment condition that the patron would deploy nuclear

weapons to the protégé state.

Table 5: Extension of Ko (2019) and Sukin (2020)

Panel A: Ko (2019)	<i>Dependent variable:</i>			
	Support for Nuclear Armament (Binary)			
	<i>LPM</i>	<i>logistic</i>		
	Model 1	Model 2	Model 3	Model 4
Declaration	−0.028 (0.058)	−0.085 (0.099)	−0.107 (0.233)	−0.343 (0.399)
Deployment	−0.051 (0.058)	−0.249* (0.100)	−0.216 (0.233)	−1.017* (0.418)
Threat	−0.014 (0.058)	−0.094 (0.099)	−0.054 (0.232)	−0.381 (0.399)
Ideology	−0.010 (0.012)	−0.044+ (0.023)		−0.180+ (0.097)
Declaration x Ideology		0.023 (0.033)		0.094 (0.137)
Deployment x Ideology		0.077* (0.032)		0.313* (0.134)
Threat x Ideology		0.033 (0.033)		0.133 (0.136)
Constant	0.499** (0.050)	0.582** (0.071)	−0.107 (0.164)	0.331 (0.285)
Observations	600	600	600	600
Adjusted R <sup>2</sup>	−0.004	0.001		
Log Likelihood			−412.411	−409.023
Akaike Inf. Crit.			832.822	834.046

Panel B: Sukin (2020)	<i>Dependent variable:</i>			
	Support for Nuclear Armament			
	<i>OLS</i>	<i>logistic</i>		
	Model 5	Model 6	Model 7	Model 8
High Credibility	0.034* (0.016)	−0.071 (0.047)	0.254* (0.116)	−0.493 (0.372)
Low Credibility	−0.020 (0.016)	−0.056 (0.050)	−0.142 (0.111)	−0.561 (0.380)
Ideology		−0.044** (0.008)		−0.285** (0.062)
High Credibility x Ideology		0.025* (0.011)		0.175* (0.084)
Low Credibility x Ideology		0.009 (0.012)		0.097 (0.085)
Region FE	Yes	Yes	Yes	Yes
Observations	2,242	2,242	2,242	2,242
Adjusted R <sup>2</sup>	0.835	0.839		
Log Likelihood			−1,377.711	−1,357.663
Akaike Inf. Crit.			2,795.422	2,761.326

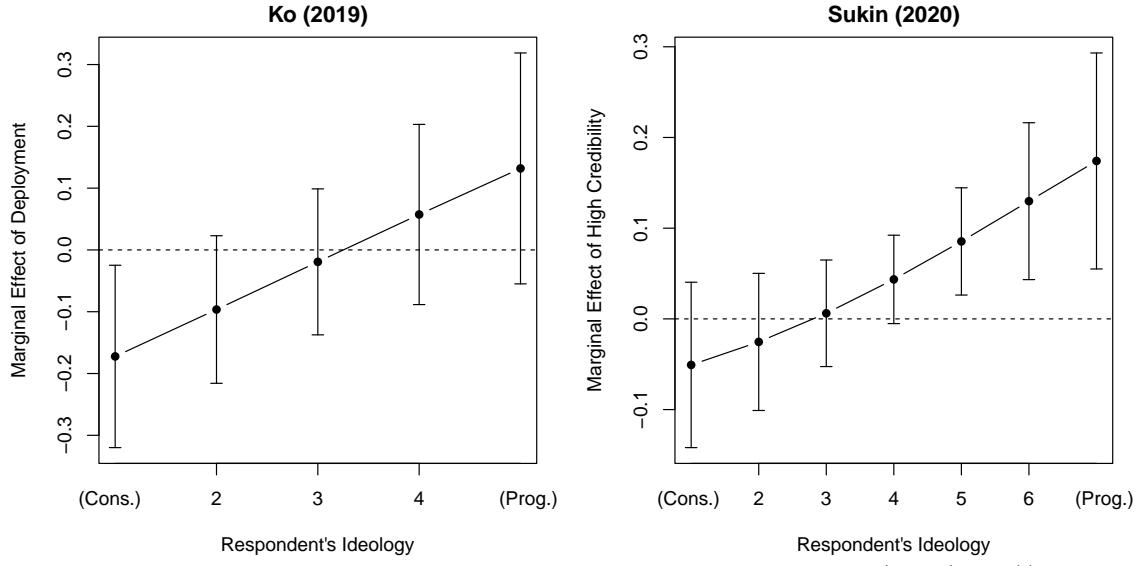
*Note:* Robust standard errors in parentheses. +p<0.1; \*p<0.05; \*\*p<0.01

Theoretically, making a high credibility commitment could be regarded as a form of

hand-tying signal. Ideology was not an important element of [Sukin \(2020\)](#)'s original theory. Based on our theory, we hypothesize that the effect suggested by [Sukin \(2020\)](#) would be the most pronounced among progressives. Since progressives are likely to perceive a greater cost in the loss of autonomy due to their mistrust of the patron's intentions, they are more likely to express greater support for acquiring independent nuclear arsenals once they are treated with the information suggesting that the United States could use nuclear weapons that may potentially be against Seoul's will. The bottom panel of Table 5 shows that the greatest effect of the treatment seems to come from the progressives shown by the positive and statistically significant interaction effect between the high credibility treatment condition and ideology. Thus, more liberal respondents are more likely to support South Korea's independent nuclear armament when exposed to the highly credible nuclear reassurance signal.

Figure 3 shows the marginal effects of the treatment depending on the ideological inclination of the survey respondents based on models 4 ([Ko, 2019](#)) and 8 ([Sukin, 2020](#)). Both graphs in the figure shows that the marginal effect of credible nuclear reassurance signal from the US, 'deployment' for [Ko \(2019\)](#) and 'high credibility' for [Sukin \(2020\)](#), on the probability of the support for South Korea's acquisition of independent nuclear arsenals increases as ideology being more liberal. The results implies that progressives are more likely to express support or express greater degree of support for the acquisition of independent nuclear arsenals when exposed to costly reassurance signals.

Figure 3: Marginal Effect of Reassurance on the Support for Independent Nuclear Armament



Note: The marginal effect is computed based on models 4 ([Ko \(2019\)](#)) and 8 ([Sukin \(2020\)](#)) of Table 5.

## Conclusion and Discussion

While past research suggests that states could build trust and communicate intentions through costly signals, we show that costly signals are effectively only to the extent that states have a baseline level of trust. In particular, we show that progressives of the protégé are less likely to be reassured through costly signals sent by the patron because it is not self-evident what the exact purpose of this costly signal is. On the contrary, costly signals can actually backfire because they may only serve to demonstrate that the patron harbors overly revisionist and aggressive intentions which certain members of the protégé do not want.

The contribution of our paper is threefold. First, it proposes a novel theory and provides systematic evidence on the heterogeneity of preferences within the protégé regarding the pro-

tégé's relationship with the patron. While past qualitative accounts have certainly discussed the divergence in preferences between conservatives and progressives (e.g., [Moller, 2022](#)), our study is the first to theorize the conditions under which the divergence in preferences is likely to become salient and test it using both quantitative and qualitative evidence.

Second, our study provides important implications for reassurance dynamics in asymmetric alliances. In contrast to the past literature that often assumes trust could be built through costly signals (e.g., [Kydd, 2000](#)), our study shows that reassurance is more difficult than previously thought. By showing how political ideology could be an important factor determining whether the protégé would indeed be reassured, our work proposes an important element for examining reassurance dynamics in asymmetric alliances and contributes to the understanding of which segments of the protégé's populations are likely to have difficulty in being reassured by the patron.

Third, our study also highlights that the fear of entrapment may also exist in protégés. Most studies on asymmetric alliances have tended to focus on the types of measures a major power patron adopts to alleviate risks of entrapment. For example, [Cha \(2016\)](#) argues that the non-existence of a multilateral alliance in Northeast Asia was borne out of Washington's aims to better constrain its protégés from pursuing revisionist foreign policies. Documental evidence shows that key U.S. decision-makers were concerned about Chiang Kai-shek spearheading offensive efforts against China that could potentially entrap Washington in an unwanted war ([Chang, 1988](#)). Similar concerns remain among certain International Relations scholars today. For example, [Posen \(2018\)](#) argues for the restraint in U.S. foreign policies, citing the risks of reckless driving of the protégés. While analyzing the interests and motivations from the perspective of a major power patron is certainly important, it is

also important to consider the preferences of the minor power protégé since they also may have similar concerns when international crises arise between a major power patron and its adversary.

One obvious limitation to the paper is the lack of generalizability as this study focuses on a single country as an in-depth case study. While we have provided a general theory on how political ideology might be an important factor in shaping the attitudes towards reassurance measures from the patron and have tested our theory on the case of South Korea, it remains to be investigated whether we would be able to observe such salient differences between conservatives and progressives in other protégés. Scholars studying asymmetric alliances with regional expertise of other countries might wish to examine whether such salient differences in preferences become apparent when similar incidents arise. For example, given the extensive research suggesting that Japanese foreign policy preferences with respect to the alliance with Washington is divided along partisanship (e.g., [Proksch, Slapin and Thies, 2011](#); [Jou and Endo, 2017](#); [Hata et al., 2023](#)), scholars may further wish to investigate whether similar findings arise in Japan.

Perhaps another important concern regarding the theory and the analysis presented here might be that we unduly reduce the complex alliance relationships into a matter of costly signaling and thereby portray the progressives as biased despite our qualifications above. To be clear, the purpose of this study is not to measure the degree of psychological bias of different media outlets or individuals. Nor are we categorically claiming that conservatives hold an objectively truthful view of the world and progressives hold a biased view of the world. Our main purpose has been to theorize and show that political ideology could be an important factor in how the different constituencies within the protégé respond to the costly

signals from the patron.

The findings from this study highlights the need for scholars to think about *how* to characterize asymmetric alliances more seriously. While we have largely adopted the conventional framework of reassurance measures as costly signaling as used in past IR research (e.g., [Blankenship, 2020](#); [Blankenship and Lin-Greenberg, 2022](#)), other scholars may argue that what a major power patron “truly” wants may not be so much about reassuring its protégé but seeking control over it or at least projecting power by utilizing its protégés (e.g., [Morrow, 1991](#)).

## References

- Alt, James and Torben Iversen. 2017. “Inequality, Labor Market Segmentation, and Preferences for Redistribution.” *American Journal of Political Science* 61(1):21–36.
- Arena, Philip and Glenn Palmer. 2009. “Politics or the Economy? Domestic Correlates of Dispute Involvement in Developed Democracies.” *International Studies Quarterly* 53(4):955–975.
- Bae, Jong-Yun. 2020. “Actors, Structure, and Process.” *Routledge Handbook of Korean Politics and Public Administration* p. 144.
- Benson, Brett V and Bradley C Smith. 2023. “Commitment Problems in Alliance Formation.” *American Journal of Political Science* 67(4):1012–1025.
- Bertoli, Andrew, Allan Dafoe and Robert F Trager. 2019. “Is There a War Party? Party Change, the Left–Right Divide, and International Conflict.” *Journal of Conflict Resolution* 63(4):950–975.
- Blankenship, Brian. 2020. “Promises under Pressure: Statements of Reassurance in US Alliances.” *International Studies Quarterly* 64(4):1017–1030.
- Blankenship, Brian and Erik Lin-Greenberg. 2022. “Trivial Tripwires?: Military Capabilities and Alliance Reassurance.” *Security Studies* 31(1):92–117.
- Bleek, Philipp C and Eric B Lorber. 2014. “Security Guarantees and Allied Nuclear Proliferation.” *Journal of Conflict Resolution* 58(3):429–454.

- Brandt, Willy. 1984. "Alternatives." *Bulletin of the Atomic Scientists* 40(6):3–4.
- Camerer, Colin. 1988. "Gifts as Economic Signals and Social Symbols." *American Journal of Sociology* 94:S180–S214.
- Catalinac, Amy L. 2010. "Why New Zealand Took Itself Out of ANZUS: Observing "Opposition for Autonomy" in Asymmetric Alliances." *Foreign Policy Analysis* 6(4):317–338.
- Cha, Victor D. 2016. *Powerplay: The Origins of the American Alliance System in Asia*. Princeton, NJ: Princeton University Press.
- Chae, Haesook and Steven Kim. 2008. "Conservatives and Progressives in South Korea." *Washington Quarterly* 31(4):77–95.
- Chang, Gordon H. 1988. "To the Nuclear Brink: Eisenhower, Dulles, and the Quemoy-Matsu Crisis." *International Security* 12(4):96–122.
- Chiozza, Giacomo. 2009. *Anti-Americanism and the American World Order*. JHU Press.
- Choe, Sang-hun. 2016. "6 South Korean Lawmakers Accused of Taking China's Side against Antimissile System." <https://www.nytimes.com/2016/08/09/world/asia/china-korea-thaad-opposition.html>
- Conover, Pamela Johnston and Stanley Feldman. 2004. The Origins and Meaning of Liberal/Conservative Self-Identifications. In *Political psychology*. Psychology Press pp. 200–216.

Crawford, Timothy W. 2011. "Preventing Enemy Coalitions: How Wedge Strategies Shape Power Politics." *International Security* 35(4):155–189.

Cronk, Lee and Bria Dunham. 2007. "Amounts Spent on Engagement Rings Reflect Aspects of Male and Female Mate Quality." *Human Nature* 18:329–333.

Davies, Graeme AM and Robert Johns. 2013. "Audience Costs among the British Public: The Impact of Escalation, Crisis Type, and Prime Ministerial Rhetoric." *International Studies Quarterly* 57(4):725–737.

Fearon, James D. 1994. "Domestic Political Audiences and the Escalation of International Disputes." *American Political Science Review* 88(3):577–592.

Fearon, James D. 1997. "Signaling Foreign Policy Interests." *Journal of Conflict Resolution* 41(1):68–90.

Hata, Masaki, Takeshi Iida, Yasuhiro Izumikawa and Tongfi Kim. 2023. "Does a Patron State's Hardline Posture Reassure the Public in an Allied State?" *Conflict Management and Peace Science* p. 07388942231216733.

Hix, Simon and Hae-Won Jun. 2009. "Party Behaviour in the Parliamentary Arena: The Case of the Korean National Assembly." *Party Politics* 15(6):667–694.

Huang, Yuxing. 2020. "An Interdependence Theory of Wedge Strategies." *Chinese Journal of International Politics* 13(2):253–286.

Izumikawa, Yasuhiro. 2013. "To Coerce or Reward? Theorizing Wedge Strategies in Alliance Politics." *Security Studies* 22(3):498–531.

Jacobs, Lawrence R and Benjamin I Page. 2005. “Who Influences US Foreign Policy?” *American Political Science Review* 99(1):107–123.

