

# Patterns of Cooperation and Public Opinion on Rapprochement

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## Abstract

How do citizens evaluate conciliatory policies during periods of rapprochement? While existing research highlights the role of cooperative signals from a foreign adversary in gaining public support for peace, it often treats rapprochement as a discrete event rather than a dynamic process. This paper argues that individuals evaluate an adversary's intention by interpreting the broader trajectory of behavior rather than isolated gestures. Specifically, we posit that when adversary's cooperation is inconsistent or declining across time, support for de-escalation wanes, as these patterns signal a lack of sustained commitment. We test this argument through a survey experiment (N = 2,324) presenting a hypothetical U.S.–China rapprochement scenario in the South China Sea. The results demonstrate that public support for de-escalation is highly sensitive to how cooperation unfolds over time; Americans respond significantly less favorably to inconsistent or decreasing patterns than to consistent or increasing cooperation. To bolster external validity, we propose a supplementary selective-history experiment in South Korea regarding the 2018 inter-Korean rapprochement. Ultimately, this study contributes a dynamic perspective to the literature on international conflict, demonstrating that the sequence of cooperation matters as much as the act itself.

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# 1. Introduction

Rapprochement—the initial phase in which leaders seek to reduce hostility and establish trust with a foreign adversary—requires not only diplomatic leadership but also public endorsement. In democratic settings in particular, leaders must ensure popular endorsement of their reconciliation efforts to sustain their political viability against hawkish domestic rivals (Vasquez, 1993; Colaresi, 2004) and to send credible signals of benign intentions to their international counterpart (Brandt et al., 2008). Moreover, when citizens come to accept cooperation with a previous adversary, patterns of social interaction, institutions, and collective identity begin to reflect mutual confidence, turning a “cold peace” achieved through rapprochement into a “warm peace” that defines conciliation (Kupchan, 2010; Ripsman, 2016; Diehl et al., 2021). Public opinion thus serves as both a constraint on and a foundation for successful peace initiatives.

Previous research on public support for rapprochement heavily emphasizes the role of cooperative signals sent by a foreign adversary. This literature, including work on reciprocated cooperation, demonstrates that a rival’s positive response to peace initiatives encourages citizens to endorse conciliatory policies and bolsters moderate domestic leadership (Kupchan, 2010; Colaresi, 2004; Davies & Johns, 2016; Mattes & Weeks, 2022). Furthermore, leveraging costly signaling theory (Schelling, 1960; Jervis, 1970; Fearon, 1994), studies show that high-cost cooperative moves—like troop withdrawals or diplomatic summits—are particularly effective at conveying benign intentions, enhancing trust (Kydd, 2000, 2005), and ultimately increasing public backing for reconciliation efforts (Mattes & Weeks, 2019; Kertzer et al., 2020; Kim, 2021; Yoder & Haynes, 2021).

However, a review of empirical cases shows that cooperative signals often fail to translate reliably into robust public support for peace. For instance, despite the successful high-level agreements of the Davos Process between Turkey and Greece in the late 1980s, significant societal animosity persisted, with only a third of Greek citizens supporting cooperative relations and less than half of the Turkish public agreeing to partial troop removal from Cyprus (Öniş & Yilmaz, 2008; Pridham, 1991). Similarly, recent diplomatic breakthroughs between China and Taiwan in the early 2010s (Chan & Chung, 2016), the United States and Iran in 2015 (Pew

Research Center, 2015), and North and South Korea in 2018 (Bak, 2018) all saw a significant portion of the public retain hostile attitudes toward adversaries even after witnessing key cooperative gestures from them. These findings suggest that the existing literature, which focuses on discrete cooperative acts, lacks the explanatory depth needed to account for the formulation of public opinion during periods of political rapprochement.

Here, we argue that individuals assess an adversary's future intentions not through isolated cooperative gestures but by interpreting the broader trajectory of its behavior. This distinction is fundamental: evaluating rapprochement requires citizens to understand not only what an adversary does at any single moment, but also how its actions unfold over time. Citizens interpret sequences of cooperative signals as narrative arcs, integrating disparate gestures into coherent accounts of an adversary's intentions. This narrative processing distinguishes stable from erratic cooperation and underpins judgments about whether the adversary is credibly pursuing peace or merely engaging in tactical maneuvering.

Two dimensions of these patterns are particularly consequential: *consistency* and *direction*. Consistent cooperation—steady and predictable signals maintained at similar levels over time—generates confidence in an adversary's commitment and fosters expectations of sustained restraint. By contrast, inconsistent cooperation—erratic or fluctuating behavior—invites suspicion that gestures may be tactical or temporary, undermining trust and reducing support for de-escalation. Similarly, an increasing trajectory of cooperation signals deepening commitment and strengthens public optimism about future intentions, whereas a declining pattern suggests waning resolve and diminishes expectations of continued cooperation. In short, the way cooperation unfolds over time shapes the narrative citizens construct about rapprochement. This narrative influences both their beliefs about an adversary's reliability and their willingness to support conciliatory policies.

We test this argument using two original survey experiments conducted in the U.S. and South Korea. For the first study, we conducted a pre-registered survey experiment with a nationally diverse sample of 2,324 American adults between July and September 2025. The study examines how citizens evaluate foreign adversaries' cooperative behavior by focusing on the U.S.–China relationship. Participants were presented with a hypothetical 2028 scenario involving potential

military de-escalation in the South China Sea and randomly assigned to one of six conditions that varied in the presence and pattern of Chinese cooperation. Four treatments depicted equivalent levels of cooperation but differed in their temporal patterns (consistent, inconsistent, increasing, or decreasing), while the fifth treatment described cooperation without specifying a trend, and the sixth condition served as a control with no cooperative signals. We then measured participants' expectations about China's future behavior and their policy preferences regarding U.S. naval deployments.

The results reveal that Americans respond not only to whether China cooperates but also to how that cooperation unfolds. Across all measures, information about Chinese cooperation increased expectations that China would reduce its military presence in the South China Sea and, in turn, strengthened support for corresponding reductions in U.S. naval deployments. However, the effects varied sharply across patterns. First, consistent cooperation produced stronger expectations of future restraint than inconsistent cooperation, with the latter showing weaker effects even compared to the condition without any discernible pattern. Second, increasing cooperation generated more optimistic expectations than decreasing cooperation, and the declining pattern again produced smaller effects than the no-pattern treatment. These same dynamics appeared in respondents' policy preferences: those exposed to consistent or increasing cooperation favored reducing U.S. naval deployments, while those in the inconsistent or declining conditions were significantly less inclined to reciprocate China's cooperation. Overall, these findings suggest that citizens assess not only the presence of cooperation but also its credibility and trajectory. They reward steady and intensifying efforts with expectations of future restraint and reciprocal de-escalation.

In our second study, we conduct a preregistered survey experiment in South Korea using a "selective-history" design. Leveraging the real-world context of the 2018 inter-Korean rapprochement to maximize ecological validity, we experimentally manipulate the narrative framing of this period rather than simply priming historical memory. Respondents are randomly assigned to vignettes that portray North Korea's 2018 cooperation as following a consistent, inconsistent, increasing, or decreasing trajectory, alongside pattern-free and pure controls. This design allows us to isolate how different interpretations of the same cooperative episode influ-

ence citizens' expectations of North Korea's future behavior and their willingness to support ongoing conciliatory policies with North Korea. We are not in the stage of data collection for this survey.

These findings make several contributions. First, we show that the temporal unfolding of cooperation matters as much as its occurrence. The pattern in which cooperative gestures accumulate shapes their persuasive power. Credibility is not solely a function of cost but also of consistency and trajectory. Second, we identify a mechanism through which citizens form expectations about adversaries' future behavior. This mechanism helps explain why some peace initiatives generate sustained public support while others do not, even when individual cooperative acts appear credible. Finally, our findings carry practical implications for leaders pursuing rapprochement: sustaining public backing for de-escalation requires not only demonstrating cooperation but also ensuring that cooperation unfolds in ways that convey coherence, reliability, and deepening commitment.

The paper proceeds as follows. The next section develops our theoretical framework in detail, explaining why consistency and direction in cooperative patterns influence expectations of future behavior and support for conciliatory policies. We then describe our research design and present the experimental results. We conclude with a discussion of the broader implications of our findings.

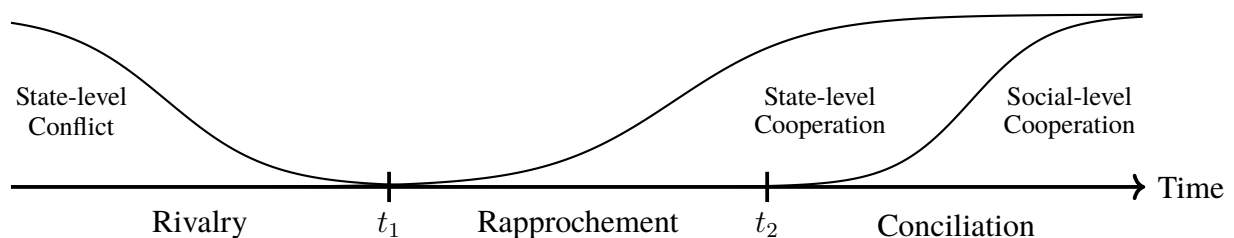
## **2. Temporal Dynamics of Cooperation during Rapprochement**

Rapprochement represents an initial phase in which state leaders seek to establish trust and address core disputes with a foreign adversary, ultimately steering rival states toward a form of "cold peace" (Kupchan, 2010; Goertz et al., 2016; Mattes & Weeks, 2024). For such peace initiatives to succeed, leaders—particularly in democratic settings—need to secure broad public backing. In many rivalries, hawkish elites often resist these efforts by amplifying existing perceptions of threat toward the adversary (Vasquez, 1993). When conciliatory policies fail to gain popular approval, such opposition can make it difficult for leaders to sustain rapprochement

by threatening their domestic legitimacy and political standing (Colaresi, 2004). Also, limited public endorsement weakens a leader’s ability to send credible signals of cooperative intent to the international counterpart (Brandt et al., 2008; Rasler et al., 2013).