Jakes, Lara. 2024. “What is the THAAD antimissile system the U.S. has sent to Israel?”.

**URL:** <https://www.nytimes.com/2024/10/14/world/middleeast/israel-thaad-missile-defense.html>

Jou, Willy and Masahisa Endo. 2017. “Political Participation in Japan: A Longitudinal Analysis.” *Asian Journal of Comparative Politics* 2(2):196–212.

Kertzer, Joshua D and Thomas Zeitzoff. 2017. “A Bottom-Up Theory of Public Opinion about Foreign Policy.” *American Journal of Political Science* 61(3):543–558.

Kim, Woosang. 1989. “Power, Alliance, and Major Wars, 1816-1975.” *Journal of Conflict Resolution* 33(2):255273.

Kim, Woosang. 1991. “Alliance Transitions and Great Power War.” *American Journal of Political Science* 35(4):833–850.

Ko, Jiyoung. 2019. “Alliance and Public Preference for Nuclear Forbearance: Evidence from South Korea.” *Foreign Policy Analysis* 15(4):509–529.

Köllner, Patrick. 2024. “Explaining Sender–Receiver Gaps in Signalling: Australia’s ‘Pacific Step-up’ and Solomon Islands’ Multi-alignment.” *The British Journal of Politics and International Relations* pp. 1–23.

Kydd, Andrew. 2000. “Trust, Reassurance, and Cooperation.” *International Organization* 54(2):325–357.

Lee, Chi-Dong. 2014. “In Memoir, Gates Calls ex-Korean President Roh ‘Crazy’.”.

**URL:** <https://en.yna.co.kr/view/AEN20140115000100315>

Lee, Kyung Suk, Hankyeul Yang and Daekwon Son. 2025. “US Allies’ Foreign Policy Alignment in an Era of Great Power Competition: An Analysis of Domestic Politics.” *Contemporary Security Policy* pp. 1–29.

Levy, Jack S, Michael K McKoy, Paul Poast and Geoffrey PR Wallace. 2015. “Backing Out or Backing In? Commitment and Consistency in Audience Costs Theory.” *American Journal of Political Science* 59(4):988–1001.

Levy, Jack S. and William R. Thompson. 2005. “Hegemonic Threats and Great-Power Balancing in Europe, 1495–1999.” *Security Studies* 14(1):1–33.

Lim, Darren J and Zack Cooper. 2015. “Reassessing Hedging: The Logic of Alignment in East Asia.” *Security Studies* 24(4):696–727.

McManus, Roseanne W and Mark David Nieman. 2019. “Identifying the Level of Major Power Support Signaled for Protégés: A Latent Measure Approach.” *Journal of Peace Research* 56(3):364–378.

Mercer, Jonathan. 2018. *Reputation and International Politics*. Cornell University Press.

Moller, Sara Bjerg. 2022. “Domestic Politics, Threat Perceptions, and the Alliance Security Dilemma: the Case of South Korea, 1993–2020.” *Asian Security* 18(2):119–137.

Morrow, James D. 1991. “Alliances and Asymmetry: An Alternative to the Capability Aggregation Model of Alliances.” *American Journal of Political Science* pp. 904–933.

Ogletree, Shirley M. 2010. "With This Ring, I Thee Wed: Relating Gender Roles and Love Styles to Attitudes towards Engagement Rings and Weddings." *Gender Issues* 27:67–77.

Onderco, Michal and Michal Smetana. 2021. "German Views on US Nuclear Weapons in Europe: Public and Elite Perspectives." *European Security* 30(4):630–648.

Onderco, Michal, Tom W Etienne and Michal Smetana. 2022. "Ideology and the Red Button: How Ideology Shapes Nuclear Weapons' Use Preferences in Europe." *Foreign Policy Analysis* 18(4):orac022.

Palmer, Glenn, Tamar London and Patrick Regan. 2004. "What's Stopping You?: The Sources of Political Constraints on International Conflict Behavior in Parliamentary Democracies." *International Interactions* 30(1):1–24.

Posen, Barry R. 2018. *Restraint: A New Foundation for US Grand Strategy*. Cornell University Press.

Proksch, Sven-Oliver, Jonathan B Slapin and Michael F Thies. 2011. "Party System Dynamics in Post-War Japan: A Quantitative Content Analysis of Electoral Pledges." *Electoral Studies* 30(1):114–124.

Quek, Kai. 2016. "Are Costly Signals More Credible? Evidence of Sender-Receiver Gaps." *The Journal of Politics* 78(3):925–940.

Rapport, Aaron and Brian Rathbun. 2021. "Parties to an Alliance: Ideology and the Domestic Politics of International Institutionalization." *Journal of Peace Research* 58(2):279–293.

Roberts, Margaret E, Brandon M Stewart and Dustin Tingley. 2019. “Stm: An R Package for Structural Topic Models.” *Journal of Statistical Software* 91:1–40.

Rublee, Maria Rost. 2009. *Nonproliferation Norms: Why States Choose Nuclear Restraint*. University of Georgia Press.

Seymour, Robert M and Peter D Sozou. 2009. “Duration of Courtship Effort as a Costly Signal.” *Journal of Theoretical Biology* 256(1):1–13.

Shim, Jaemin. 2019. “The Legislature and Agenda Politics of Social Welfare: A Comparative Analysis of Authoritarian and Democratic Regimes in South Korea.” *Democratization* 26(7):1235–1255.

Sukin, Lauren. 2020. “Credible Nuclear Security Commitments Can Backfire: Explaining Domestic Support for Nuclear Weapons Acquisition in South Korea.” *Journal of Conflict Resolution* 64(6):1011–1042.

Sukin, Lauren and Alexander Lanoszka. 2024. “Credibility in Crises: How Patrons Reassure their Allies.” *International Studies Quarterly* 68(2):sqae062.

Tomz, Michael. 2007. “Domestic Audience Costs in International Relations: An Experimental Approach.” *International Organization* 61(4):821–840.

Vignoli, Valerio and Michal Onderco. 2024. “Leader Ideology and State Commitment to Multilateral Treaties.” *The Review of International Organizations* pp. 1–30.

Wagner, Wolfgang, Anna Herranz-Surrallés, Juliet Kaarbo and Falk Ostermann. 2018. “Party

Politics at the Water's Edge: Contestation of Military Operations in Europe.” *European Political Science Review* 10(4):537–563.

Waltz, Kenneth N. 1979. *Theory of International Politics*. Boston, MA: McGraw-Hill.

Yarhi-Milo, Keren, Joshua D Kertzer and Jonathan Renshon. 2018. “Tying Hands, Sinking Costs, and Leader Attributes.” *Journal of Conflict Resolution* 62(10):2150–2179.

## **Online Appendix for**

Do Reassurance Measures Reassure? Political Ideology and  
Sender-Receiver Gap in Asymmetric Alliances

# Table of Contents

OA1	Logit Analysis of the 10th Bundestag . . . . .	2
OA2	Results (THAAD, 2 topics) . . . . .	3
OA3	Results (Nuclear Umbrella, 2 topics) . . . . .	5
OA4	Keyword Probability Distribution by Topic (THAAD) . . . . .	7
OA5	Keywords Probability Distribution by Topic (THAAD, 9 topics) . . . . .	7
OA6	Keyword Probability Distribution by Topic (Nuclear Umbrella) . . . . .	8
OA7	Keyword Probability Distribution by Topic (Nuclear Umbrella, 13 topics) . . . . .	9
OA8	Regression Result (THAAD) . . . . .	10
OA9	Regression Result (Nuclear Umbrella) . . . . .	11
OA10	Legislator Response to THAAD Deployment . . . . .	12
OA11	Media Coverage by Time (THAAD) . . . . .	13
OA12	Media Coverage by Time (Nuclear Umbrella) . . . . .	13
OA13	Diagnostic Values by Number of Topics (THAAD) . . . . .	14
OA14	Diagnostic Values by Number of Topics (Nuclear Umbrella) . . . . .	15
OA15	Document Probability Distribution by Topic (THAAD) . . . . .	16
OA16	Document Probability Distribution by Topic (THAAD, 9 Topics) . . . . .	16
OA17	Document Probability Distribution by Topic (Nuclear Umbrella) . . . . .	17
OA18	Document Probability Distribution by Topic (Nuclear Umbrella, 13 Topics) . . . . .	18
OA19	Topic Distribution by Time (THAAD) . . . . .	19
OA20	Topic Distribution by Time (Nuclear Umbrella) . . . . .	19
OA21	Top 10 Articles Leverage Each Topic . . . . .	20
OA21.1	THAAD – Sovereignty . . . . .	20
OA21.2	THAAD – Security . . . . .	24
OA21.3	Nuclear Umbrella – Peace . . . . .	28
OA21.4	Nuclear Umbrella – Security . . . . .	31

## OA1 Logit Analysis of the 10th Bundestag

	Model 1	Model 2	Model 3
CDU/CSU-FDP	8.89*** (0.28)	8.88*** (0.28)	8.90*** (0.28)
CDU/CSU-FDP $\times$ Pershing	2.94* (1.44)	2.93* (1.44)	2.94* (1.44)
Pershing	-3.15*** (0.90)	-3.15*** (0.90)	-3.15*** (0.90)
Gender		0.23 (0.13)	0.24 (0.14)
Age		0.02*** (0.01)	0.02*** (0.01)
Constant	-2.28*** (0.04)	-3.33*** (0.27)	-3.42*** (0.34)
State FE	No	No	Yes
N	16921	16921	16921

Only the motions with CDU/CSU and FDP as the two primary sponsors are included.

Table A1: German Roll Call Analysis for the 10th Bundestag

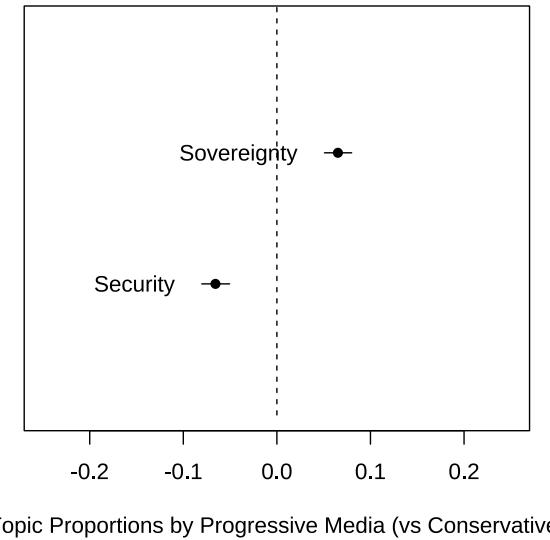
## OA2 Results (THAAD, 2 topics)

Table A2: Keywords with Topics (THAAD)

Topic	Keywords
1 Sovereignty	대통령 (President), 후보 (candidate), 국민 (people), 정부 (government), 사드 (THAAD), 대표 ((party) leader), 의원 (lawmaker), 문재인 (Moon Jae-in), 대선 (presidential election), 국회 (National Assembly)
2 Security	중국 (China), 사드 (THAAD), 미국 (USA), 북한 (North Korea), 한국 (South Korea), 배치 (deployment), 정부 (government), 미사일 (missile), 대통령 (president), 외교 (diplomacy)

Table A2 shows the top 10 keywords for the two topics.<sup>20</sup> We observe a significant difference in the types of words depending on the topic. Specifically, the keywords for the first topic pertain to security issues, such as “missile,” “North Korea,” and other contiguous countries sharing security concerns with South Korea. Thus, we label the first topic as *Security*. On the other hand, the keywords for the second topic focus on sovereignty issues and South Korean domestic politics, suggesting that the second topic consists of articles linking the THAAD deployment to domestic political matters. This is crucial since there was widespread criticism from progressives regarding her arbitrary decision to deploy THAAD missiles during President Park’s tenure. Accordingly, we conclude that the second topic can be labeled as *Sovereignty*, and we expect that progressive media are more likely to cover the second topic but less likely to cover the first topic compared to conservative media.

Figure A1: Treatment Effect Associated with Topics (THAAD)



*Note:* The marginal effect is computed based on models 3 and 6 of OA8.

We conducted a series of regression analysis to estimate the treatment effect associated with each topic. Figure A1 shows that the proportion of progressive media discussing both

<sup>20</sup>The distribution of the keyword probability is in the appendix. See OA4.

*Sovereignty* and *Security* differs significantly from that of conservative media. On average, progressive media discuss sovereignty 0.067 (0.053, 0.081) more than conservative media but cover security 0.066 (0.050, 0.082) less. This suggests that ideological orientation influences how South Korean media cover the THAAD deployment. Progressives in the protégé state are skeptical of the patron’s reassurance signal and emphasize sovereignty when discussing the issue. In contrast, conservatives focus on the security aspects of reassurance, aligning with the patron’s intended signal.<sup>21</sup>

---

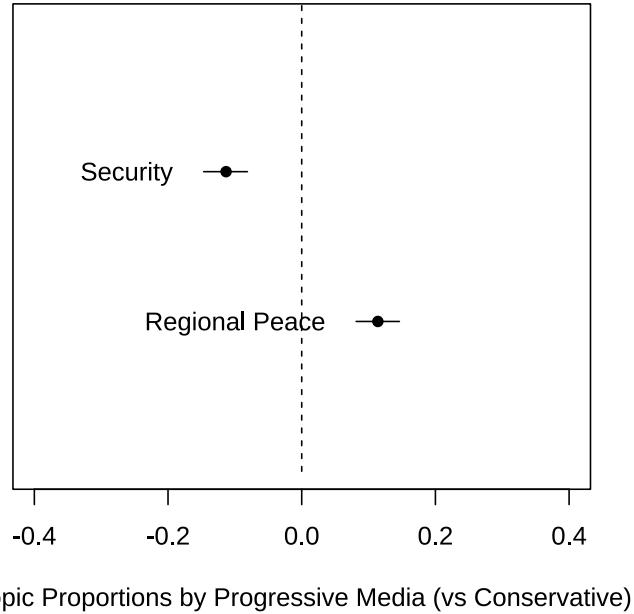
<sup>21</sup>Full models with control variables and multiple splines are in the appendix. See OA8.

### OA3 Results (Nuclear Umbrella, 2 topics)

Table A3: Keywords with Topics (Nuclear Umbrella)

Topic	Keywords
1 Security	미국 (USA), 북한 (North Korea), 한국 (South Korea), 한미 (USA-South Korea), 미사일 (missile), 핵우산 (nuclear umbrella), 한반도 (Korean Peninsula), 대통령 (president), 억제 (deterrence), 전략 (strategy)
2 Regional Peace	북한 (North Korea), 미국 (USA), 대통령 (president), 한국 (South Korea), 중국 (China), 일본 (Japan), 정부 (government), 핵무기 (nuclear weapon), 한반도 (Korean Peninsula), 트럼프 (Trump)

Figure A2: Treatment Effect Associated with Topics (Nuclear Umbrella)



Note: The marginal effect is computed based on models 3 and 6 of OA9.