However, public support for peace is not merely a means to achieve diplomatic success, but an end in itself. While rapprochement begins at the state level, its long-term success depends on whether cooperative dynamics extend beyond elite diplomacy and take root within society. As illustrated in Figure 1, rapprochement constitutes a transitional phase in a broader peace trajectory: initial state-level conflict gives way to intergovernmental cooperation, which is intended to eventually evolve into social-level engagement during the stage of conciliation. Public support for rapprochement thus plays a pivotal role in bridging this transition. When citizens embrace cooperation with a former adversary, social interactions, institutions, and collective identities begin to embody mutual trust, transforming a “cold peace” achieved through rapprochement into a “warm peace” characteristic of conciliation (Kupchan, 2010; Ripsman, 2016; Diehl et al., 2021). By contrast, without such public support, diplomatic engagement remains shallow, confined to elite negotiations and vulnerable to political backlash.

Figure 1: Timeline of Rivalry, Rapprochement, and Conciliation



This way of conceptualizing rapprochement as a bridging process across time underscores its evolving nature. From this perspective, such a leader’s pursuit of peace is understood as a process unfolding through a series of cooperative gestures that gradually reshape relations between rival states, rather than as a single diplomatic act. For instance, the Nixon administration’s rapprochement with China in the early 1970s was not defined by one decisive encounter, but by a series of deliberately staged initiatives, such as the relaxation of trade restrictions, the “ping-pong diplomacy” exchanges, and ultimately Nixon’s historic visit to Beijing. Each of these actions conveyed distinct signals of goodwill, simultaneously testing the adversary’s in-

tentions and generating momentum toward normalization. In this sense, rapprochement involves multiple moments of interaction that together signal a strategic and relational shift.

Importantly, throughout this process, citizens evaluate diplomatic gestures not in isolation but as components of a broader sequence of interactions that collectively signal the trajectory of rapprochement. Information about rapprochement is often conveyed in ways that link new developments to prior events. For instance, the significance of South Korean President Moon Jae-in's visit to Pyongyang was interpreted in connection with the two earlier inter-Korean summits that same year (Shin & Lee, 2018). Likewise, the outcomes of the Trump–Kim Hanoi summit were discussed alongside their previous meetings and other conciliatory exchanges (BBC, 2018), while reports on the normalization of Saudi–Iranian relations emphasized the series of prior negotiations and gestures that paved the way for success (Al Jazeera, 2023). In this way, publics construct meaning from rapprochement as an evolving process, linking multiple cooperative signals to discern the broader direction and credibility of the peace effort.

Yet most existing research on how individuals evaluate rapprochement overlooks its sequential and process-oriented character. Rather than examining how citizens interpret a continuous series of cooperative gestures, prior studies typically focus on reactions to a single cooperative act, such as a diplomatic summit and a troop withdrawal, treating each event as an isolated occurrence detached from those that precede or follow it. The literature on reciprocated cooperation maintains that an adversary's return of a conciliatory gesture prompts the public to revise beliefs about the rival's intentions and to favor peace initiatives (Kupchan, 2010), which in turn bolsters the domestic position of “doves” advocating rapprochement (Colaresi, 2004). Empirical research supports these claims, showing that citizens are more likely to endorse conciliatory policies when the adversary responds positively (Davies & Johns, 2016; Mattes & Weeks, 2022) and even reward domestic leadership under such conditions (Mattes & Weeks, 2019). Nonetheless, this body of work largely conceptualizes public reactions as responses to one-time cooperative exchanges without theorizing how individuals connect multiple signals over time to construct broader judgments about the trajectory of rapprochement.

Another important body of work emphasizes the credibility of a cooperative gesture as a function of its cost, drawing on strategic signaling theory (Schelling, 1960; Jervis, 1970; Fearon,

1994). Applied to rapprochement, the argument is that costly moves most effectively convey benign intentions under mistrust (Kydd, 2000, 2005). Historical cases frequently cited include Sadat's 1977 trip to Jerusalem (Lebow & Stein, 1987; Berenji, 2020), Gorbachev's far-reaching arms proposals (see Kydd, 2005, Ch.8; Berenji, 2023), and Vajpayee's New Delhi–Lahore bus diplomacy (Wheeler, 2011). A growing micro-foundational literature tests these claims with experiments: higher-cost cooperative acts generally reduce hostility or increase support for conciliatory policies, though effects vary by prior beliefs and context (Kim, 2021; Yoder & Haynes, 2021; Kertzer et al., 2020; Mattes & Weeks, 2022).<sup>1</sup> However, this literature typically examines individual signals in isolation. It focuses on their cost or magnitude, rather than considering how people interpret a sequence of cooperative gestures with varying costs. In doing so, it overlooks whether publics attend to the cumulative pattern of such signals over time, rather than the specific order or combination in which they occur.

Indeed, existing scholarship on the temporal dynamics of international relations has advanced the analysis of patterns and sequences in state behavior, yet it remains largely confined to elite- or state-level processes. Axelord (1984) introduced the idea that time plays a crucial role in interstate cooperation through the concept of the “shadow of the future,” which refers to the anticipation of future interactions and its impact on current behavior. He showed that, in a repeated interaction setting, players know that any betrayal (defection) might lead to retaliation in future rounds, which motivates cooperation to avoid long-term negative consequences. Aligned with his idea, scholars have attempted to explore how the dynamics of interactions between international actors across time lead to specific cooperative outcomes (Osgood, 1962; Goldstein & Pevehouse, 1997; Brandt et al., 2008). More recently, research has examined how the length of the shadow of the future interacts with other factors, such as commitment problems (D. H. Tingley, 2011) and costly signaling (Haynes, 2019), to influence cooperation outcomes.<sup>2</sup> While these studies consider cooperation over time as an essential research topic, their relevance

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<sup>1</sup>There are boundary conditions and exceptions. For example, costly cuts in military spending may not reassure when coming from an enemy, but can matter when signaled by an ally (Albuyeh & Paradis, 2018).

<sup>2</sup>D. H. Tingley (2011) provides experimental evidence showing that individuals cooperate less when the shadow of the future is longer in a lab setting. Building on Fearon (1997)'s commitment problem, Tingley demonstrates that commitment problems worsen in bargaining when future interactions are more frequently expected. Similarly, Haynes (2019) examine how a longer time horizon is negatively associated with the impact of costly signals with a model of interstate reassurance in which the receiver is uncertain of the sender's time horizons.

to public response to rapprochement seems limited. Unlike the immediate, direct reactions assumed in their models—where each player quickly responds to the other—citizens in reality may not instantly convey their opinions to the government after observing a signal from a foreign adversary. Instead, they are thought to collectively interpret multiple signals over time, understanding the significance of rapprochement as a broader narrative.

Taken together, although previous research has provided valuable insights, it has largely focused on how the public responds to individual cooperative gestures, portraying rapprochement as a singular diplomatic moment rather than a dynamic process that evolves over time. As illustrated in [Figure 1](#), however, rapprochement is more accurately understood as a continuous, temporally unfolding process that bridges the stages of rivalry and social-level conciliation. Indeed, a substantial body of scholarship on interstate reconciliation characterizes rapprochement as a gradual transformation involving multiple stages and a succession of deliberate actions, symbolic gestures, and negotiations designed to build trust and reduce hostility ([Osgood, 1962](#); [Kupchan, 2010](#); [Mattes & Weeks, 2024](#); [Nishikawa-Pacher, 2024](#)). Yet, despite this recognition of its staged and cumulative nature, existing research has not systematically examined how the trajectory of cooperation within this process shapes public attitudes toward peace. This paper aims to address this gap by exploring how the varying patterns of sequential cooperative signals during rapprochement influence their support for de-escalation.

### **3. Public Narratives of Cooperation during Rapprochement**

This study focuses on episodes of rapprochement in which the public observes a series of cooperative signals from an adversary that differ in their intensities. During rapprochement, states send a series of cooperative acts that vary in magnitude, from low-cost symbolic gestures, such as diplomatic meetings or statements, to more costly commitments, such as troop withdrawals or treaty concessions. These signals also unfold in sequence over time. Each cooperative act occurs within a distinct temporal order. Some sequences begin with bold initiatives followed by smaller steps, while others evolve gradually from cautious gestures to more substantial commitments.

Then, how do individuals make sense of multiple cooperative signals with varying levels across time? We posit that people interpret a succession of diplomatic gestures as components of a broader narrative unfolding through a temporal sequence. Broadly speaking, the order of events can carry symbolic significance, shaping perceptions of political processes (Cohen, 2018). Also, sequences of events, rather than isolated occurrences, create patterns that influence how individuals anticipate future developments (Pierson, 2004; Hom, 2020). This interpretive process, known as *emplotment*, integrates discrete events into a coherent storyline through which individuals identify continuity, causality, and purpose (Ricoeur, 1984). In this context, the unfolding order of diplomatic events serves as an interpretive structure that allows the public to infer the evolving nature and implications of rapprochement.