Figure A2 presents the effect of media bias on the proportion of topics in news articles and shows that the proportion of progressive media discussing both *Regional Peace* and *Security* differs significantly from that of conservative media. On average, the progressive media discuss *Regional Peace* 0.113 (0.082, 0.144) more but cover *Security* 0.110 (0.077, 0.143) less than the conservative media. This suggests that ideology influences how the South Korean media cover the nuclear umbrella, one of the most powerful reassurance tools provided by a patron. Progressives in the protégé state are skeptical of the patron's reassurance signals regarding the nuclear umbrella and emphasize peace within the region, especially the Korean peninsula, when discussing the issue, as they believe that the nuclear umbrella could instigate conflict and threaten regional security by provoking neighboring countries. In contrast, conservatives focus on the domestic security aspects of reassurance, aligning with

the patron's intended signal, particularly in relation to North Korea's military ambitions.<sup>22</sup>

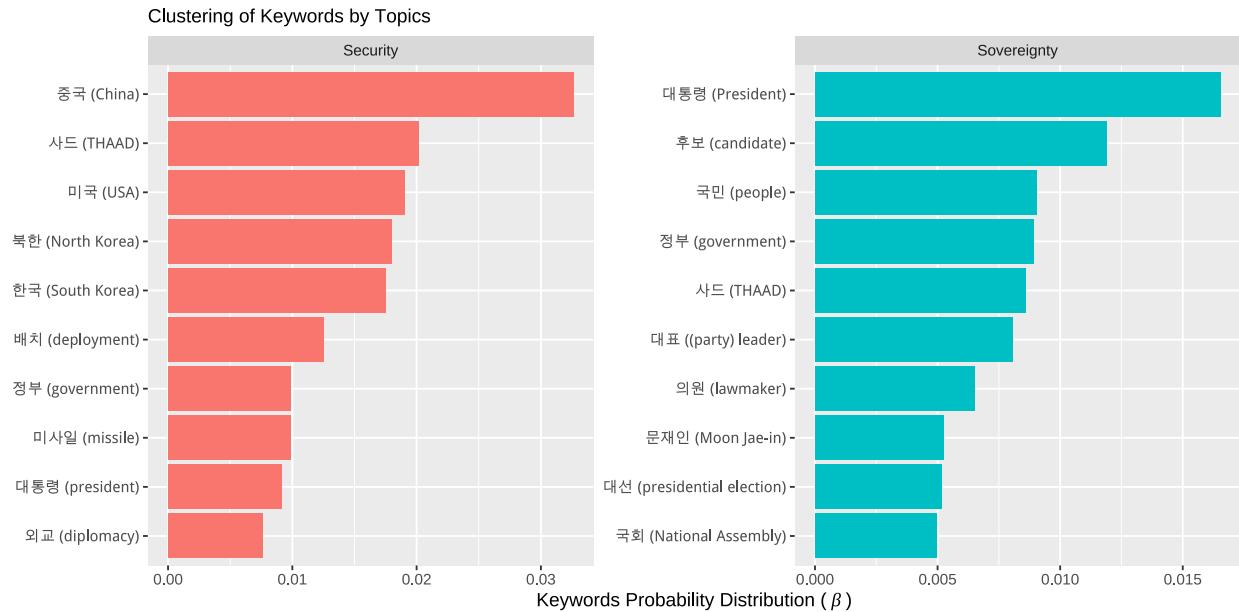
When reviewing the titles and opening sentences of articles associated with the first topic, we observe a clear pattern in how the keywords are used. North Korea is mentioned in the context of rivalry with South Korea, as seen in statements such as "it has been 67 years since the division, and 60 years since the armistice of the Korean War. Today, South and North Korea still live in constant rivalry, facing the threat of war." This suggests that the article does not portray North Korea itself as a security threat but rather frames the ongoing confrontation between South and North Korea as the primary security challenge on the Korean Peninsula. Within this context, the U.S. nuclear umbrella is described as exacerbating the problem. In contrast, the second topic, labeled as *Security*, frames North Korea itself as a threat due to its military ambitions. Furthermore, other articles explicitly state that "we must open the path to realizing the dream of a 'nuclear-free peaceful Korean Peninsula'..." or "we should think not only of the victims of the indiscriminate nuclear attacks on Hiroshima and Nagasaki 64 years ago but also of the specter of nuclear weapons that has loomed over the world since that day."<sup>23</sup> Therefore, we conclude that the keywords in the first topic are primarily used in the context of *Regional Peace*.

---

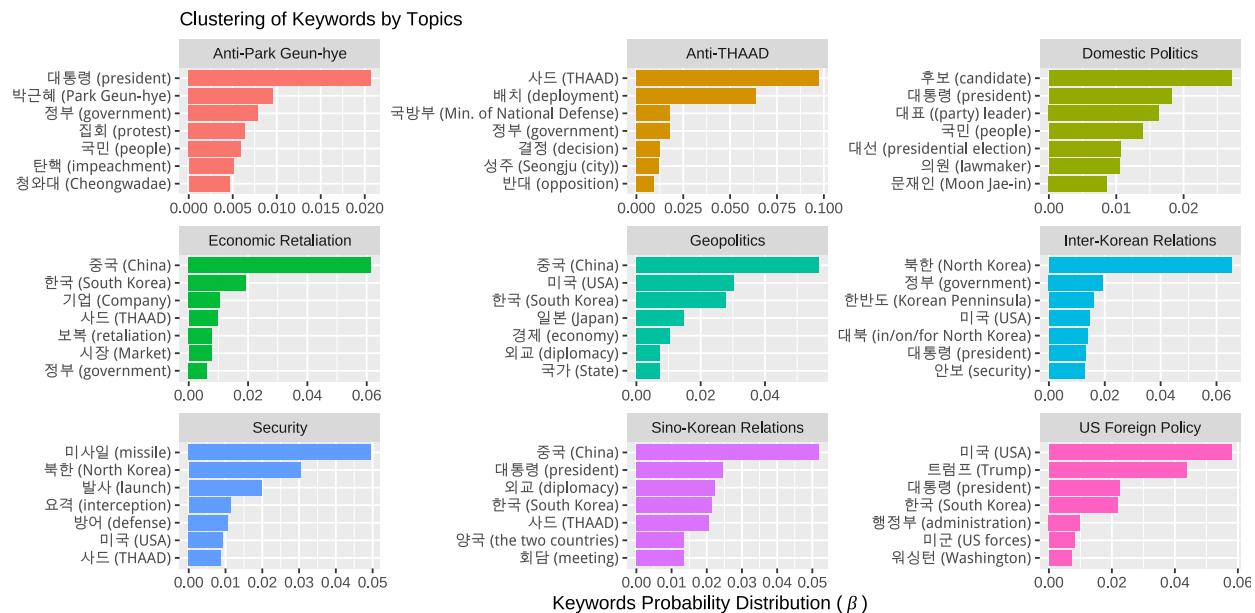
<sup>22</sup>See OA8.

<sup>23</sup>See OA21.3.

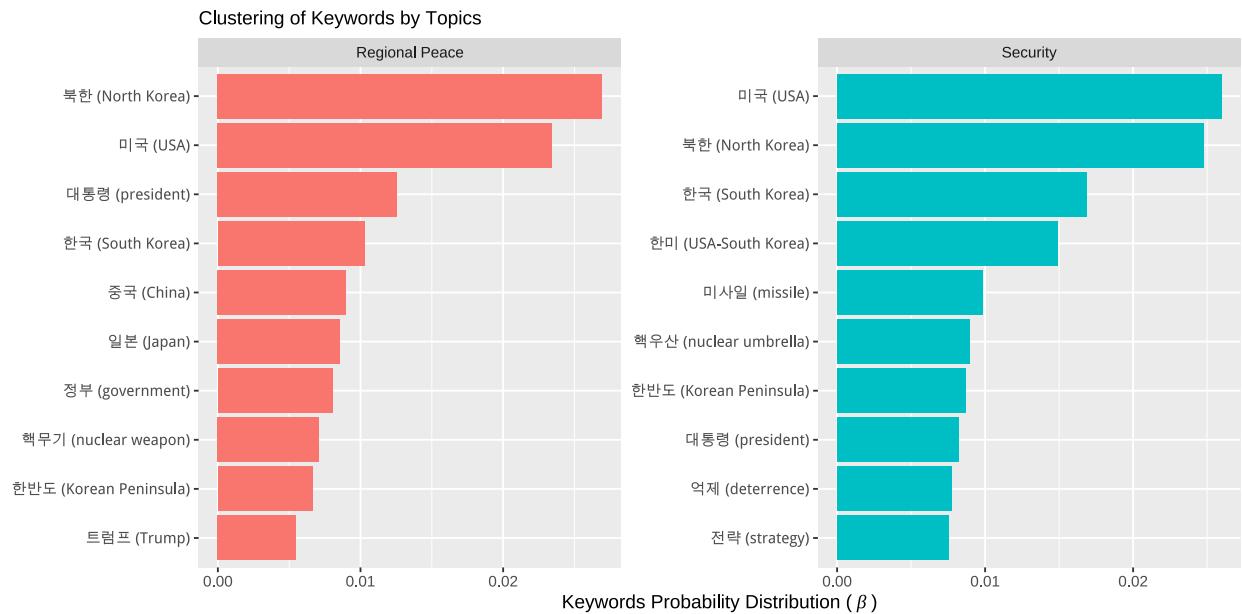
## OA4 Keyword Probability Distribution by Topic (THAAD)



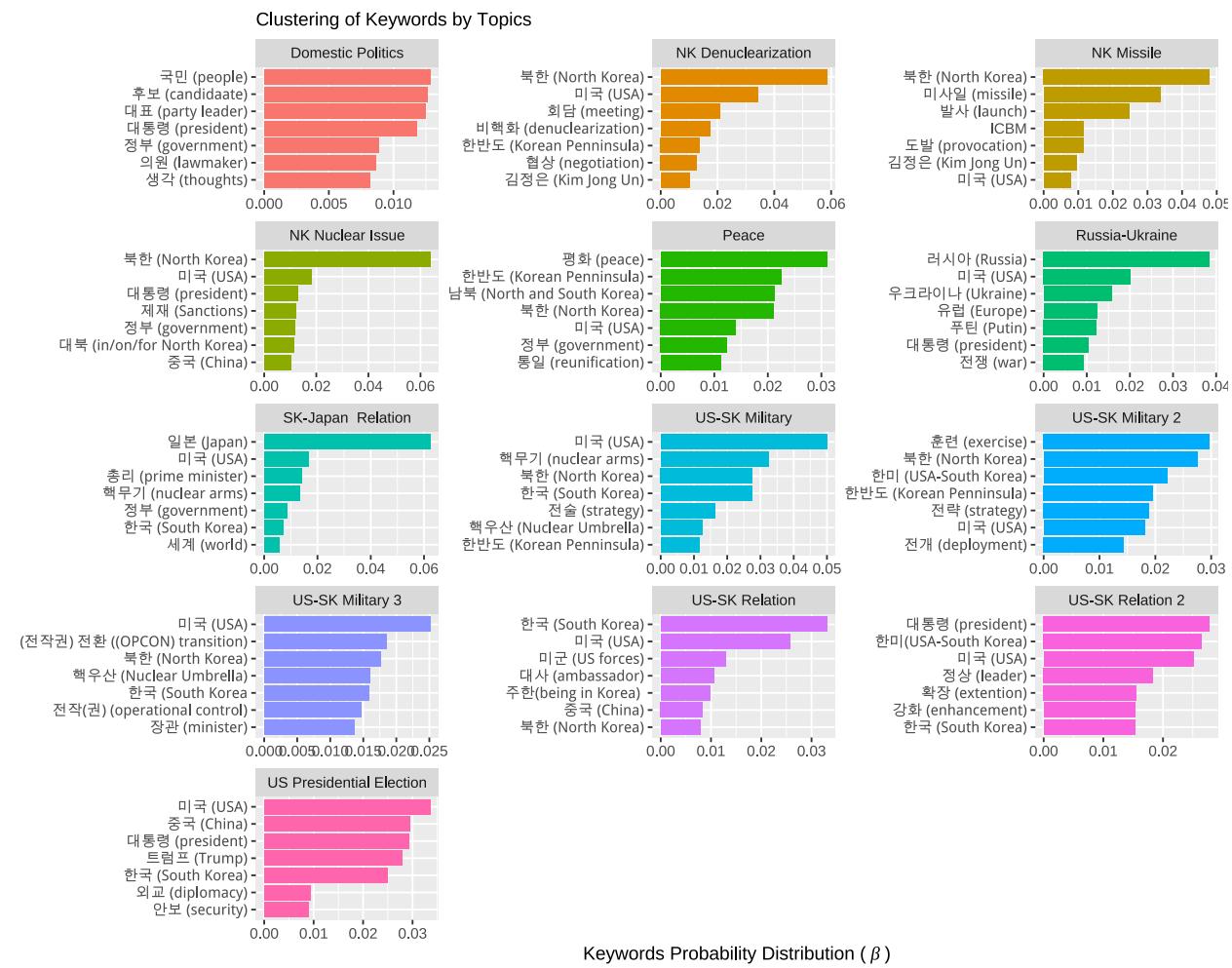
## OA5 Keywords Probability Distribution by Topic (THAAD, 9 topics)



## OA6 Keyword Probability Distribution by Topic (Nuclear Umbrella)



## OA7 Keyword Probability Distribution by Topic (Nuclear Umbrella, 13 topics)



## OA8 Regression Result (THAAD)

	Sovereignty			Security		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.309*** (0.006)	-0.052* (0.024)	0.177** (0.060)	0.690*** (0.006)	1.052*** (0.024)	0.820*** (0.060)
Progressive Media	0.092*** (0.007)	0.084*** (0.008)	0.067*** (0.007)	-0.091*** (0.007)	-0.085*** (0.008)	-0.066*** (0.008)
President Moon		-0.182*** (0.011)	-0.165*** (0.016)		0.181*** (0.012)	0.165*** (0.016)
President Yoon			-0.344*** (0.026)	-0.439*** (0.030)		0.342*** (0.026)
s(q_seq, 3)1			1.005*** (0.057)			-1.007*** (0.057)
s(q_seq, 3)2			0.056 (0.046)			-0.051 (0.046)
s(q_seq, 3)3			0.986*** (0.053)			-0.984*** (0.051)
s(q_seq, 6)1				-0.189 (0.098)		0.190 (0.097)
s(q_seq, 6)2				0.156** (0.056)		-0.154** (0.056)
s(q_seq, 6)3				0.351*** (0.070)		-0.349*** (0.070)
s(q_seq, 6)4				-0.075 (0.069)		0.074 (0.068)
s(q_seq, 6)5				0.698*** (0.078)		-0.692*** (0.079)
s(q_seq, 6)6				0.722*** (0.077)		-0.724*** (0.076)
docs	12405	12405	12405	12405	12405	12405