A central narrative that the public seeks to discern during rapprochement is whether the adversary can be trusted as a sustained partner for cooperation. People rarely judge peace initiatives by their immediate outcomes; instead, they interpret present cooperation as a signal about future intentions. Public opinion thus hinges on expectations about whether the adversary's cooperative behavior will endure or eventually give way to defection. This uncertainty reflects the classic commitment problem in international relations: even when states display conciliatory behavior, doubts about their long-term reliability generate hesitation and fears of exploitation (Fearon, 1995). Deep-rooted mistrust further amplifies these concerns. Historical grievances, entrenched enemy images, and threat narratives create cognitive anchors that make it difficult for citizens to reinterpret an adversary's motives, even when faced with cooperative acts (Jervis, 1976; Thompson, 2001). As a result, publics often approach rapprochement with skepticism, viewing isolated gestures as insufficient proof of genuine change unless they are embedded within a broader, consistent pattern that conveys sincerity and sustained commitment.

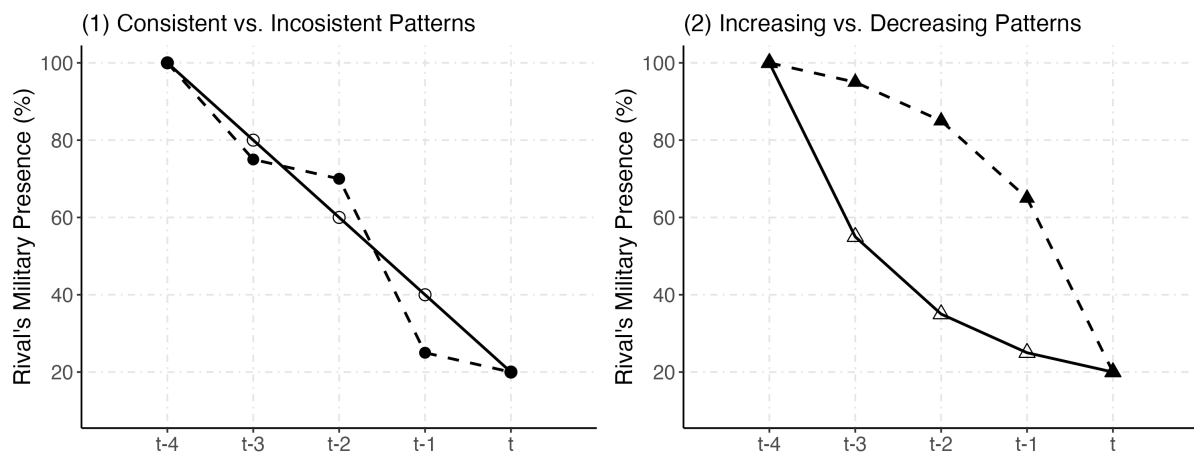
Expectations about an adversary's sustained cooperation, in turn, shape how citizens evaluate their own government's conciliatory policies. When people believe that a rival will maintain cooperative behavior, they are more likely to regard de-escalation as safe and mutually beneficial, thereby supporting policies that reduce military tension or expand diplomatic engagement. Conversely, when future cooperation appears uncertain or temporary, accommodation seems risky and prone to exploitation. In this way, public expectations about the trajectory of an ad-

versary’s cooperation serve as a critical bridge between observed behavior abroad and policy preferences at home. Understanding how these expectations form, and how they are shaped by patterns of cooperative signals, is therefore essential to explaining when and why peace initiatives garner sustained public support.

#### 4. Patterns of Cooperation and Public Opinion on Rapprochement

In this section, we advance our theoretical arguments about what types of cooperative patterns during rapprochement shape individuals’ expectations about an adversary’s future cooperation, and in turn, influence their support for conciliatory policies. Specifically, we highlight two key dimensions that characterize the perceived evolution of cooperation over time: *consistency* and *direction*. We examine how these dimensions influence individuals’ perceptions of the durability of an adversary’s cooperation, and in turn, shape their willingness to support their government’s pursuit of peace through the reduction of military presence.

Figure 2: Four Types of Cooperative Patterns Across Consistency and Direction Dimensions



The first dimension, *consistency*, refers to the steadiness of cooperative behavior—whether cooperative actions from a foreign adversary are maintained at a stable level or fluctuate unpredictably. When cooperation is consistent throughout the process of rapprochement, the rival state sends multiple cooperative signals that remain at similar levels over time. By contrast, inconsistent cooperation occurs when the extent of a rival state’s cooperation varies across dif-

ferent time points. As illustrated in the first panel of [Figure 2](#), although the total amount of cooperation between  $t - 4$  and  $t$  is identical in both patterns, the consistent pattern (solid line) shows a steady reduction in military presence at each time point, whereas the inconsistent pattern (dashed line) exhibits uneven levels of cooperation over time.

These contrasting patterns of cooperation shape the broader narrative that the public reads from the process of rapprochement. When cooperation unfolds consistently, people are more likely to perceive the adversary's actions as genuine and durable, constructing a story of steady progress and credible commitment to peace. This narrative fosters optimism about the adversary's future behavior, strengthening public confidence that continued engagement will yield lasting stability. In contrast, when cooperation appears erratic or inconsistent, citizens struggle to discern a coherent trajectory of intentions. Fluctuating signals invite suspicion that cooperation may be tactical or temporary, reducing expectations of future goodwill and eroding public support for their government's efforts to sustain rapprochement.

The contrast between the Franco–German reconciliation and inter-Korean relations underscores the importance of consistency in sustaining cooperation. In postwar Europe, France and Germany engaged in a steady and institutionalized process of collaboration, from the European Coal and Steel Community to the broader European Union framework, that gradually built trust and made peace self-reinforcing. By contrast, inter-Korean relations have been marked by intermittent and often contradictory gestures: moments of engagement, such as the 2000 and 2007 summits or joint economic projects, have repeatedly been disrupted by missile tests and military provocations from the North. While both pairs of rivals demonstrated cooperative intent, the stability and predictability of Franco–German interactions nurtured enduring reconciliation, whereas the volatility of inter-Korean exchanges perpetuated uncertainty and mistrust.

***H1A:** Individuals are more likely to expect greater future cooperation from a foreign adversary when the level of cooperation is sustained at a consistent intensity over time, rather than when it fluctuates inconsistently.*

***H1B:** Individuals are more likely to support a de-escalatory policy when the level of cooperation is sustained at a consistent intensity over time, rather than when it fluctuates inconsistently.*

The second dimension, *direction*, captures the overall trajectory of cooperative behavior—

whether the rival's actions indicate an expansion or decline in cooperation over time. An increasing pattern of cooperation occurs when the adversary's gestures progressively intensify, signaling a deepening willingness to compromise or build trust. In contrast, a decreasing pattern describes a gradual withdrawal of cooperative behavior, such as scaling back dialogue or reinstating military activities, which suggests waning commitment to reconciliation. As illustrated in the second panel of [Figure 2](#), both trajectories may begin with similar levels of cooperation between  $t - 4$  and  $t$  cumulatively, but their slopes diverge: the increasing pattern (solid line) displays a gradual intensification of cooperative gestures over time, whereas the decreasing pattern (dashed line) indicates a steady retreat from engagement.

These directional patterns shape how the public interprets the evolution of rapprochement. When cooperation appears to increase over time, individuals are likely to view it as a positive trend that strengthens trust and reinforces the belief that peace is moving forward. This upward trajectory signals progress and commitment, elevating expectations of future cooperation and bolstering support for their government's conciliatory initiatives. Conversely, when cooperation gradually diminishes, citizens may infer that earlier gestures were superficial or short-lived. A downward trajectory triggers pessimism about the adversary's intentions, leading people to expect future hostility and to withdraw support from policies that aim to sustain engagement.

The warming of U.S.–Vietnam relations after normalization in 1995 illustrates an increasing pattern of cooperation. Over time, both sides advanced steadily from diplomatic restoration to expanded trade, military exchanges, and strategic dialogue. Each stage reinforced the perception of a mutually strengthening partnership. By contrast, U.S.–Russia relations after the early 2000s exemplify a decreasing trajectory: following initial collaboration on counterterrorism and arms control, tensions mounted over NATO expansion and regional conflicts, eroding the cooperative foundation. While both pairs of states once engaged in cooperative gestures, the upward trajectory in U.S.–Vietnam relations nurtured optimism and public confidence in a lasting partnership, whereas the downward trend in U.S.–Russia relations fostered growing skepticism and distrust.

***H2A:** Individuals are more likely to expect greater future cooperation from a foreign adversary when the level of cooperation increases over time, rather than when*

*it decreases.*

*H2B: Individuals are more likely to support a de-escalatory policy when the level of cooperation increases over time, rather than when it decreases.*

## **5. Research Design Overview**

We employ survey experiments to test the theoretical claims discussed above. There are several key attributes of a survey experiment, which provides methodological advantages to this study. A survey experiment is well-suited to assess public opinion on a specific foreign policy issues, such as rapprochement, which is typically difficult to directly observe. Moreover, an experimental approach generally enables a researcher to hold constant characteristics of situations that may confound the result, thus enabling a thorough examination of the underlying causal mechanisms of cooperative patterns during rapprochement.