Note: \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

## OA9 Regression Result (Nuclear Umbrella)

	Security			Peace		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.589*** (0.011)	0.512 (0.305)	0.657* (0.325)	0.411*** (0.011)	0.492 (0.294)	0.394 (0.315)
Progressive Media	-0.176*** (0.016)	-0.110*** (0.017)	-0.114*** (0.016)	0.175*** (0.016)	0.111*** (0.017)	0.113*** (0.016)
President Kim		-0.293 (0.286)	-0.415 (0.287)		0.284 (0.276)	0.375 (0.280)
President Roh		0.099 (0.218)	-0.124 (0.214)		-0.110 (0.212)	0.091 (0.211)
President Lee		0.093 (0.200)	-0.210 (0.197)		-0.115 (0.196)	0.188 (0.196)
President Park		0.053 (0.187)	-0.050 (0.184)		-0.078 (0.186)	0.030 (0.182)
President Moon		-0.104 (0.187)	-0.172 (0.184)		0.076 (0.184)	0.155 (0.182)
President Yoon		0.177 (0.193)	-0.012 (0.192)		-0.203 (0.189)	-0.002 (0.188)
s(q_seq, 3)1		-0.589 (0.384)			0.600 (0.382)	
s(q_seq, 3)2		0.332 (0.240)			-0.300 (0.235)	
s(q_seq, 3)3		-0.017 (0.249)			0.037 (0.250)	
s(q_seq, 6)1			-0.393 (0.325)			0.384 (0.327)
s(q_seq, 6)2			0.342 (0.259)			-0.378 (0.249)
s(q_seq, 6)3			-0.309 (0.282)			0.279 (0.274)
s(q_seq, 6)4			0.230 (0.267)			-0.264 (0.262)
s(q_seq, 6)5			0.053 (0.285)			-0.091 (0.273)
s(q_seq, 6)6			-0.211 (0.277)			0.175 (0.271)
docs	2216	2216	2216	2216	2216	2216

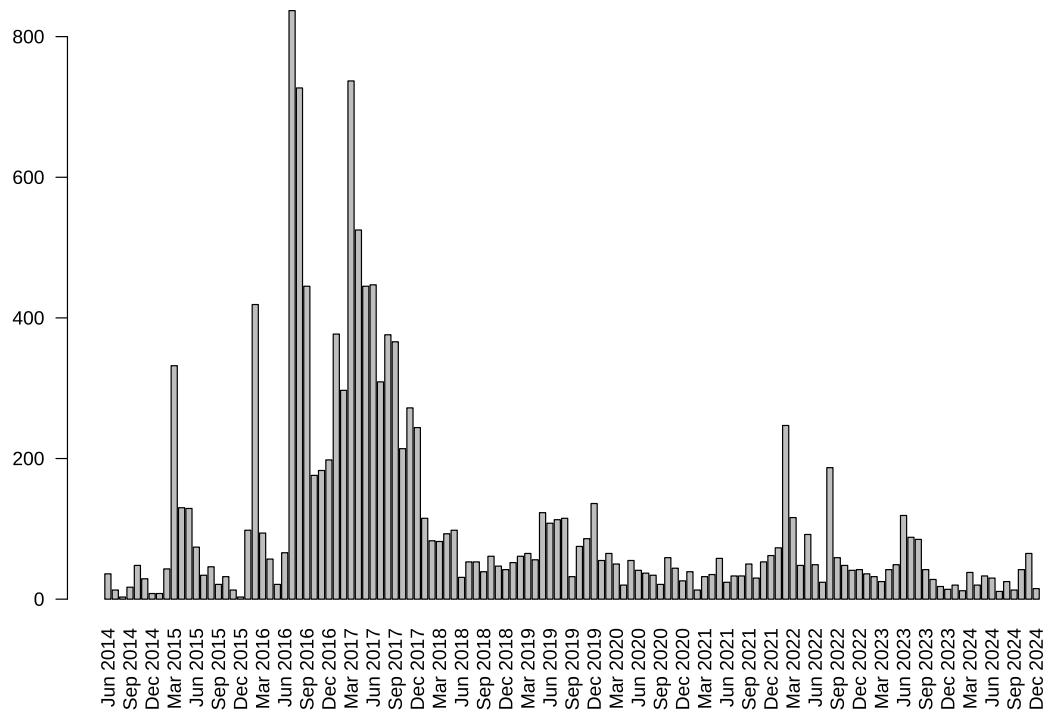
Note: \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

## OA10 Legislator Response to THAAD Deployment

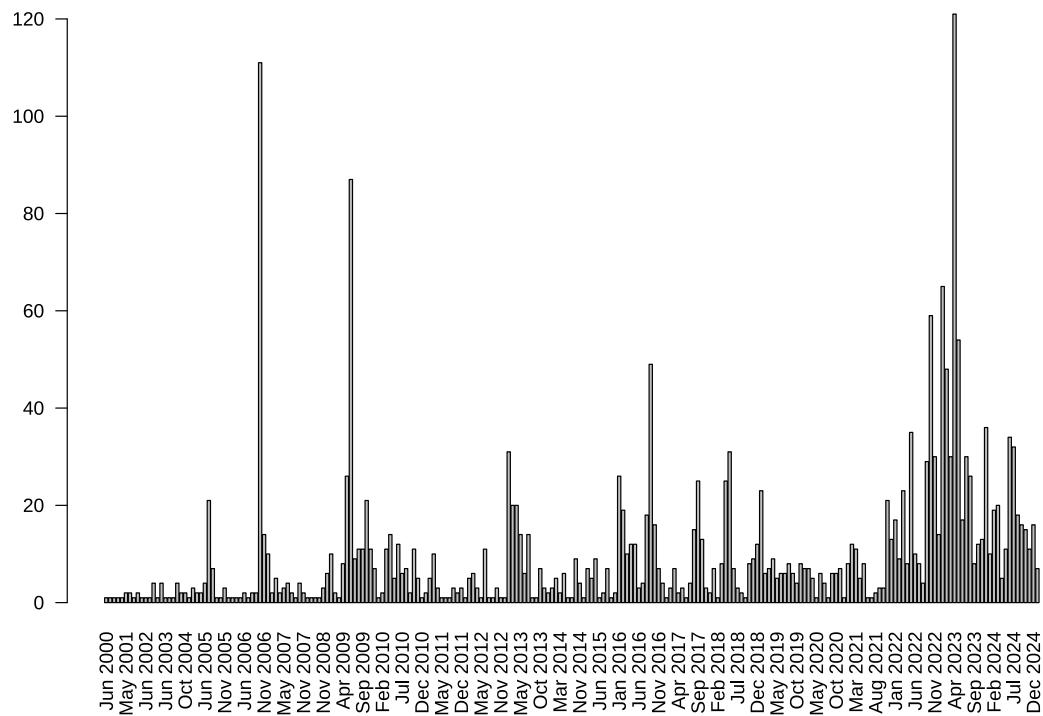
	<i>Dependent variable:</i>		
	Negative <i>logistic</i>	Positive <i>logistic</i>	Neg.-Pos. <i>ordered logistic</i>
	(1)	(2)	(3)
Progressive Party	1.879* (0.831)	-3.360** (1.096)	-3.044*** (0.827)
Constant	-2.526*** (0.741)	-0.074 (0.388)	
Log Likelihood	-27.721	-23.146	-47.041
Negative Neutral			-3.661
Neutral Positive			0.101
Observations	59	59	59

*Note:* Robust standard errors clustered by legislator in parentheses. Legislator is the unit of analysis. \*p<0.05; \*\*p<0.01; \*\*\*p<0.001

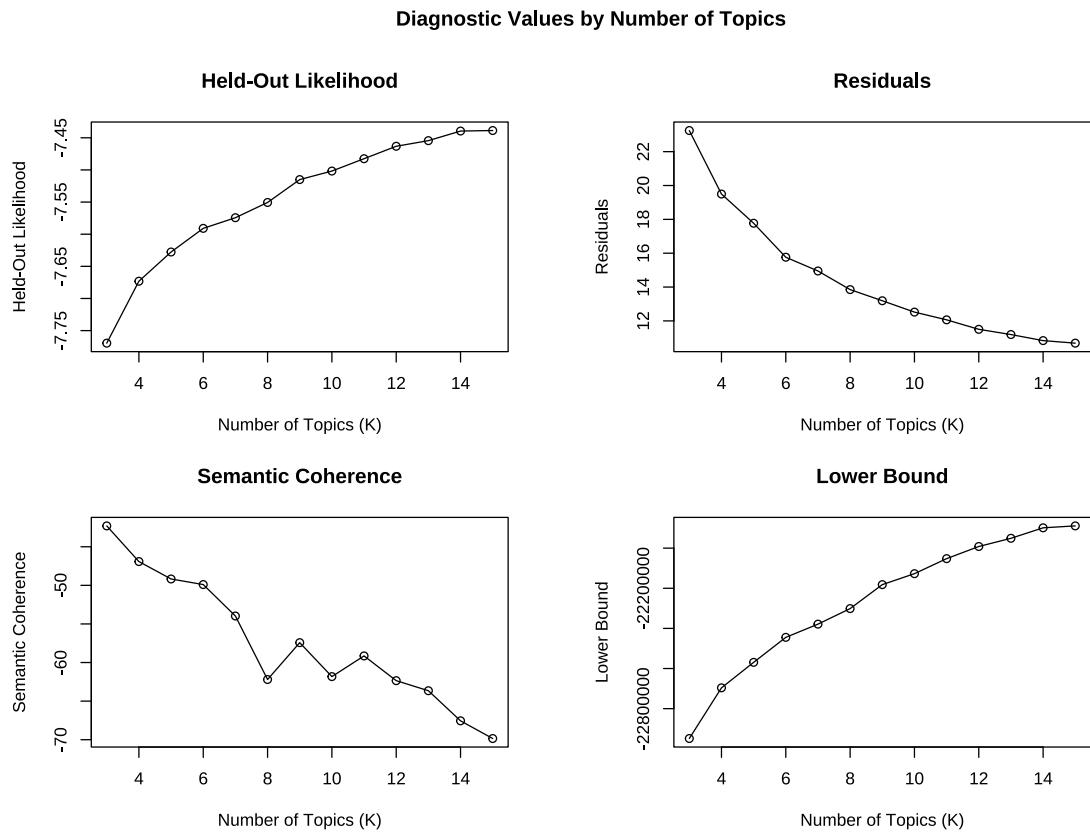
## OA11 Media Coverage by Time (THAAD)



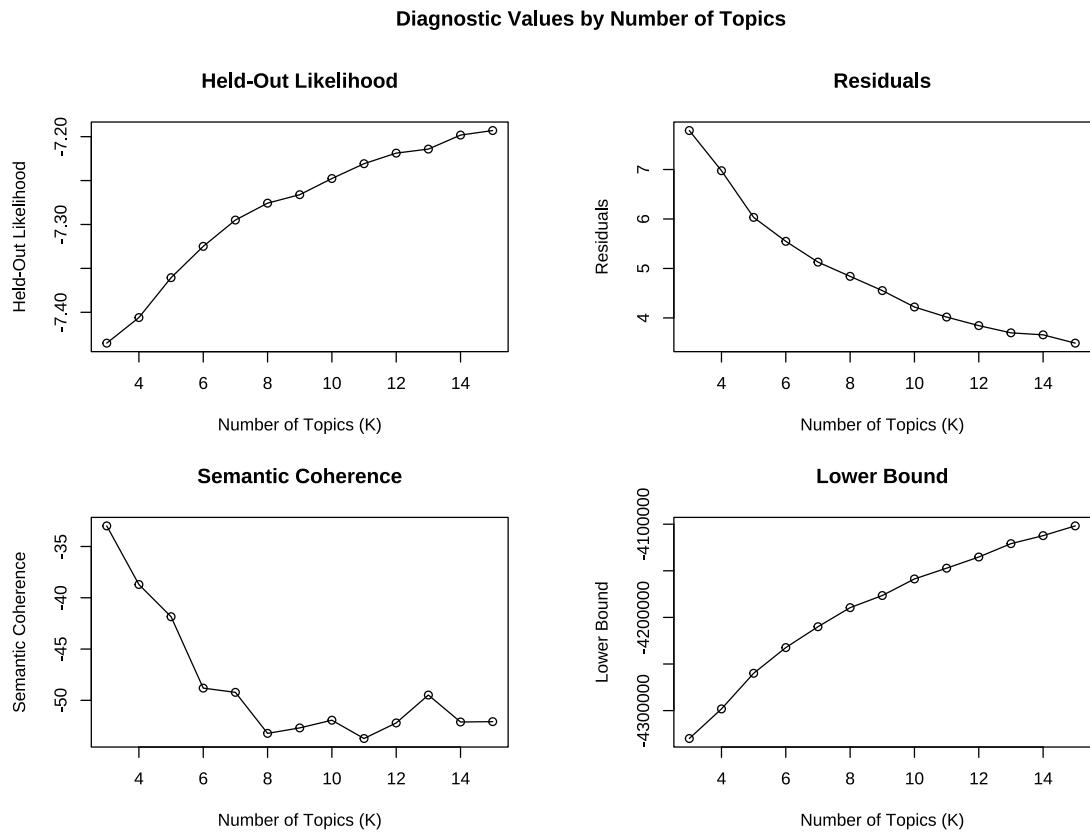
## OA12 Media Coverage by Time (Nuclear Umbrella)