We implemented two complementary survey experiments tailored to different empirical contexts: (1) a hypothetical future scenario of U.S.–China rapprochement fielded in the U.S., and (2) a selective-history design in South Korea that drew on the real episode of inter-Korean rapprochement in 2018. The hypothetical U.S.–China design allows us to test the logic of our theory in a context where respondents have little direct experience with sustained great-power reconciliation. Because the scenario is forward-looking and abstract, it offers strong generalizability and enables us to isolate theoretical mechanisms without the confounding influence of entrenched partisan narratives or strong memories of specific events. By contrast, the South Korean selective-history design leverages a well-known and emotionally salient case—South Korea’s engagement with North Korea in 2018—allowing us to evaluate how people respond to cooperation patterns rooted in concrete historical experience. This approach enhances external validity, as the treatment mirrors real events and their domestic framing. At the same time, this design necessarily relies on events that have actually occurred, meaning respondents’ prior knowledge may dampen treatment effects. Recognizing the unique advantages and tradeoffs of each approach, we fielded both designs to strengthen confidence that our findings reflect underlying patterns of opinion formation rather than artifacts of a single methodological or contextual

choice.

## 6. Study 1: Survey Experiment on Hypothetical Rapprochement between the U.S. and China

### 6.1. Survey Design

We carried out a pre-registered survey experiment on 2,324 American adults by using Cint Theorem between July and September 2025.<sup>3</sup> Our survey includes only respondents who passed several attention checks,<sup>4</sup> and the sample's demographic characteristics are nationally representative. Although our theory is not centered on any specific rivalry, this survey focuses on how Americans perceive China and the prospect of cooperation with the country. Examining this case is expected to provide valuable insights to existing research that emphasizes public opinion on foreign policies amid rising U.S.-China tensions (Mattes & Weeks, 2019; Chu, 2021; Myrick, 2021; Kertzer et al., 2024). Importantly, this survey introduces a hypothetical scenario depicting potential future tensions between the U.S. and China, with variations in the patterns of cooperative signals presented within the scenario. Such hypothetical experiments allow researchers to separate the effects of signals from pre-existing attitudes or prior knowledge about foreign affairs. As such, this method has become a common approach in recent IR literature that investigates the microfoundation of cooperative signals between foreign adversaries (Davies & Johns, 2016; Mattes & Weeks, 2019, 2022; Lee, 2023; Kertzer et al., 2024).

At the start of the survey, respondents were asked a series of demographic questions, including gender, age, religion, household income, education level, partisan identification, and political ideology. Following the demographic and attitudinal measures, respondents were presented with a hypothetical scenario involving a potential future situation between the U.S. and

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<sup>3</sup>The experimental design received approval from Trinity College Dublin's Ethics Review Committee (Reference No.4037/4682), and it is pre-registered at Open Science Forum (<https://osf.io/nfcrk/overview>)

<sup>4</sup>The first attention check asks participants to select two options containing the word "Somewhat." Only those who correctly choose "Somewhat agree" and "Somewhat disagree" are included in the analysis. The second attention check follows the scenario description, asking: "Please select the option that best describes the given situation." Only respondents who select "The South China Sea emerges as a focal point of tensions between the U.S. and China" are retained for the final analysis.

Figure 3: A Hypothetical Scenario of the U.S.-China Tension in the South China Sea



*The U.S. faces major security challenges due to its tense relationship with China, particularly in the South China Sea. The region is strategically vital. Not only does one-third of global maritime trade pass through it, but it also contains valuable natural resources essential for energy security and economic stability.*

*China asserts its historical claims to the region and maintains artillery facilities there. The U.S. Navy regularly carries out operations by positioning military ships near disputed waters. The presence of their military forces in the South China Sea remains a major flash point, increasing the risk of escalation between the two countries.*

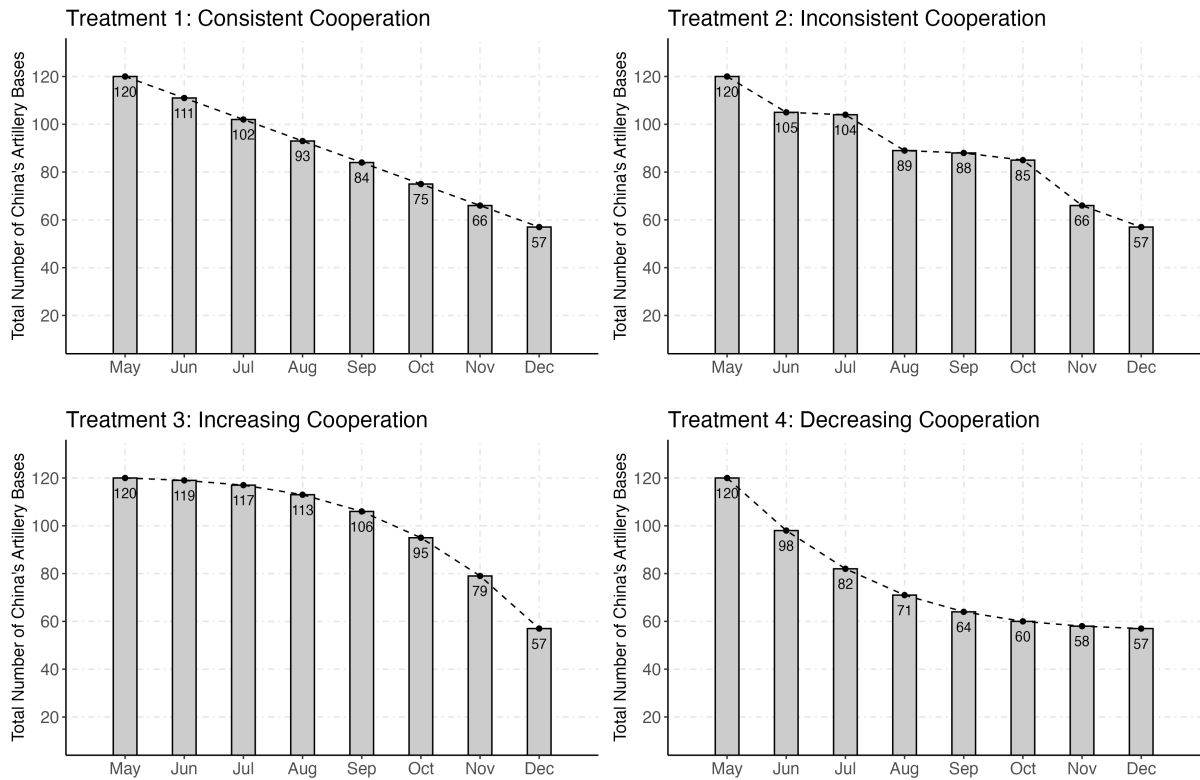
China.<sup>5</sup> This scenario is conveyed through a vignette, accompanied by a visual treatment shown in [Figure 3](#).

Next, we present a scenario where U.S. and Chinese leaders cooperate to reduce tensions in the region. Participants will be randomly assigned to one of six groups. The first four groups (Treatment 1-4) are shown different patterns of cooperative behavior, varying along their direction and consistency. In the fifth group (Treatment 5), participants receive information about China's cooperative behavior, but without any indication of a specific pattern or trend. The final group serves as a control (Treatment 6), receiving information without China's cooperative behavior. Each treatment with specific patterns of cooperation includes both visual and textual components, with the visual information resembling a graph in [Figure 4](#), and the textual information provided as described below.

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<sup>5</sup>We chose the year 2028 for the scenario to ensure it feels proximate and realistic, while avoiding potential bias from the current U.S. political context.

Figure 4: Four Treatment Conditions with Varying Patterns of Cooperation



**[Vignette for Treatment 1-4]**

*Suppose that, in the year 2028, Beijing and Washington hold high-level talks to reduce tensions in the region. Following these talks, China begins to take down its artillery facilities in the South China Sea. Between May and December in that year, the total number drops by over half, from 120 to 57.*

Treatment 1 (Consistent Cooperation):

*As shown in the graph below, China shows a **steady rate of facility reduction**. Each month, it consistently dismantles nine facilities from start to finish.*

Treatment 2 (Inconsistent Cooperation):

*As shown in the graph below, China shows an **inconsistent pace of facility reduction**. In some months, it dismantles more than a dozen facilities, while in others, it removes only a few.*

Treatment 3 (Increasing Cooperation):

*As shown in the graph below, China shows an **increasing pace of facility reduction**. It dismantles only a few facilities in the early months but significantly increases the number removed in the later months.*

Treatment 4 (Decreasing Cooperation):

*As shown in the graph below, China shows a **declining pace of facility reduction**. While it dismantles more than a dozen facilities in the early months, only a few facilities are removed in the later months.*

Participants assigned to one of the four main treatment groups are presented with a scenario in which China reduces its artillery facilities in the South China Sea following high-level talks with the U.S. in 2028. All four treatments report that China dismantled a total of 63 facilities over an eight-month period, dropping from 120 to 57. The treatments vary in the temporal pattern of this reduction. In Treatment 1, the pace of dismantlement is consistent, with China removing exactly nine facilities each month. Treatment 2 depicts an inconsistent pattern, where the number of dismantled facilities fluctuates widely from month to month. Treatment 3 describes an increasing trend, with few facilities removed in the early months and a sharp rise in dismantling activity toward the end. In contrast, Treatment 4 presents a declining pattern, showing a strong initial reduction that tapers off over time. These variations allow us to examine how different patterns, despite yielding the same net outcome, shape public perceptions of China's cooperative intentions.