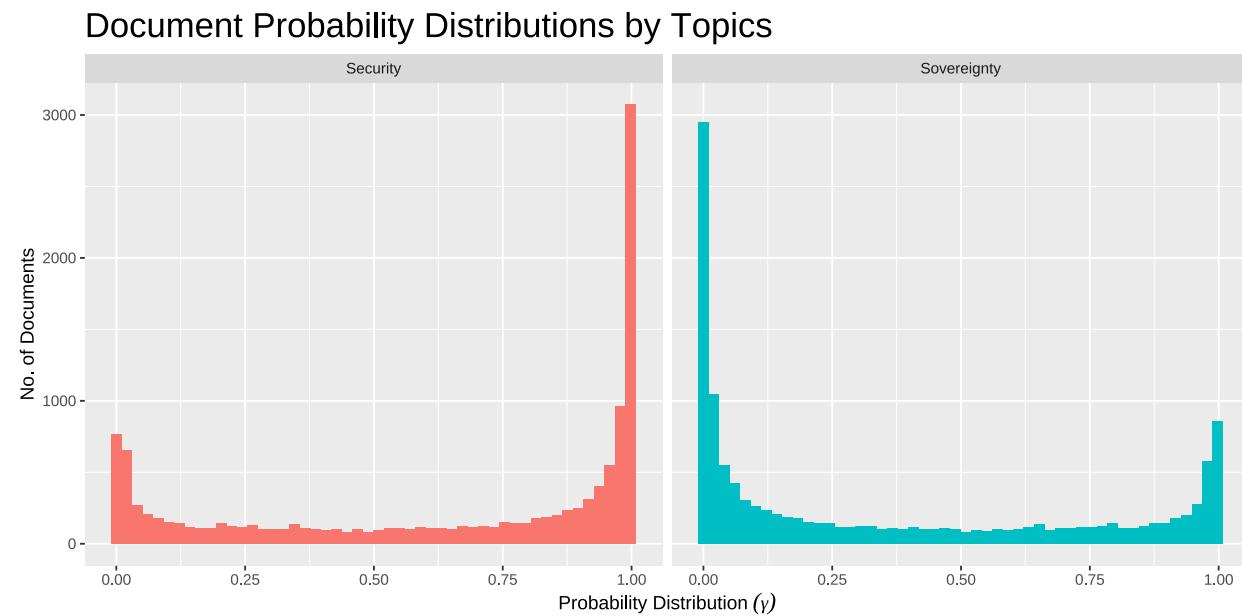
## OA13 Diagnostic Values by Number of Topics (THAAD)



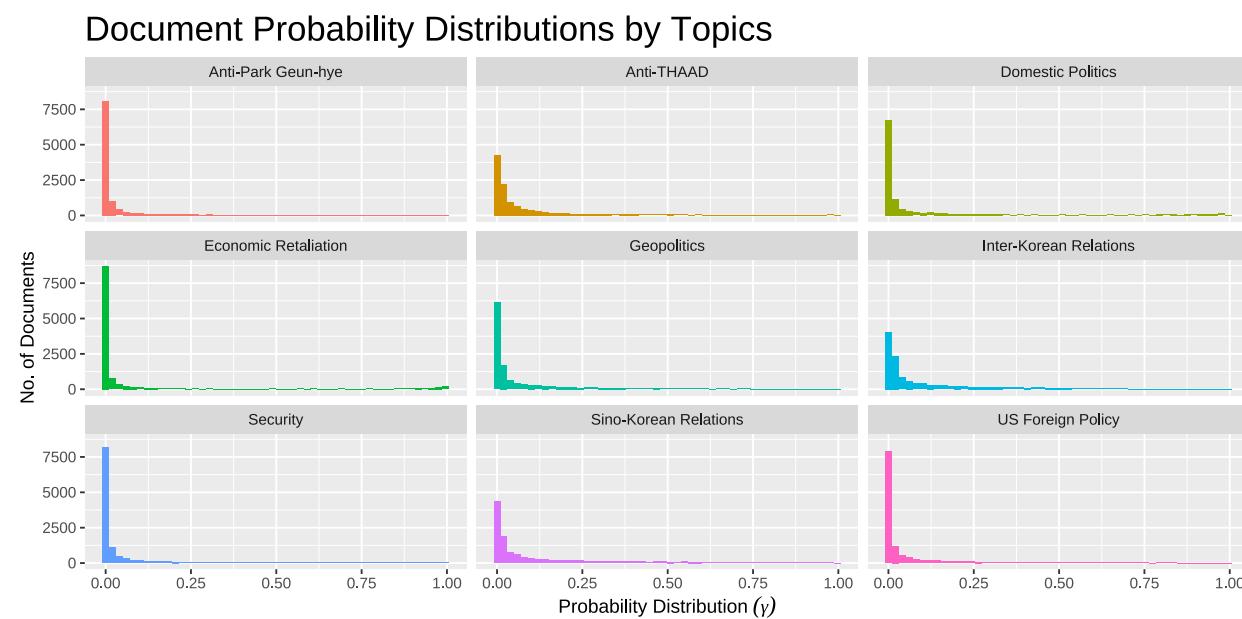
## OA14 Diagnostic Values by Number of Topics (Nuclear Umbrella)



## OA15 Document Probability Distribution by Topic (THAAD)

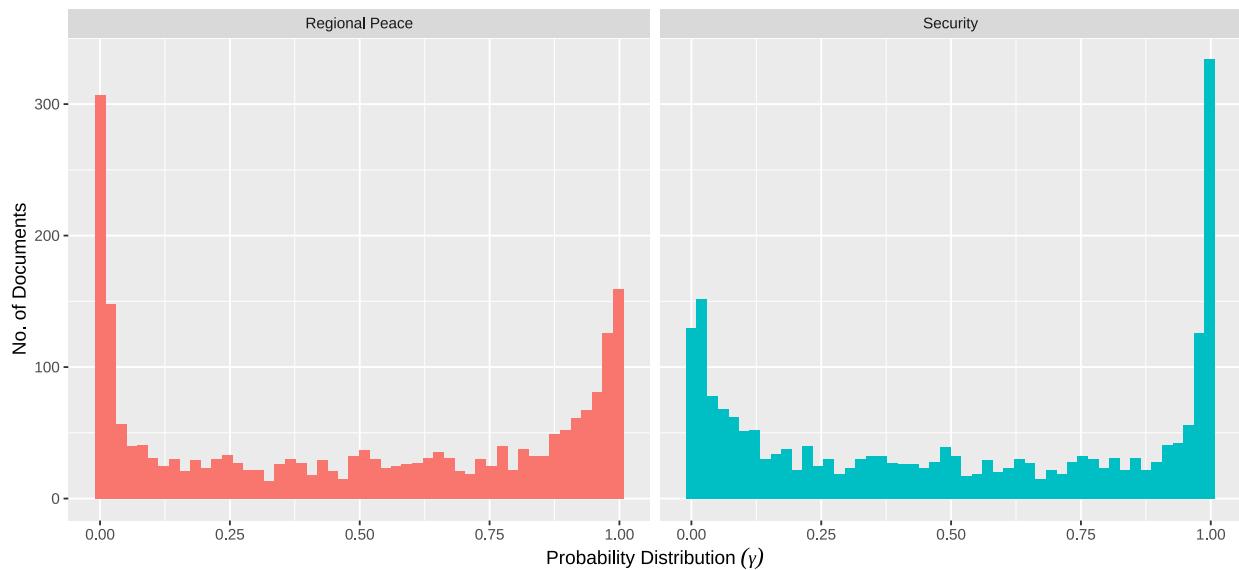


## OA16 Document Probability Distribution by Topic (THAAD, 9 Topics)

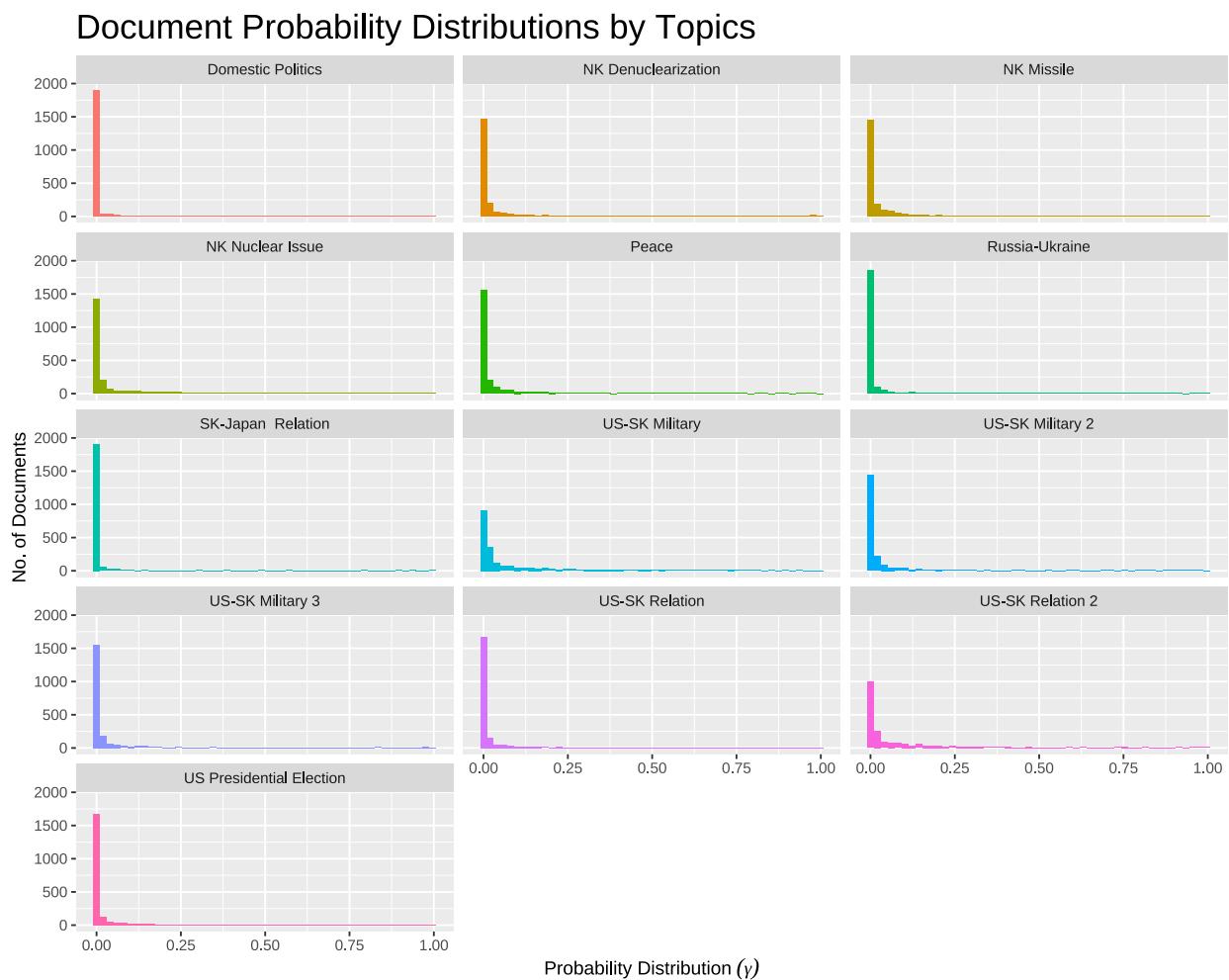


## OA17 Document Probability Distribution by Topic (Nuclear Umbrella)

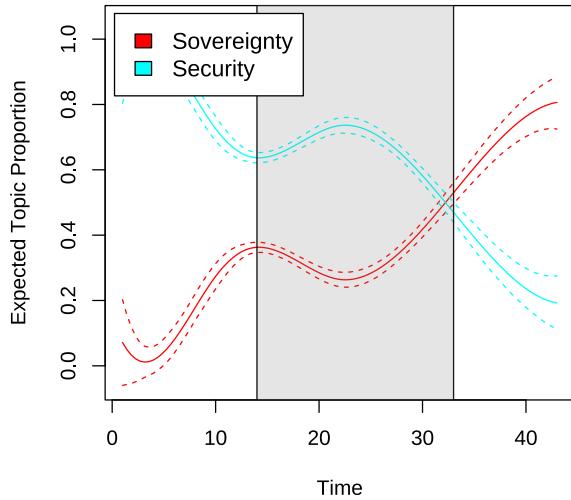
Document Probability Distributions by Topics



## OA18 Document Probability Distribution by Topic (Nuclear Umbrella, 13 Topics)

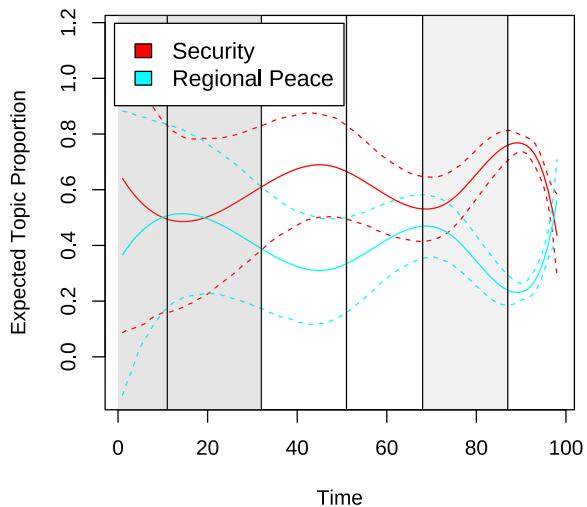


## OA19 Topic Distribution by Time (THAAD)



Note: The distribution is computed based on models 3 and 6 of OA8.

## OA20 Topic Distribution by Time (Nuclear Umbrella)



Note: The distribution is computed based on models 3 and 6 of OA9.

## OA21 Top 10 Articles Leverage Each Topic

### OA21.1 THAAD – Sovereignty

[1] "[전문]민주당 경선 7차 토론회 “강력한 지방분권 이루겠다” 공감 더불어민주당 대선 후보 경선 7차 토론회가 24일 12시30분 광주 MBC 공개홀에서 열렸다. 다음은 토론 전문이다. ■출마의 변 최성=빛고을 광주출신 최성이다. 아내도 전주댁이다. 세월호 인양 순간 호남 민심은 정권교체이다. 김대중 정신 계승하는 민주당 중심으로 국민의당과 개혁 공동정부로 가능하다. 민주당 호남 출신 유일한 후보로 사과한다. 분당 과정.."

"[Full Text] Democratic Party Primary 7th Debate 'Achieving Strong Decentralization.' The 7th debate for the Democratic Party's presidential primary was held on the 24th at 12:30 PM in the Gwangju MBC public hall. Below is the full transcript of the debate. ■ Opening Remarks Choi Seong: I am Choi Seong, from the beautiful Gwangju. My wife is from Jeonju. The moment the Sewol ferry was raised, the sentiment in Honam (Southwest region) was for regime change. We can achieve a reform-oriented government with the Democratic Party, inheriting the spirit of Kim Dae-jung, and forming a coalition with the People's Party. I apologize as the only candidate from Honam in the Democratic Party..."

[2] "[11 12 민중총궐기 라이브-2탄] 시대의 어둠을 밝히는 촛불 든 두 소녀 ■13일 03시50분 : 경찰, 경복궁역 인근 집회 연행 나서 노동당 차량 압류팩트TV의 실시간 중계에 따르면 오전 3시30분 현재 경찰들이 연좌농성 중인 시민들을 연행하는 과정에서 집회 참가자들과 격한 몸싸움이 벌어졌다. 이 과정에서 한 시민이 부상을 입어 3시40분쯤 응급차에 실려 가기도 했다. 현장에 남아있는 약 1000여명의 시민들은 '폭력경찰 ..'"