In addition, we include a baseline group in which participants are informed about China's cooperative behavior without a specific pattern. In this treatment, participants are informed that China engaged in cooperative behavior following high-level talks with the U.S. in 2028, which were aimed at reducing regional tensions. The scenario describes how, between May and December of that year, China dismantled a significant number of artillery facilities in the South China Sea, reducing the total from 120 to 57. However, unlike other treatments that depict clear patterns of cooperation over time, this condition presents the outcome without showing any specific trend or trajectory in the dismantling process. Participants are not given information about how the reduction unfolded across the eight months; only that the total number of facilities declined. This treatment allows us to isolate the effects of patternless cooperation and examine how individuals respond when they are aware of the outcome but lack contextual information about how that cooperation evolved over time.

[Treatment 5: Cooperation with Patterns]

*Suppose that, in the year 2028, Beijing and Washington hold high-level talks to reduce tensions in the region. Following these talks, China begins to take down its*

*artillery facilities in the South China Sea. Between May and December in that year, the total number drops by over half, from 120 to 57.*

Finally, we present a vignette to the control group in which China offers no cooperative signals regarding the South China Sea. The vignette reads as follows:

[Treatment 6: No Cooperation]

*Suppose that, in the year 2028, there is no meaningful shift in the situation. Beijing and Washington do not hold any formal talks regarding their military presence in the South China Sea, and China keeps its artillery facility count steady at 120 in that year.*

To assess the impact of the experimental treatments on participants' expectations and policy preferences, we include a series of outcome measures related to China's future behavior and U.S. responses. First, participants are asked to anticipate China's actions in the year following the scenario, specifically whether China will increase, decrease, or maintain the number of artillery facilities in the South China Sea. Those who predict a change are then asked to estimate the magnitude of that change by indicating the number of facilities they expect China to add or remove.

Furthermore, participants are presented with a policy question regarding the appropriate U.S. response. They are told that the U.S. currently deploys 80 military ships to the South China Sea and are asked to indicate whether they believe this number should increase, decrease, or stay the same in light of China's actions. Also, those who predict a change are then asked to estimate the magnitude of that change by indicating the number of the U.S. ships they expect its leaders to add or remove. These items collectively capture both participants' interpretations of China's intentions and their preferences for U.S. strategic posture.

At the final stage, we assess participants' general knowledge about China by asking three multiple-choice questions. Specifically, respondents are asked: (1) which political party has governed China since 1949, (2) who held the office of President prior to Xi Jinping, and (3) which description best characterizes the Belt and Road Initiative. These questions are designed to gauge baseline familiarity with key aspects of China's political leadership and foreign policy strategy. Including this knowledge check allows us to examine whether respondents' understanding of China moderates the impact of the earlier treatments.

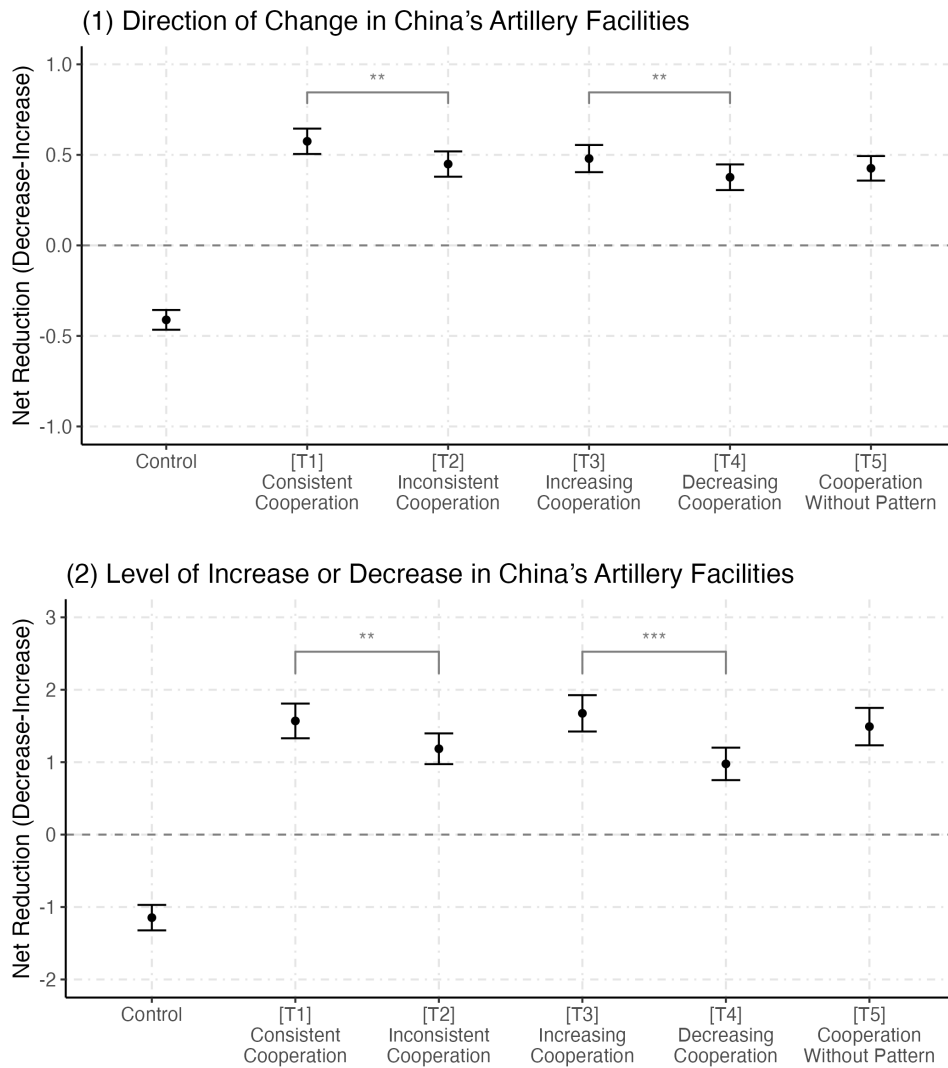
## 6.2. Results

Our initial analysis focuses on survey respondents' expectations regarding China's future behavior in the South China Sea. The outcome variable, displayed on the y-axis in Figure 5, is an average directional score, coded as 1 for 'decrease,' 0 for 'no change,' and -1 for 'increase,' such that higher positive values indicate a higher expectation of reduction in China's artillery facilities. In the control condition, where respondents received no information about Chinese cooperation, the average directional score was -0.411, indicating that respondents leaned toward expecting an increase rather than a decrease in China's artillery facilities in the year following the scenario. By contrast, across all conditions in which respondents were shown information on Chinese cooperation, the average score shifted into positive territory (0.46), reflecting a substantial expectation of reductions rather than increases in China's military facilities.

Beyond the overall effect of cooperation, we examine how varying patterns of cooperative signals shaped participants' expectations, in line with our theoretical framework. First, we find that the consistency of cooperation matters, supporting H1A. Respondents exposed to a consistent cooperative pattern (0.575) were 5.3 percentage points more likely to expect China's military reductions compared to those exposed to an inconsistent pattern (0.449). This difference is statistically significant at the 0.05 level. Second, as proposed by H2A, the direction of cooperation also influenced expectations. Participants who observed an increasing pace of cooperation across time (0.479) were 5.15 percentage points more likely to predict future reductions than those who saw a declining pace (0.376). This effect is likewise significant at the 0.05 level. Respondents in the condition without cooperative patterns expected fewer reductions than those in the consistent cooperation treatment (0.426,  $p < 0.01$ ), but did not differ significantly from the inconsistent, increasing, or decreasing conditions.

To examine these patterns' effects more closely, the second panel of Figure 4 presents the magnitude of expected change in China's artillery facilities. The y-axis reports the net reduction score, ranging from -5 (expectation of an expansion by 21 or more facilities) to 5 (expectation of a reduction by 21 or more facilities). First, we find supportive evidence for our hypothesis on a consistent pattern (H1A). On average, respondents exposed to a consistent cooperative pattern (1.57) anticipated, on average, two more China's artillery facilities being dismantled than those

Figure 5: Patterns of Cooperation and Expected Reduction in China’s Military Facilities