"[11 12 People General Protest Live - Part 2] Two Girls Holding Candles, Lighting the Darkness of the Era ■ 13th, 03:50 AM: Police Begin Arresting Protesters Near Gyeongbokgung Station, Seizing Workers' Party Vehicles According to live coverage by Fact TV, at 3:30 AM, police clashed with protesters during the arrest of citizens involved in a sit-in protest. During this confrontation, one citizen was injured and was taken to the hospital around 3:40 AM. About 1,000 citizens who remained at the scene chanted, 'Violent police...'."

[3] "촛불시민 33명이 말하는 '탄핵, 봄 그리고 대한민국' 역사적인 '2016헌나1'의 결론은 "대통령 박근혜를 파면한다"였다. 대한민국 헌정 사상 첫 대통령 파면이라는 거대한 결정을 이끌어낸 가장 강력한 힘은 다섯 달 가까운 기간 동안 눈 비를 무릅쓰고 전국의 광장을 지킨 촛불시민이다. 이들은 눈 비가 내리고 혹한이 몰아쳐도 북쪽 끝 서울 광화문광장에서 남쪽 끝 제주시청 앞 거리까지, 서쪽의 광주 금남로와 동.."

"33 Candlelight Citizens Speak About 'Impeachment, Spring, and the Republic of Korea' ■ The historic conclusion of '2016 Heonna 1' was 'Impeach President Park Geun-hye.' The most powerful force behind this monumental decision—the first-ever presidential impeachment in the history of South Korea—was the candlelight citizens who stood in the nation's public squares for nearly five months, braving snow and rain. Regardless of snow, rain, or the harsh winter cold, these citizens gathered from Gwanghwamun Square in the north to Jeju City Hall in the south, and from the west in Gwangju's Geumnam-ro to the east..."

[4] "이것만 보면 다 안다, 최순실 게이트 총정리 3탄■ 박근혜 대통령은 하야하라! 외침

이 전국을 뒤덮고 있습니다. 기업의 돈을 갈취한 재단 설립이 대통령 지시였다는 증언이 속속 나옵니다. 청와대와 행정부를 휘두르며 2018평창동계올림픽, 한류에 이르기까지 이 권을 챙긴 최순실의 국정농단 사례는 끝을 모르고 쌓입니다. ‘최순실 게이트 총정리’를 선보여 온 <한겨레>가 3탄을 내놓습니다. 이것만 읽으면, 최순실 ..”

"Everything You Need to Know, Complete Summary of the Choi Soon-sil Gate, Part 3 ■ President Park Geun-hye, Resign! The cry is sweeping across the nation. Testimonies are emerging, confirming that the establishment of a foundation to extort money from corporations was directed by the president. The cases of Choi Soon-sil's abuse of power, manipulating the Blue House and the administration, and profiting from events like the 2018 Pyeongchang Winter Olympics and the Korean Wave continue to pile up. Hankyoreh newspaper, which has been presenting the complete summary of the Choi Soon-sil Gate, releases Part 3. If you read this, you will understand everything about Choi Soon-sil..."

[5] "서청원 당 대표 출마설? 패장의 마지막 임무는 '질서있는 퇴각' ■ '카르마'(karma)라는 말이 있습니다. 우리 말로 업(業)이나 업보(業報)라고 풀이합니다. 업은 앞날에 선악의 결과를 가져오는 소행입니다. 몸과 입과 마음으로 짓는 것입니다. 업보는 선악의 행업으로 말미암은 인과응보(因果應報)를 뜻합니다. 인간은 누구나 카르마에 갇혀서 살고 있습니다. 정치적 선택과 행위를 선과 악으로 나눌 수는 없을 것입니다. .."

"Seocheongwon Running for Party Leader? The Last Mission of the Loser is 'Orderly Retreat' ■ There is a term called 'karma.' In Korean, it is translated as 업 (eop) or 업보 (eopbo). Karma refers to actions that bring the consequences of good or evil in the future. It is done through the body, speech, and mind. Eopbo means the cause and effect of good and bad actions. Every human is trapped in karma. Political choices and actions cannot simply be divided into good and evil."

[6] "'추미애 '몰아주기'로 강한 야당을' vs "'절대 다수'가 잘못하면 당 망해" ■ 더불어민주당의 전국대의원대회(전대)를 4일 앞둔 지난 23일. 더민주 서울 금천 지역위원회 사무실에는 대의원 40여명이 한자리에 모여 열띤 토론을 벌였다. 이번 전대에서 누구를 당대표로 지지할 것인가 토론 주제였다. 지역위원장이 대의원 당원들에게 특정 후보를 찍으라고 명령하는, 이른바 '오더'를 '때리지 않겠다'는 의지의 표현일까. 자리를 만든 금천 .."

"Choo Mi-ae's 'Patronage' to Create a Strong Opposition Party' vs 'If the 'Absolute Majority' is Wrong, the Party Will Collapse' ■ On the 23rd, four days before the Democratic Party of Korea's National Convention, about 40 delegates gathered at the office of the Gyeongcheon district committee in Seoul for a heated discussion. The topic of the debate was whom to support as the party leader in the upcoming convention. Was this an expression of their intention not to 'give orders' to delegates, where the regional committee chair doesn't instruct members to vote for a specific candidate, commonly known as 'order'?"

[7] "[D-4 오늘의 대선 현장] 19대 대선 사전투표율 26.06% 1107만2310명 참여 경향신문은 9일부터 5월9일 대선까지 매일 '오늘의 대선 현장' 라이브 업데이트를 전합니다. 매일 아침 경향신문과 주요 언론의 보도, 각 후보와 정당의 활동, 시민사회 움직임 등 대선 관련 주요 소식을 알려드립니다. (표기 시간은 발생 출고 시간이 아니라 경향닷컴 게재 시간입니다. ■ 19대 대선 사전투표율 26.06% 1107만2310명 참여(19..)"

[D-4 Today's Election Scene] 19th Presidential Election Early Voting Rate: 26.06%, 11,072,310 Participants ■ Kyunghyang Shinmun will provide daily live updates from the election scene from May 9th until the presidential election. Every morning, we'll share major election-related news, including reports from Kyunghyang Shinmun and other major media outlets, activities of candidates and political parties, and movements in civil society. (The listed times are not the actual event times but the posting times on Kyunghyang.com.) ■ 19th Presidential Election Early Voting Rate: 26.06%, 11,072,310 Participants (19...)

[8] "[D-30 오늘의 대선 현장] 문재인 “安, 사드합의 넘겨받아야 한다면 위안부합의도 끝난 문제냐” 경향신문은 9일부터 5월9일 대선까지 매일 ‘오늘의 대선 현장’ 라이브 업데이트를 전합니다. 매일 아침 경향신문과 주요 언론의 보도, 각 후보와 정당의 논평 등 대선 관련 주요 소식을 알려드립니다. ■ 오후 4시50분 : 문재인 “가까운 벗의 죽음처럼 느껴집니다” 故 김영애 추모 문재인 더불어민주당 대선후보는 페이스북에 이날 췌장암 투병 중 별세..."

"[D-30 Today's Election Scene] Moon Jae-in: 'If Ahn Takes Over the THAAD Agreement, Does That Mean the Comfort Women Agreement Is Also a Done Deal?' ■ Kyunghyang Shinmun will provide daily live updates from the election scene from May 9th until the presidential election. Every morning, we'll share major election-related news, including reports from Kyunghyang Shinmun and other major media outlets, commentary from candidates and political parties, and more. ■ 4:50 PM: Moon Jae-in: 'It Feels Like the Death of a Close Friend' - Memorial for the Kim Young-ae. Moon Jae-in, the Democratic Party's presidential candidate, posted on Facebook that he felt like the death of Kim Young-ae, who passed away from pancreatic cancer today, was like the loss of a close friend."

[9] "'이번 대선, 위력적 선거연대는 없다' ■ 박근혜 대통령에 대한 탄핵 심판이 속도를 냈에 따라 대통령 선거를 향한 움직임도 빨라지고 있습니다. 대선주자들의 출마 선언이 속속 이어지고 있습니다. 주자들의 선거전과 별개로 제3지대론과 빅텐트론 등 후보 연대 움직임도 활발합니다. 이번 대선의 변수와 전망에 대해 정치평론가인 유창선 박사와 정치전략가인 박성민 정치컨설팅민 대표, 여론분석 전문가인 정..."

"'This Presidential Election Won't Have a Powerful Electoral Coalition' ■ As the impeachment trial of President Park Geun-hye gains momentum, the movement toward the presidential election is also accelerating. The announcements of presidential candidates are coming one after another. Separately from the election campaigns, movements for coalition-building, such as the third-party theory and the big tent theory, are also active. Regarding the variables and outlook for this presidential election, political commentator Dr. Yoo Chang-seon, political strategist Park Seong-min, and public opinion analysis expert Jeong..."

[10] "'진보가치', 양당체제 알리바이가 되다 ■ 한겨레21 커버스토리는? 주간지 <한겨레21>의 커버스토리를 매주 화요일 오후 3시마다 한겨레 홈페이지에서 보실 수 있습니다. 더 많은 한겨레21 기사를 보고 싶다면, 한겨레21 홈페이지([h21.hani.co.kr](http://h21.hani.co.kr))로. "(더불어민주당의 위성정당인) 더불어민주연합을 추진하는 (시민사회단체) 사람들은 윤석열 정부 심판과 정치개혁을 위해서 불가피한 전술적..."

"'Progressive Values' Become an Alibi for the Two-Party System ■ What is the cover story of Hankyoreh 21? The weekly magazine Hankyoreh 21 publishes its cover story every Tuesday

at 3 PM on the Hankyoreh website. To read more articles from Hankyoreh 21, visit the Hankyoreh 21 homepage ([h21.hani.co.kr](http://h21.hani.co.kr)). ‘People from civic organizations pushing for the creation of the Democratic Party’s satellite party, Democratic Party Union, argue that it is an inevitable tactical move for judging the Yoon Seok-youl government and for political reform.’”

## OA21.2 THAAD – Security

[1] "[단독]헬비 "주한미군 현 수준 유지, 고정된 바 없어" ■ "한국에 대한 방위공약은 철통(ironclad)같다. (다만) 이를 어떻게 이행할지는 고정되지 않았다(not fixed)." 데이비드 헬비 미국 국방부 인도태평양안보 담당차관보 대행(사진)은 지난달 31일 동아일보와의 단독 서면 인터뷰에서 '주한미군을 현재 규모로 유지할지 확인할 수 있느냐'는 질문에 이렇게 답했다. 그가 한국 언론과 인터뷰를 한.."

"[Exclusive] Helvey: 'U.S. Troops in Korea May Stay at Current Level, No Fixed Plans' ■ 'The U.S. defense commitment to South Korea is ironclad. However, how this will be implemented is not fixed.' David Helvey, the Acting Assistant Secretary of Defense for Indo-Pacific Security Affairs at the U.S. Department of Defense (pictured), responded in this way during an exclusive written interview with Dong-A Ilbo on January 31. When asked if he could confirm whether U.S. troops in South Korea would be maintained at their current level, he replied with this statement."

[2] "[전문] 제54차 한 미 안보협의회(SCM) 공동성명" ■ 한 미 군 당국이 3일(현지시간) 워싱턴에서 제54차 한 미안보협의회(SCM)를 개최하고 공동성명을 발표했다. 이종섭 국방부 장관과 로이드 오스틴 미 국방부 장관은 이번 회의에서 고도화되는 북핵 위협을 억제하기 위해 "동맹의 능력과 정보공유, 협의절차, 공동기획 및 실행 등을 더욱 강화해 나가기로 했다"고 밝혔다. 두 장관은 또한 "필요에 따라 미국.."

[Full Text] Joint Statement of the 54th Korea-U.S. Security Consultative Meeting (SCM) ■ The Korean and U.S. military authorities held the 54th Korea-U.S. Security Consultative Meeting (SCM) in Washington on the 3rd (local time) and released a joint statement. Minister of National Defense Lee Jong-seop and U.S. Secretary of Defense Lloyd Austin stated that in order to deter the growing North Korean nuclear threat, they would 'strengthen the alliance's capabilities, information sharing, consultation procedures, joint planning, and execution.' The two ministers also said, 'If necessary, the United States...'"

[3] "[전문]한미안보협의회의 공동성명 미 국방 "김정은 정권 종말" ■ 한국과 미국 국방부는 3일(현지시간) 미국 워싱턴에서 제54차 한미안보협의회(SCM)를 개최하고 "맞춤형 억제전략 개정을 통해 고도화되는 북한의 핵 미사일 위협을 효과적으로 억제하고 대응하기 위한 기본틀을 구비할 것"이라고 합의했다. 다음은 SCM 공동성명 전문. 1. 제54차 한미안보협의회(SCM, Security Consultative Mee..)"

[Full Text] Joint Statement of the Korea-U.S. Security Consultative Meeting: U.S. Secretary of Defense 'End of Kim Jong-un's Regime' ■ On the 3rd (local time), the South Korean and U.S. ministries of defense held the 54th Korea-U.S. Security Consultative Meeting (SCM) in Washington and agreed to 'establish a basic framework to effectively deter and respond to the escalating North Korean nuclear and missile threats through revisions to the tailored deterrence strategy.' Below is the full text of the SCM joint statement. 1. The 54th Korea-U.S. Security Consultative Meeting (SCM, Security Consultative Meeting)..."

[4] "[공동 기고]사드가 기술적 측면에서 한국 방어에 백해무익한 이유" ■ 한국이 미국의 고고도미사일방어(THAAD) 시스템을 자국 영토에 설치하기로 한 결정은 모든 동북아 지역에 중요한 정치적 함의를 갖는다. 한 중관계, 미 중관계 그리고 미 일 중 관계에 파장을

미칠 것이며 동북아의 모든 주요 국가 행위자들 사이의 관계를 염청나게 긴장시켜 대북 공조에 영향을 줄 가능성은 높다. 한국에 배치될 사드 방어 시스템의 능력과 .."

"[Joint Contribution] Reasons Why THAAD Is Technically Harmful to South Korea's Defense■ South Korea's decision to install the U.S. Terminal High Altitude Area Defense (THAAD) system on its territory carries significant political implications for the entire Northeast Asia region. It will have ripple effects on China-South Korea relations, U.S.-China relations, and U.S.-Japan-China relations, and is likely to create immense tension in the relationships among all major regional actors, potentially affecting cooperation on North Korea. The capabilities of the THAAD defense system deployed in South Korea and..."