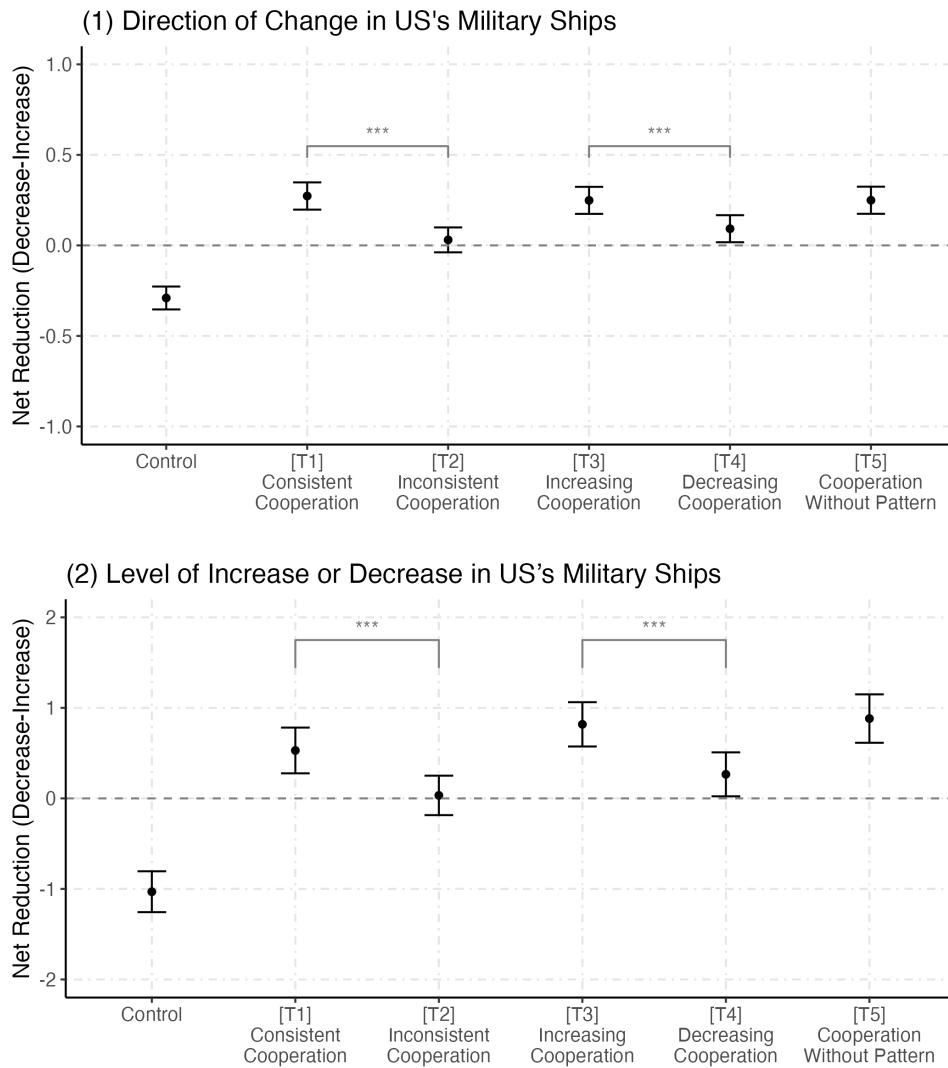


Note: The error bars in each coefficient plot on this graph represent the 95% confidence intervals.

in the inconsistent condition (1.19). Second, the direction of cooperation also shaped expectations, consistent with H2A. Participants who observed an increasing cooperative pattern (1.67) anticipated, on average, 3.5 more facilities being dismantled than those in the declining pattern condition (0.98), a difference significant at the 0.01 level. Finally, relative to the “no pattern” condition (1.49), respondents in the inconsistent and declining conditions reported significantly lower expectations of cooperation, with differences reaching significance at the 0.1 and 0.01 levels, respectively.

We next examine how the experimental treatments shaped public opinion on U.S. naval deployments to the South China Sea. As displayed in the first panel of Figure 6, in the control

Figure 6: Patterns of Cooperation and Public Opinion on U.S. Ships Deployment



Note: The error bars in each coefficient plot on this graph represent the 95% confidence intervals.

condition, where respondents received no information about Chinese cooperation, the average directional score was  $-0.29$ , indicating that participants leaned toward increasing rather than decreasing U.S. military presence in the South China Sea. By contrast, across all conditions which reveal China's cooperative behaviors, the average score shifted into a positive level ( $0.18$ ), reflecting a preference for reductions rather than increases in U.S. military presence in the region.

Our theoretical expectation suggest that greater perceived cooperation from China is associated with stronger support for reducing the number of U.S. ships in the South China Sea as a means of de-escalating tensions. Overall, the results mirror the patterns observed in expectations of China's behavior, though the effects are somewhat smaller in magnitude. First, we find

strong evidence that consistency matters, supporting [H1B](#). Respondents exposed to a consistent reduction pattern (0.273) were more supportive of U.S. naval reductions by 12.13 percentage point than those exposed to an inconsistent pattern (0.031), a difference significant at the 0.01 level. Notably, the inconsistent condition itself is statistically indistinguishable from zero, indicating that support for reducing U.S. deployments was not the prevailing opinion in this group. We also find evidence consistent with [H2B](#): respondents who observed an increasing pattern of Chinese military reductions (0.249) were more supportive of diminishing U.S. naval presence by 7.85 percentage point than those who observed a declining pattern (0.092), again significant at the 0.01 level. Finally, participants in the “no pattern” condition (0.249) expressed significantly greater support for reducing U.S. deployments than those in both the inconsistent and declining conditions ( $p < 0.01$ ).

We also assess how treatments influenced the perceived magnitude of U.S. force adjustments in the South China Sea. Consistent with [H1B](#), respondents exposed to a consistent pattern of Chinese cooperation (0.529) anticipated a larger drawdown in U.S. naval presence compared to those in the inconsistent condition (0.033), a difference equivalent to 2.48 ships and statistically significant at the 0.01 level. Again, the inconsistent condition is again indistinguishable from zero, suggesting no clear support for military de-escalation in this group. In line with [H2B](#), participants in the increasing cooperation treatment (0.818) supported larger reductions than those in the treatment of declining cooperation (0.266), corresponding to a difference of 2.76 ships ( $p < 0.01$ ). Finally, respondents in the “no pattern” condition (0.882) expressed significantly greater support for military de-escalation compared to both the inconsistent and declining treatments ( $p < 0.01$ ).

## 7. Study 2: Survey Experiment on Inter-korean Rapprochement in 2018

### 7.1. Survey Design

To empirically test our theoretical expectations about how patterns of cooperation shape public attitudes in a real-world setting, we conduct a preregistered online survey experiment in South Korea using a selective-history design combined with targeted framing.<sup>6</sup> Building on prior work that leverages real historical episodes to study foreign policy attitudes (D. Tingley, 2017; Weiss & Dafoe, 2019; Dafoe et al., 2022), our approach extends this logic by not only selecting a salient past event but also experimentally varying its interpretive frame. Specifically, we draw on the widely recognized 2018 inter-Korean rapprochement and present respondents with alternative narrative descriptions that depict North Korea's cooperative behavior as consistent, inconsistent, increasing, or decreasing over time. Rather than simply reminding respondents of a selective slice of history, our design manipulates the temporal framing of that history to isolate how different interpretations of the same cooperative episode influence expectations about North Korea's future behavior and support for Seoul's conciliatory policies. This parallel structure to Study 1 allows us to evaluate our theoretical mechanisms in a real-world East Asian setting where citizens actually experienced the episode being reframed, thereby enhancing ecological validity in a context—South Korea—where public attitudes toward a foreign adversary have immediate and consequential policy relevance.

The survey is administered by Macromill Embrain (<https://www.embrain.com/eng/>), a local survey company in South Korea. Our target population is South Korean adults aged 18 to 61 residing across all 17 administrative regions. Participants are recruited through an online panel, and only respondents who (1) agreed to all three consent statements (participation, sensitive data use, and debriefing), and (2) correctly answer both attention-check questions are included in the final dataset. Quotas for gender and age are applied to ensure national representativeness.

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<sup>6</sup>This study received ethics approval from the Trinity College Dublin Research Ethics Committee (Reference No. 4835).

Participants are randomly assigned to one of six groups. Each group is presented with a vignette describing inter-Korean relations in 2018—a year marked by several high-profile summits and cooperative gestures following decades of hostility. Each vignette is presented on a separate page and displayed for at least ten seconds before participants could proceed to be fully read.

The first two treatments present respondents with contrasting narrative frames of North Korea's cooperative behavior in 2018 with a consistency dimension. The consistent-pattern treatment depicts the year as a sustained period of engagement in which North Korea repeatedly followed through on diplomatic, cultural, and military-confidence-building initiatives. This vignette emphasizes continuity, portraying cooperation as steady, predictable, and reinforced across multiple domains. In contrast, the inconsistent-pattern treatment frames 2018 as marked by irregular, stop-and-go engagement. While acknowledging key cooperative gestures, it highlights delays, pauses, and uneven follow-through, presenting North Korea's actions as intermittent rather than sustained.

Treatment 1 (Consistent pattern):

*The year 2018 is widely regarded as a period during which **North Korea maintained a consistently cooperative attitude toward South Korea**. After Chairman Kim Jong-un expressed his willingness to participate in the PyeongChang Winter Olympics in his New Year's address, Pyongyang's actions followed a steady and predictable pattern of engagement. Within weeks, the long-dormant inter-Korean hotline was restored, and athletes from both Koreas marched together under the Korean Unification Flag at the PyeongChang Olympics. The two sides went beyond mere participation in sporting events, exchanging artistic performances in Seoul and Pyongyang—a scene that signaled normalized relations rather than an isolated special occasion.*

***This rhythm of cooperation continued through the spring and summer.** In April, President Moon Jae-in and Chairman Kim held a summit at Panmunjom, issuing the Panmunjom Declaration, which outlined plans to expand cooperation and dialogue across multiple domains. The two leaders met again in May for further discussions. In September, a third summit took place in Pyongyang. During this meeting, they announced several agreements, including the September 19 Military Agreement, which contained measures aimed at reducing military tensions. President Moon also delivered a public speech at a large-scale event in Pyongyang.*

*Taken together, these developments show that North Korea's cooperative behavior was not one-off or purely symbolic; rather, it continued throughout the period across diplomatic, cultural, and humanitarian areas. **North Korea maintained a steady flow of engagement**, making 2018 an exceptionally sustained period of inter-*

*Korean cooperation.*

Treatment 2 (Inconsistent pattern):

*In 2018, inter-Korean relations unfolded in a **pattern of intermittent cooperation, reflecting North Korea's inconsistent engagement**. Early in the year, a series of dramatic gestures—including Chairman Kim Jong-un's proposal to participate in the PyeongChang Olympics, the joint entry of the two Koreas under the Unification Flag, and Kim Yo-jong's visit to Seoul as a special envoy—raised expectations for reconciliation. However, after each of these events, follow-up measures were often delayed, and the pace of engagement slowed.*

*The April Panmunjom Summit and the surprise meeting in May led to the Panmunjom Declaration, but **concrete implementation lacked consistency**. North Korea did take steps such as adjusting its time zone and reopening communication lines, yet other commitments—like expanding economic cooperation or conducting joint inspections—progressed slowly. During the summer, talks gained momentum again through Red Cross and military meetings, only to lose speed once more before cooperation was revived with new agreements at the September Pyongyang Summit. Even these agreements required further negotiations to be put into effect.*

*Ultimately, **the defining feature of 2018 was the inconsistency of North Korea's cooperation**. The North opened doors multiple times and took selective actions, but repeatedly paused before resuming engagement. Progress was made, but no step transitioned smoothly into the next. In short, while North Korea did engage in cooperation on several occasions, **the overall pattern was characterized by a lack of consistency**.*

The third and fourth treatments present opposing temporal narratives of North Korea's cooperative behavior in 2018 in the dimension of a cooperative direction. The increasing-pattern treatment characterizes inter-Korean engagement as a steadily intensifying process: initial symbolic gestures—such as hotline restoration and Olympic participation—are portrayed as giving way to progressively deeper forms of cooperation, culminating in the highly institutionalized agreements of the September Pyongyang Summit. This frame emphasizes an upward trajectory in which cooperation broadened in scope, frequency, and substantive policy impact over time. In contrast, the decreasing-pattern treatment depicts 2018 as beginning with dramatic and unprecedented overtures, only for cooperation to taper off as the months passed. Early symbolic breakthroughs and high-profile meetings gradually shifted toward less dynamic implementation work, and later summits are framed not as major leaps forward but as extensions of prior commitments. This narrative highlights a downward slope in intensity, suggesting that North Korea's engagement, while ongoing, steadily lost momentum after its early peak.

Treatment 3 (Increasing pattern):

*In 2018, North Korea's cooperation with South Korea followed a distinctly upward trajectory. In the early months, only cautious symbolic gestures appeared—reopening the hotline, participating in the Olympics, marching together under the joint flag, and sending an art troupe. These were historically significant but limited in policy impact.*

*Soon, however, the pace of cooperation accelerated rapidly. The April Panmunjom Summit transformed symbolic goodwill into structured dialogue, producing agreements related to denuclearization and peace. In May and June, working-level talks surged, expanding multi-layered exchanges: the resumption of military and Red Cross talks, the restoration of communication lines, and plans for family reunions. Each month brought new cooperative measures, including the restoration of maritime radio communications and discussions on reconnecting railways—steps with real practical implications. The process reached its peak at the September Pyongyang Summit. There, Kim Jong-un and President Moon Jae-in adopted the Pyongyang Joint Declaration and a comprehensive military agreement that established buffer zones and confidence-building measures. President Moon's speech before 150,000 North Korean citizens symbolized the highest level of inter-Korean engagement in decades.*

*The trend was unmistakable: cooperation began with cautious symbolic gestures, expanded into institutionalized engagement, and evolved from limited interaction to concrete plans. By the end of 2018, North Korea's cooperation had clearly risen in both intensity and scope.*

Treatment 4 (Decreasing pattern):

*In 2018, North Korea's cooperation with South Korea followed a distinctly downward trajectory. Inter-Korean relations began with intense optimism, but as the year progressed, the pace of cooperation gradually slowed. North Korea's participation in the PyeongChang Olympics, the joint entrance under the unified flag, and the April summit astonished the world and created an atmosphere of historic reconciliation. Cultural exchange events and symbolic gestures such as aligning the two Koreas' time zones reinforced this early optimism.*

*However, as time went on, the speed of new cooperative initiatives gradually declined. By mid-2018, the focus shifted from launching new proposals to implementing existing agreements. Working-level meetings continued, but their frequency and substance were not as dynamic as they had been at the beginning of the year. The September Pyongyang Summit reaffirmed earlier agreements and announced some additional steps, but these measures were closer to extensions of already discussed items than to genuine breakthroughs.*

*Toward the end of the year, cooperation persisted but took on a more procedural and quieter form, centered on follow-up measures rather than major shifts. The explosive momentum seen in the spring had faded, and inter-Korean engagement settled into a stable but less active pattern. In other words, North Korea did not cease cooperation, but its intensity gradually decreased, showing a pattern that moved steadily away from the initial level of vitality.*

The final two conditions serve as control groups. Treatment 5, the “cooperation without any pattern” condition, presents respondents with a neutral, pattern-free account of inter-Korean relations in 2018. It enumerates the year’s major diplomatic, cultural, and military exchanges—such as the PyeongChang Olympics, the Panmunjom and Pyongyang summits, and associated confidence-building measures—without emphasizing any temporal trajectory. This description provides information equivalent in content to the patterned treatments but intentionally avoids framing the cooperation as consistent, inconsistent, increasing, or decreasing. In contrast, Treatment 6 functions as a pure control in which respondents receive no information about the 2018 rapprochement at all. In sum, these two control conditions allow us to distinguish framing effects driven by the temporal interpretation of cooperation (in Treatments 1-4) from the effects of simply being reminded of the 2018 events (Treatment 5) or from having no informational prompt (Treatment 6).

Treatment 5 (Cooperation without Any Pattern):

*In 2018, a number of inter-Korean exchanges took place. In his New Year’s address that year, Chairman Kim Jong-un mentioned the possibility of participating in the PyeongChang Winter Olympics, which led the two Koreas to reopen communication channels that had long been suspended. At the Olympics, athletes from both Koreas marched together under the unified flag, and cultural exchanges followed, including performances by a North Korean art troupe in the South and a South Korean artistic performance in Pyongyang.*

*In April, President Moon Jae-in and Chairman Kim held a summit at Panmunjom and announced the Panmunjom Declaration, which included plans to expand cooperation and dialogue across various areas. The two leaders met again in May for further discussions. A third summit was held in Pyongyang in September, where both sides announced several agreements and adopted the September 19 Military Agreement, which contained measures aimed at reducing military tensions.*

*Thus, in 2018, the two Koreas engaged in multiple contacts and discussed cooperative measures across a wide range of areas—including diplomacy, culture, military affairs, and humanitarian issues.*

Treatment 6 (Control):

*Respondents receive no additional information on the inter-Korean rapprochement in 2018.*

To measure the outcome variables, respondents answered two sets of outcome measures concerning (1) expectations about North Korea’s future behavior and (2) their attitudes toward

conciliatory policies toward North Korea. First, to assess expectations about North Korea’s behavior, we asked respondents to evaluate: (1) The stance they believe North Korea will take on military tensions with South Korea (ranging from “escalate” to “ease” tensions); and (2) The stance they expect North Korea to adopt toward diplomatic exchanges with South Korea (from “actively cooperate” to “not cooperate”). Second, to measure attitudes toward South Korea’s policy choices, respondents indicated their views on: (1) What they believe Seoul should do regarding troop deployment and security infrastructure along the inter-Korean border (from “greatly increase” to “greatly decrease”); and (2) The degree to which they support the South Korean government pursuing diplomatic engagement and cooperative initiatives with North Korea in 2025 and beyond (from “support” to “oppose”).

After completing the outcome measures, respondents were asked to select the description that best captured North Korea’s cooperative pattern in 2018 (consistent, inconsistent, increasing, decreasing, or “don’t know”). This item functioned as a manipulation check, allowing us to verify whether participants correctly understood and internalized the temporal cooperation pattern emphasized in their assigned treatment. We also include a question asking respondents to characterize North Korea’s policies and actions toward South Korea from 2018 to 2025, using a scale from “very cooperative” to “very hostile.” This item enables us to examine whether exposure to differently framed 2018 cooperation patterns influences how respondents interpret North Korea’s current behavior and foreign policy intentions—an important consideration given that individuals may hold divergent baseline perceptions following the 2018 rapprochement. If responses to this question remain consistent across treatment groups, it would suggest that variation in attitudes toward current North Korean policies stems solely from the experimentally framed depictions of the 2018 rapprochement rather than from preexisting differences in perceptions of North Korea’s recent conduct.

Finally, all participants receive a debriefing statement explaining the purpose of the study. The statement clarifies that the vignettes are based on actual events from 2018 but are framed differently to explore how temporal narratives of cooperation influence public perception. Participants are assured that the purpose of varying these descriptions was analytical—not to mislead or distort historical facts. Only respondents who confirm their understanding and consent

to data use after reading this debriefing are included in the final analysis.

## **7.2. Results**

*\*\*This section is incomplete.\*\* We are currently gathering data through pilot surveys. Our first pilot, conducted in October 2025, used a different design from the one described above. After reviewing the results, we revised the design because the original treatments did not effectively shift respondents' perceptions of North Korea's cooperative behavior in 2018. So, we decided to change them to the current versions with more details that support the description of their cooperative patterns of North Korea. Nonetheless, the first pilot still revealed that perceptions of inconsistent or declining cooperation are negatively associated with expectations about North Korea's future cooperation and support for conciliatory policies toward the country, even after accounting for several covariates including partisanship and pre-existing hostility toward North Korea.*

## **8. Conclusion**

This paper examined how the sequencing and trajectory of cooperative gestures during rapprochement shape public expectations about an adversary's intentions and support for reciprocal concessions. Using an original survey experiment on U.S.–China relations in the South China Sea, we showed that citizens attend not only to whether cooperation occurs but also to how it unfolds. Consistent and increasing cooperation generated optimism about future restraint and greater support for U.S. de-escalation, whereas inconsistent or declining gestures failed to reassure—even producing less optimism than receiving no patterned information at all.