[5] "[전문] 제49차 한미 안보 협의회의(SCM) 공동 성명 [전문] 제49차 한미 안보 협의회의(SCM) 공동 성명■ 1. 제49차 한미 안보 협의회의(SCM)가 2017년 10월 28일 서울에서 개최되었다. 이 회의는 송영무 대한민국 국방부장관과 제임스 매티스 미합중국 국방부장관이 공동 주재하였으며, 양국의 국방 및 외교 분야의 고위 관계관들이 참석하였다. 이 회의에 앞서 2017년 10월 27일 대한민국 합참.."

[Full Text] Joint Statement of the 49th Korea-U.S. Security Consultative Meeting (SCM)■ The 49th Korea-U.S. Security Consultative Meeting (SCM) was held on October 28, 2017, in Seoul. The meeting was co-chaired by Minister of National Defense Song Young-moo of the Republic of Korea and Secretary of Defense James Mattis of the United States, with senior officials from both countries' defense and foreign ministries in attendance. Prior to this meeting, on October 27, 2017, the Republic of Korea's Joint Chiefs of Staff..."

[6] "[논설실의 뉴스 읽기] 北 신종미사일, 4분 안에 목표물 타격 방사포와 '섞어 쏘기'땐 속수무책■ 북한이 지난 4일과 9일 잇따라 4발을 쏜 '북한판 이스칸데르' 미사일에 대한 관심이 높다. 국방부와 군 당국은 북한 신형 미사일이 탄도미사일이라는 사실을 공식 인정하지 않으면서도 최신형 패트리엇 PAC-3 미사일 등으로 요격이 가능하다고 밝히고 있다. 하지만 상당수 전문가는 북 신형 미사일이 종전 북 탄도미사일과는 차원이 다른 '게임 체인저'(Game.."

[Editorial Desk's News Reading] North Korea's New Missile, Can Hit Targets in 4 Minutes; Helpless Against Mixed Launches with Rocket Artillery■ There is growing attention on North Korea's 'Iskander-style' missile, which it launched four times on the 4th and 9th. The Ministry of Defense and military authorities have not officially acknowledged that the new North Korean missile is a ballistic missile but have stated that it can be intercepted by the latest Patriot PAC-3 missiles. However, many experts believe that the new North Korean missile is a 'game changer,' significantly different from previous North Korean ballistic missiles..."

[7] "[밀톡] 수역 달려 들여 SLBM 전략기지로 대변신한 北 신포■ 북한이 향후 잠수함 발사 탄도미사일(SLBM) 도발에 나설 가능성이 높은 것으로 관측된 가운데, 북한 내부에서 SLBM 도발에 나서려는 각종 정후가 정보기관과 유엔 안보리 등에 의해 포착돼 관심을 끌고 있다. 최근 북한 SLBM의 전략기지인 함경남도 신포 조선소에서는 잠수함 훈련센터와 잠수함 수리용 건물이 완공됐거나 건설중인 모습이 드러났다. 또 SLBM .."

"[Miltalk] North Korea's Sinpo Transformed into an SLBM Strategic Base with Hundreds

of Millions of Dollars■ Amid increasing speculation that North Korea is likely to conduct a submarine-launched ballistic missile (SLBM) provocation in the future, various signs indicating such a move have been detected by intelligence agencies and the United Nations Security Council, drawing attention. Recently, at the Sinpo shipyard in South Hamgyong Province, which serves as the strategic base for North Korea's SLBM, new buildings for a submarine training center and submarine repair facilities have either been completed or are under construction. Additionally, SLBM..."

[8] "[논설실의 뉴스 읽기] 북한이 신무기 4종세트 섞어 쏘면, 소형 전술핵 맞먹는 효과■ 북한이 지난 5월 이후 시험발사를 지속한 북한판 이스칸데르 미사일과 대구경 방사포(다연장로켓) 등 신형 4종 미사일 방사포를 둘러싼 논란이 계속되고 있다. 도널드 트럼프 미 대통령은 북 신형 미사일 방사포 발사에 대해 "누구나 쏘는 단거리 미사일"이라며 일관되게 깎아내리고 있다. 북 신형 미사일 요격이 어렵다는 일각의 우려에 대해 정경두 국방장관은 국회..."

"[Editorial Desk's News Reading] If North Korea Fires Its New 4-Weapon Set, It Could Have the Effect of a Small Tactical Nuclear Weapon■ Debate continues over North Korea's new missile and rocket systems, including the North Korean version of the Iskander missile and large-caliber rocket artillery (multiple rocket launchers), which it has been testing since May. U.S. President Donald Trump has consistently downplayed North Korea's new missile launches, calling them "short-range missiles anyone can fire." Regarding concerns that North Korea's new missiles may be difficult to intercept, South Korea's Defense Minister Jeong Kyeong-doo..."

[9] "[밀톡]북 미사일 속구치면 바로 '쾅' 군, 요격 무기 개발한다■ [단독] 군 당국이 유사시 북한 탄도미사일을 발사 직후 상승단계에서 KF-X(한국형전투기) 등에서 발사한 고속 미사일(요격탄)로 요격하는 무기를 개발중인 것으로 알려졌다. 미사일 상승 단계에서 요격하면 미사일 파편이 북한 땅 위에 떨어지는 피해가 생길 수 있어 북한의 실제 미사일 발사를 억제하는 효과도 있다. 특히 '북한판 이스칸데르' 미사일 등 요격이 어.."

"[Miltalk] If North Korean Missiles Launch, 'Bang' — Military Developing Interception Weapons■ [Exclusive] Military authorities are reportedly developing weapons capable of intercepting North Korean ballistic missiles by launching high-speed missiles (interceptors) from platforms like the KF-X (Korean Fighter eXperimental) during the missile's ascent phase. Intercepting missiles in the ascent phase can prevent missile debris from falling over North Korean territory, which could also serve as a deterrent to North Korea's missile launches. In particular, intercepting missiles like the 'North Korean version of Iskander' is..."

[10] "[인터뷰] 잠수함 전문가 문근식 "北SLBM, 북핵 결정체'수중 킬체인' 위해 우리도 핵 잠 전력화 서둘러야"■ "핵방어를 위한 '킬체인'은 '원점(原點) 공격'이 핵심이다. 수중에 선 핵무기가 탑재된 잠수함이 원점이다. 상대 잠수함을 공격하려면 아군 잠수함이 계속 따라다니면서 감시해야 한다. 적국의 핵무기 탑재 잠수함을 계속 미행하다가 잠수함에서 SLBM(잠수함발사탄도미사일)을 발사하려는 순간 아군 어뢰로 즉각 파괴해야 한다." 문근식 한국국방안보포럼 대외협.."

"[Interview] Submarine Expert Moon Geun-sik: 'North Korean SLBM is the Pinnacle of

North Korean Nuclear Capabilities... We Must Accelerate Our Nuclear Submarine Development for Underwater Kill Chain'■ 'The core of the kill chain for nuclear defense is "point-of-origin attacks." In the water, the point-of-origin is a submarine carrying nuclear weapons. To attack an enemy submarine, our submarine must continuously track and monitor it. By tailing the enemy's nuclear-armed submarine and waiting for the moment it launches an SLBM (Submarine-Launched Ballistic Missile), our submarine should immediately destroy it with a torpedo.' Moon Geun-sik, from the Korea Defense Security Forum, stresses the urgency of strengthening Korea's nuclear submarine capabilities."

### OA21.3 Nuclear Umbrella – Peace

[1] "[한 일 동아시아적 주체성 상실, 동북아 평화 위협]" '한 일 강제병합 100년, 현재와 미래' 한 일 좌담■ 임현영 소장 - 침략전쟁은 명백한 범죄 양국 시민사회 평화운동、윤건차 교수 - 천황 총리 공개사과 앞.."

"Loss of Korean-Japanese East Asian Identity, Threatening Peace in Northeast Asia" '100th Anniversary of the Korea - Japan Forced Annexation, Present and Future' Korea-Japan Roundtable■ Im Heon-young (Director) - Invasion and War Are Clearly Crimes; Civil Societies of Both Countries Should Promote Peace Movements. 、Professor Yun Geon-cha - Public Apology from the Emperor and Prime Minister is Necessary"

[2] "기획 / '한.일 강제병합 100년, 현재와 미래'한.일 좌담- "한 일 동아시아적 주체성 상실, 동북아 평화 위협"■ 한 일 강제병합 100년을 맞아 연초부터 시민사회를 중심으로 다양한 사업과 운동이 펼쳐지고 있다. 한국에서는 국치 100년사업공동추진위원회가 중심이 되어 강제병합100년 공동행동 한 일실행위원회라는 시민공동기구를 만들어 활동하고 있다. 두 나라 정부 차원에서도 오는 15일을 전후해 강제병합 100년과 관련한 입장 표명이 나올 전망이다. 강제병합 100년.."

"Special Feature / '100 Years of Korea-Japan Forced Annexation, Present and Future' Korea-Japan Roundtable - 'Loss of Korean-Japanese East Asian Identity, Threatening Peace in Northeast Asia'■ As we approach the 100th anniversary of the Korea-Japan forced annexation, various initiatives and movements are being carried out, primarily led by civil society. In South Korea, the National Traitor 100th Anniversary Joint Promotion Committee is at the forefront, forming a civic organization called the Korea-Japan Joint Action Committee for the 100th Anniversary of the Forced Annexation. At the government level, statements related to the 100th anniversary of the forced annexation are expected to be issued around the 15th of this month."

[3] "[왜냐면] 남북 연합방의 꿈 / 오인동 1. 남북 경제공동체 청사진 오인동(재미동포 정형외과의사)■ 분단 67년, 남북전쟁 정전한지도 60년이 되는 오늘이다. 남과 북은 아직도 반목, 대결하며 전쟁 위기 속에 나날을 살고 있다. 북녘에 가보면 인민들은 통일을 입에 달고 사는 모습이다. 한편 남녘에서는 통일 얘기는 별로 없고 윤택해진 경제여건을 즐기기에 바쁜 듯 하다. 그래도 통일은 해.."

[Why?] The Dream of a North-South Confederation / Oh In-Dong The Blueprint for a North-South Economic Community by Oh In Dong (Korean-American orthopedic doctor)■ It has been 67 years since the division, and 60 years since the armistice of the Korean War. Today, South and North Korea still live in constant rivalry, facing the threat of war. When visiting the North, the people constantly talk about unification. Meanwhile, in the South, discussions about unification are sparse, and people seem more focused on enjoying the improved economic conditions. Nonetheless, unification remains a hope."

[4] "[2007 대선 유권자와 함께 하는 경선후보 검증] 민노당 ① 노회찬 9일 열리는 민주노동당 대선후보 선출을 위한 1차 투표를 앞두고, ■ <한겨레> 대선후보도자문위원회들이 권영길, 노회찬, 심상정 등 세명의 경선후보들과 집단 인터뷰를 했다. 진보정당 경선후보들의 정책공약이 얼마나 현실적인지를 검증하고 각 후보간 차이점은 무엇인지를 드러내기 위

한 자리였다. 〈한겨레〉 대선보도자문단에서 김기원 방송대 교수(경제)와 이주희 이화여대..."

"[2007 Presidential Election Voter Engagement and Primary Candidate Verification] Minju Party ① Roh Hyeon-chan, Ahead of the first round of voting for the Democratic Labor Party's presidential candidate, which will be held on the 9th■ The presidential election advisory board of Hankyoreh conducted a group interview with three primary candidates: Kwon Young-gil, Roh Hyeon-chan, and Shim Sang-jeong. The purpose was to evaluate the feasibility of the policy proposals of the progressive party candidates and highlight the differences between the candidates. In the advisory board of Hankyoreh, Professor Kim Ki-won (Economics) from the Korea National Open University and Professor Lee Ju-hee from Ewha Womans University were involved."

[5] "정진석 “한진해운 롯데, 외래어종 배스와 같다”■ 정진석 새누리당 원내대표가 20대 국회 첫 교섭단체 대표연설에서 사회 불평등 구조를 언급하며 ‘사회적 대타협’이 필요하다고 강조했다. 정 원내대표는 20일 국회에서 한 교섭단체 대표연설에서 구의역 노동자 사망 사고, 대기업 탈법 등 최근 현안을 거론하면서 사회 불평등 구조를 지적했다. 이를 해결할 방안으로 보수진영에서 주장하는 노동개혁과 진보진영에서 .."

"Jeong Jin-seok: 'Hanjin Shipping and Lotte are like invasive species, such as bass'■ Jeong Jin-seok, the floor leader of the Saenuri Party, emphasized the need for a 'social compromise' while mentioning the social inequality structure in his first representative speech in the 20th National Assembly. In the speech on the 20th at the National Assembly, he referenced recent issues such as the Gyeongui Line subway worker's death and illegal practices by large corporations, pointing out the social inequality structure. He suggested that solutions to this problem should include labor reform, advocated by the conservative camp, and other approaches from the progressive camp."

[6] "<한국, 소통합시다>(10) 실험! 소통 <3> 조승수 - 전원책■ 전원책 변호사(이하 전원책)= 건강한 좌파의 조건부터 이야기할게요. 첫째, 자유민주주의에 승복해야 합니다. 좌파는 곧 마르크스주의자로 오해하는 분이 많은데, 서구의 진보는 자유주의의 한 줄기입니다. 둘째, 폭력과 포퓰리즘에 의존하면 안 됩니다. 진보들은 무조건 길거리로 가는데 그건 아니에요. 과거 민주노동당이나 민주노총이 얼마나 폭력성이 많았습니까. 셋.."

"Let's Communicate Korea (10) Experiment! Communication <3> Cho Seung-su - Jeon Won-cheok"■ Jeon Won-cheok (Attorney) = Let's start by discussing the conditions for a healthy leftist. First, they must accept liberal democracy. Many people misunderstand the left as Marxist, but Western progressivism is a branch of liberalism. Second, they should not rely on violence or populism. Leftists should not automatically resort to the streets. How violent were past groups like the Democratic Labor Party or the Korean Confederation of Trade Unions?"

[7] "김정은의 핵실험이 ‘무모한 장난’이 아닌 이유■ <한겨레>는 지난 7일 사설에서 밝힌 대로 북한의 핵무기 개발과 핵 보유에 반대하며, 북한의 4차 핵실험을 “평화를 위협하는 도발”이라 판단한다. 하지만 반대는 의견일 뿐 대안이나 해법이 아니다. 1992년 한반도 비핵화 공동선언과 2005년 6자회담의 ‘9·19 공동성명’이 천명한 ‘핵 없는 평화로운 한

반도'의 꿈을 실현할 길을 열어야 한다. 어디에서.."

"Why Kim Jong-un's Nuclear Test Is Not a 'Reckless Prank'" ■ As expressed in its editorial on the 7th, Hankyoreh opposes North Korea's nuclear weapons development and possession, and considers North Korea's 4th nuclear test to be a "provocation that threatens peace." However, opposition is just an opinion and not a solution or alternative. We must open the path to realizing the dream of a "nuclear-free peaceful Korean Peninsula," as declared in the 1992 Joint Declaration on the Denuclearization of the Korean Peninsula and the 2005 Six-Party Talks' "September 19 Joint Statement."

[8] "[개번 매코맥 칼럼](18)북핵, 왜 다시 꼬였나■ 1년 반 전까지만 해도 '북한 문제'는 해결 직전에 있었다. 중국 베이징 6자회담 참가국들은 북한이 핵시설 불능화와 국제 사찰단의 재입국 허용, (해체를 전제로 하는) 핵시설 신고 등을 이행하면 그 보상으로 에너지를 제공하고 봉쇄를 완화하며 완전한 '관계 정상화'로 나아가겠다는 데 동의했다. 그 직후엔 뉴욕 필하모닉이 평양을 방문해 연주회를 열었다. 북.."

"Why Has North Korea's Nuclear Issue Become Complicated Again?" ■ Up until a year and a half ago, the "North Korea issue" was nearly resolved. The participants in the Six-Party Talks in Beijing had agreed that if North Korea disabled its nuclear facilities, allowed international inspectors to return, and declared its nuclear facilities (on the condition of dismantling them), they would receive energy support, relax sanctions, and move toward full "normalization of relations." Right after this, the New York Philharmonic visited Pyongyang and held a concert.

[9] "[개번 매코맥 칼럼](20)'핵무기 없는 세계'■ 8월은 핵에 대해 깊이 생각해 볼 수 있는 시기다. 64년 전 히로시마와 나가사키에 가해진 무차별 핵공격의 희생자들은 물론이거니와 그날 이후 세계에 드리워져 있는 핵의 망령에 대해서도 생각해야 한다. 버락 오바마 미국 대통령은 지난 4월 체코 프라하 연설에서 핵무기 없는 세계의 도래를 앞당기기 위해 행동할 '도덕적 책임'이 미국에 있다고 말해 전 세계.."

"A World Without Nuclear Weapons" ■ August is a time to deeply reflect on nuclear weapons. We should think not only of the victims of the indiscriminate nuclear attacks on Hiroshima and Nagasaki 64 years ago but also of the specter of nuclear weapons that has loomed over the world since that day. In his speech in Prague last April, U.S. President Barack Obama said that the United States has a "moral responsibility" to act in order to accelerate the arrival of a world without nuclear weapons.

[10] "[한국, 소통합시다](10)실험! 소통 (3)조승수 - 전원책■ 조승수 "변화 못하는 진보 뼈깎는 성찰 필요합니다"、“광장의 저항 인정 폭력행사는 용인 안돼요” 전원책 전원책 변.."

"Let's Communicate, Korea (10) Experiment! Communication (3) ■ - Jo Seung-su & Jeon Won-cheok" Jo Seung-su: "The progressive movement must engage in profound self-reflection to change." "Resistance in the square should be acknowledged, but violence must not be tolerated," said Jeon Won-cheok.

#### OA21.4 Nuclear Umbrella – Security

[1] "[단독]대통령실-백악관, 워싱턴서 첫 핵우산 공동훈련■ 대통령실과 미국 백악관이 범정부 차원의 핵우산 운용 시뮬레이션(TTS) 훈련을 지난달 한미 정상회담 전 실시한 것으로 알려졌다. 북한의 단계별 핵 도발 시나리오를 가정한 핵우산 대응 훈련을 한미 군 당국 간이 아닌 양국 최상위 조직이 주도해 진행한 건 이번이 처음이다. 한미 정상회담에서 도출된 확장억제(핵우산) 강화 방안인 '워싱턴 선언'에서 도입을 명.."

[Exclusive] The Presidential Office and the White House Conduct First Joint Nuclear Umbrella Training in Washington"■ The Presidential Office and the White House recently conducted a government-wide simulation of the nuclear umbrella operation (TTS) ahead of the summit between South Korean President Yoon Suk-yeol and U.S. President Joe Biden. The training, which simulated responses to North Korea's step-by-step nuclear provocations, was led by the highest-level organizations of the two countries, rather than the military authorities. This was the first time such a training was conducted. The "Washington Declaration," which was a result of the summit, includes plans to enhance the extended deterrence (nuclear umbrella).

[2] "한미, 내년 8월 훈련부터 北핵공격 대응 연습■ 이르면 내년 8월 을지자유의 방塊(UFS) 훈련 때부터 북핵 공격에 대한 대응 시나리오가 반영된 한국과 미국의 연합훈련이 실시된다. 위기 시 양국 정상이 24시간 소통할 수 있는 전용 '핫라인'도 구축된다. 북한의 핵 공격에 대응해 미군 전략자산을 동원한 핵 반격 등 양국 군사력을 결합한 '일체형 확장억제'가 가시화하는 것이다. 한미 양국은 15일.."

South Korea and the U.S. to Begin Joint Training for Nuclear Attack Response from Next August"■ Starting as early as next August, during the Ulchi Freedom Shield (UFS) training, joint exercises between South Korea and the U.S. will incorporate scenarios for responding to a North Korean nuclear attack. A dedicated "hotline" will also be established to ensure 24/7 communication between the leaders of the two countries during a crisis. This will bring the integration of both countries' military forces into the concept of "cohesive extended deterrence," including the use of U.S. strategic assets for nuclear retaliation in response to a North Korean nuclear strike.

[3] "韓, '바다의 패트리엇' SM-6 요격미사일 도입■ 미국이 14일(현지 시간) SM-6 함대공 요격미사일(사진)의 한국 판매를 잠정 승인했다. '바다의 패트리엇'으로 불리는 SM-6는 북한 항공기, 탄도미사일은 물론 극초음속 미사일까지 요격 가능한 다용도 미사일이다. SM-6는 2025 2031년 총 100여 기가 도입될 것으로 알려졌다. 2025년부터 실전 배치될 우리 군의 차세대 이지스함에 장착되면 .."

"South Korea to Introduce SM-6 Interceptor Missile, 'Patriot of the Sea'"■ On the 14th (local time), the United States provisionally approved the sale of the SM-6 naval surface-to-air interceptor missile to South Korea. Known as the "Patriot of the Sea," the SM-6 is a versatile missile capable of intercepting North Korean aircraft, ballistic missiles, and even hypersonic missiles. It is expected that around 100 units will be introduced between 2025 and 2031. When deployed on South Korea's next-generation Aegis destroyers starting in 2025, it will significantly enhance the country's missile defense capabilities.

[4] "한미, 北 생화학 공격에도 '핵 반격' 확장억제협의체, 공동성명 채택■ 미국이 한국을 겨냥한 전술 핵무기 공격과 핵무기에 버금가는 대량살상무기(WMD) 공격에 대해 전면적인 핵 반격에 나서기로 했다. 한미는 16일(현지 시간) 열린 외교 국방 차관급 확장억제전략협의체(EDSCG) 회의에서 채택한 공동성명에서 “북한의 어떠한 핵 공격도 압도적이고 결정적인(overwhelming and decisive) 대응에 직면하게..”

"U.S.-South Korea Joint Statement: Nuclear Retaliation for North Korea's Biological and Chemical Attacks" ■ The United States has committed to a full-scale nuclear retaliation in response to tactical nuclear attacks and weapons of mass destruction (WMD) that could target South Korea. On the 16th (local time), during a meeting of the Extended Deterrence Strategy and Consultation Group (EDSCG), a joint statement was adopted, stating that "any nuclear attack from North Korea will face overwhelming and decisive retaliation."

[5] "김정은 'ICBM 기습명령' 北 9시간만에 쌌다■ 북한이 18일 김정은 국무위원장의 "사전 계획 없는 불의 명령"에 따라 대륙간탄도미사일(ICBM) '화성-15형'을 "기습 발사했다"고 19일 밝혔다. 김 위원장의 불시 명령에 따른 ICBM 발사는 처음이다. 미 본토를 타격할 수 있는 ICBM도 언제든지 실전에서 기습적으로 발사할 수 있음을 노골적으로 위협한 것이다. 북한은 김 위원장이 18일.."

"Kim Jong Un's 'ICBM Surprise Launch Order': North Korea Fired Missile in 9 Hours" ■ On the 18th, North Korea revealed that Kim Jong Un, the Supreme Leader, gave an "unscheduled surprise order" to launch a intercontinental ballistic missile (ICBM) of the "Hwasong-15" type. This was the first time Kim issued such a surprise order for an ICBM launch. It openly threatened that the ICBM, capable of striking the U.S. mainland, could be launched unexpectedly in real combat situations.

[6] "韓美 "北 어떤 핵공격에도 압도적 대응" 혼들리던 핵우산 강화■ 미국이 한국을 겨냥한 전술핵무기 공격과 핵무기에 버금가는 대량살상무기(WMD) 공격에 대해 전면적인 핵 반격에 나서기로 했다. 한미는 16일(현지 시간) 열린 외교 국방 차관급 확장억제전략협의체(EDSCG) 회의에서 채택한 공동성명에서 “북한의 어떠한 핵 공격도 압도적이고 결정적인(overwhelming and decisive) 대응에 직면하게 될..”

"S. Korea and US: 'Overwhelming Response' to Any North Korean Nuclear Attack, Strengthening of Nuclear Umbrella" ■ The United States has agreed to initiate a full nuclear retaliation against tactical nuclear attacks aimed at South Korea, as well as large-scale weapons of mass destruction (WMD) attacks comparable to nuclear weapons. During the extended deterrence strategy talks held on the 16th (local time) at the deputy foreign and defense ministers' level, the two countries adopted a joint statement, affirming that North Korea's nuclear attacks would face an "overwhelming and decisive" response.

[7] "北 ICBM 실전배치 단계 신설된 미사일총국이 발사 주도■ 북한이 미국 전역을 사정권에 넣는 화성-15형 ICBM(대륙간탄도미사일)을 18일 오후 발사했다. 올 들어 첫 ICBM 도발이다. 북한은 이번 발사가 계획 없이 김정은의 명령에 따라 이뤄졌다고 했다. 최근 열병식에서 ICBM 17기를 공개하며 양산 능력을 과시한 데 이어 '불시 명령'에 따른 발사를 강조한 것은 ICBM이 실전 배치 단계에 들어섰다는 의.."

"North Korea's ICBM Reaches Operational Stage, Missile Command Leads Launch" ■

North Korea launched the Hwasong-15 intercontinental ballistic missile (ICBM) on the afternoon of the 18th, bringing the entire US mainland within its range. This is the first ICBM provocation of the year. The launch was reportedly carried out without prior planning, following an order from Kim Jong-un. After showcasing 17 ICBMs during a recent military parade to demonstrate mass production capabilities, North Korea's emphasis on the "sudden command" launch signals that the ICBM has entered the operational deployment phase.

[8] "美 "F-22, F-35, 핵 항모 등 전략자산 한반도에 더 많이 전개" ■ 한미 양국이 F-22와 F-35 스텔스 전투기, 핵추진 항공모함 등 미 전략자산을 더 자주 한반도로 전개해 한국에 대한 핵우산(대북 확장억제)을 강화하기로 했다. 로이드 오스틴 미국 국방장관은 31일 서울 용산구 국방부 청사에서 이종섭 국방부 장관과 한미 국방장관 회담을 한 뒤 공동 기자회견에서 '앞으로 전개가 예상되는 전략자산이 무엇이냐'는 질.."

"US to Deploy More Strategic Assets to the Korean Peninsula, Strengthen Nuclear Umbrella" ■ The US and South Korea have agreed to more frequently deploy strategic assets, including F-22 and F-35 stealth fighter jets and nuclear-powered aircraft carriers, to the Korean Peninsula as part of efforts to strengthen the nuclear umbrella (extended deterrence against North Korea). US Secretary of Defense Lloyd Austin confirmed this during a joint press conference with South Korean Defense Minister Lee Jong-sup on the 31st at the Ministry of National Defense in Yongsan, Seoul. Austin responded to a question about the expected deployment of strategic assets in the future.

[9] "韓美, 펜타곤서 훈련... "참관만 하던 한국, 핵우산 작전 美와 공유" ■ 한미 군 당국이 22일(현지 시각) 미 국방부 청사(펜타곤)에서 북한의 핵무기 사용 시나리오를 상정해 이에 대응하는 '핵우산' 도상 훈련을 실시했다. 한미 훈련단은 미 해군의 핵 추진 잠수함에도 처음으로 공동 탑승했다. 핵추진 잠수함이 대북 확장억제수단에 포함된다는 것을 공식화한 의미로 풀이된다. 한미는 이날 공동 발표를 통해 "북한이 미국이나 동맹 및.."

"Korea and the US Conduct Drills at the Pentagon, Share Nuclear Umbrella Operations" ■ On the 22nd (local time), the US and South Korean military authorities conducted a tabletop exercise at the Pentagon, simulating scenarios in which North Korea uses nuclear weapons and how to respond with the "nuclear umbrella." For the first time, the South Korean delegation joined US Navy's nuclear-powered submarines. This exercise marks the formal recognition of nuclear-powered submarines as part of the extended deterrence measures against North Korea. The joint announcement confirmed that "in the event North Korea targets the US or its allies..."

[10] "尹, 8월 "왜 핵작전 없나" 질책 이번엔 韓美 '핵전쟁' 대응 훈련 합의 ■ 한미 양국이 북한의 핵 미사일 위협 고도화에 대응해 내년 8월 한미 연합 연습인 '을지자유의 방파(UFS)' 연습 때 처음으로 북한의 핵무기 사용을 상정한 핵 작전 시나리오 훈련을 하기로 했다. 지금까지 한미 양국은 북한의 핵무기 사용 가능성 등만을 상정한 훈련을 실시했고, 핵 사용을 전제로 한 훈련은 없었다. 양국은 북한의 핵 공격 시 공동 대응에 대한.."

"Yoon Criticized the Lack of Nuclear Operations in August, Now Korea and the US Agree on 'Nuclear War' Response Training" ■ In response to the intensification of North Korea's nuclear missile threats, South Korea and the United States have agreed to include nuclear

operations training in their joint exercise, "Ulchi Freedom Shield (UFS)," scheduled for August next year. Until now, the two countries have conducted training exercises considering the possibility of North Korea's nuclear weapons usage but had not included scenarios based on actual nuclear deployment. The joint training will focus on coordinating responses to a North Korean nuclear attack.