These results carry three broader implications. First, they refine the logic of costly signaling by showing that credibility derives not only from the magnitude of individual gestures but from their temporal coherence. Sequences of cooperative acts create patterns that audiences interpret as evidence of reliability. Second, they uncover a narrative mechanism: people integrate successive gestures into a storyline of either steady progress or faltering commitment,

rewarding leaders who sustain a visible rhythm of cooperation. Third, they illuminate the domestic politics of peace initiatives—publics withdraw support when cooperative narratives lose momentum, even if earlier steps appeared costly and sincere.

The inter-Korean experience under President Moon Jae-in exemplifies these dynamics. Despite a series of costly and unprecedented summits in 2018, public support quickly eroded once North Korea's cooperative signals weakened, interrupting the narrative of progress. Our findings suggest that future efforts at U.S.–China or other rival reconciliations will face similar challenges: sustaining public backing requires not just dramatic overtures, but a coherent and cumulative pattern of behavior that reinforces expectations of enduring cooperation.

These findings also open avenues for further inquiry. Our design centers on a single hypothetical rivalry and a national sample. Replicating the experiment in contexts with different threat perceptions, political institutions, or firsthand experiences with rivalries would clarify the scope conditions. Incorporating elites or media intermediaries could reveal how narratives about cooperation are constructed and contested. Finally, pairing survey evidence with observational data on real rapprochement efforts would help connect micro-level attitudes to the strategic choices leaders confront when moving from tentative cooperation to lasting peace.

## References

- Al Jazeera. (2023). *Saudi and iran exchange ambassadors after rapprochement*. Retrieved from <https://www.aljazeera.com/news/2023/9/5/saudi-and-iran-exchange-ambassadors-after-rapprochement> (Accessed: 2024-01-25)
- Albuyeh, R., & Paradis, M. (2018). Thawing rivalries and fading friendships: an experimental approach to rapprochement and alienation. *Political Psychology*, 39(4), 811–827.
- Axelrod, R. (1984). *The evolution of cooperation*. Basic Books: New York.
- Bak, S.-h. (2018). Rightwing protestors claim ‘time to bomb nk’. *The Korean Herald*. Retrieved 2021-10-09, from <http://www.koreaherald.com/view.php?ud=20180427000661>
- BBC. (2018). *Trump kim talks: What to make of the hanoi summit collapse?* Retrieved from <https://www.bbc.com/news/world-asia-47382060> (Accessed: 2024-01-20)
- Berenji, S. (2020). Sadat and the road to jerusalem: Bold gestures and risk acceptance in the search for peace. *International Security*, 45(1), 127–163.
- Berenji, S. (2023). Empathy, risk-taking, and concession-making: Gorbachev’s bold proposals at reykvjavik to end the us-soviet arms race. *Security Studies*, 32(2), 306–337.
- Brandt, P. T., Colaresi, M., & Freeman, J. R. (2008). The dynamics of reciprocity, accountability, and credibility. *Journal of Conflict Resolution*, 52(3), 343–374.
- Chan, S., & Chung, L. (2016). A force awakens in taiwan: vote of sunflower generation could be pivotal in elections. *South China Morning Post*. Retrieved from <https://www.scmp.com/news/china/policies-politics/article/1901733/force-awakens-taiwan-vote-sunflower-generation-could-be>
- Chu, J. A. (2021). Liberal ideology and foreign opinion on china. *International Studies Quarterly*, 65(4), 960–972.
- Cohen, E. F. (2018). *The political value of time: Citizenship, duration, and democratic justice*. Cambridge University Press.
- Colaresi, M. P. (2004). When doves cry: International rivalry, unreciprocated cooperation, and leadership turnover. *American Journal of Political Science*, 48(3), 555–570.
- Dafoe, A., Liu, S., O’Keefe, B., & Weiss, J. C. (2022). Provocation, public opinion, and international disputes: Evidence from china. *International Studies Quarterly*, 66(2), sqac006.
- Davies, G. A., & Johns, R. (2016). The domestic consequences of international overcooperation: An experimental study of microfoundations. *Conflict Management and Peace Science*, 33(4), 343–360.
- Diehl, P. F., Goertz, G., & Gallegos, Y. (2021). Peace data: Concept, measurement, patterns, and research agenda. *Conflict Management and Peace Science*, Vol. 38(5) 605–624.
- Fearon, J. D. (1994). Domestic political audiences and the escalation of international disputes. *American political science review*, 577–592.

- Fearon, J. D. (1995). Rationalist explanations for war. *International organization*, 49(3), 379–414.
- Fearon, J. D. (1997). Signaling foreign policy interests: Tying hands versus sinking costs. *Journal of Conflict Resolution*, 41(1), 68–90.
- Goertz, G., Diehl, P. F., & Balas, A. (2016). *The puzzle of peace: The evolution of peace in the international system*. Oxford University Press.
- Goldstein, J. S., & Pevehouse, J. C. (1997). Reciprocity, bullying, and international cooperation: Time-series analysis of the bosnia conflict. *American Political Science Review*, 515–529.
- Haynes, K. (2019). A question of costliness: Time horizons and interstate signaling. *Journal of Conflict Resolution*, 63(8), 1939–1964.
- Hom, A. R. (2020). *International relations and the problem of time*. Oxford University Press.
- Jervis, R. (1970). *The logic of images in international relations*. Columbia University Press.
- Jervis, R. (1976). *Perception and misperception in international politics: New edition*. Princeton University Press.
- Kertzer, J. D., Brutger, R., & Quek, K. (2024). Perspective-taking and security dilemma thinking: Experimental evidence from china and the united states. *World Politics*, 76(2), 334–378.
- Kertzer, J. D., Rathbun, B. C., Rathbun, N. S., et al. (2020). The price of peace: Motivated reasoning and costly signaling in international relations. *International Organization*, 74(1), 95–118.
- Kim, S. J. (2021). Quick on the draw: American negativity bias and costly signals in international relations. *Journal of Conflict Resolution*, 00220027211040104.
- Kupchan, C. A. (2010). *How enemies become friends: The sources of stable peace*. Princeton University Press.
- Kydd, A. H. (2000). Trust, reassurance, and cooperation. *International Organization*, 54(2), 325–357.
- Kydd, A. H. (2005). *Trust and mistrust in international relations*. Princeton University Press.
- Lebow, R. N., & Stein, J. G. (1987). Beyond deterrence. *Journal of Social Issues*, 43(4), 5–71.
- Lee, S. (2023). Domestic distributional roots of national interest. *American Political Science Review*, 1–16.
- Mattes, M., & Weeks, J. L. (2019). Hawks, doves, and peace: an experimental approach. *American Journal of Political Science*, 63(1), 53–66.
- Mattes, M., & Weeks, J. L. (2022). Reacting to the olive branch: Hawks, doves, and public support for cooperation. *International Organization*, 76(4), 957–976.
- Mattes, M., & Weeks, J. L. (2024). From foes to friends: The causes of interstate rapprochement and conciliation. *Annual Review of Political Science*, 27.

- Myrick, R. (2021). Do external threats unite or divide? security crises, rivalries, and polarization in american foreign policy. *International Organization*, 1–38.
- Nishikawa-Pacher, A. (2024). Peace needs constant reproduction: The temporality of the diplomatic system. *Security Dialogue*, 55(2), 197–215.
- Öniş, Z., & Yilmaz, Ş. (2008). Greek-turkish rapprochement: Rhetoric or reality? *Political Science Quarterly*, 123(1), 123–149.
- Osgood, C. E. (1962). *An alternative to war or surrender*.
- Pew Research Center. (2015). Support for iran nuclear agreement falls. *Pew Research Center*. Retrieved from <https://www.pewresearch.org/politics/2015/09/08/support-for-iran-nuclear-agreement-falls/>
- Pierson, P. (2004). *Politics in time: History, institutions, and social analysis*. Princeton University Press.
- Pridham, G. (1991). Linkage politics theory and the greek-turkish rapprochement. In *The greek-turkish conflict in the 1990s* (pp. 73–88). Springer.
- Rasler, K., Thompson, W. R., & Ganguly, S. (2013). *How rivalries end*. University of Pennsylvania Press.
- Ricoeur, P. (1984). *Time and narrative, volume 3* (Vol. 3). University of Chicago press.
- Ripsman, N. M. (2016). *Peacemaking from above, peace from below: Ending conflict between regional rivals*. Cornell University Press.
- Schelling, T. C. (1960). *The strategy of conflict*. Harvard university press.
- Shin, H., & Lee, J. (2018). *Two koreas plan third summit of kim, moon next month*. Retrieved from <https://www.reuters.com/article/world/two-koreas-plan-third-summit-of-kim-moon-next-month-idUSKBN1KY06D/> (Accessed: 2024-01-22)
- Thompson, W. R. (2001). Identifying rivals and rivalries in world politics. *International Studies Quarterly*, 45(4), 557–586.
- Tingley, D. (2017). Rising power on the mind. *International Organization*, 71(S1), S165–S188.
- Tingley, D. H. (2011). The dark side of the future: An experimental test of commitment problems in bargaining. *International Studies Quarterly*, 55(2), 521–544.
- Vasquez, J. A. (1993). *The war puzzle* (Vol. 27). Cambridge University Press.
- Weiss, J. C., & Dafoe, A. (2019). Authoritarian audiences, rhetoric, and propaganda in international crises: Evidence from china. *International Studies Quarterly*, 63(4), 963–973.
- Wheeler, N. J. (2011). The promise and perils of ‘leaps of trust’ in india–pakistan relations. In *The politics of nuclear weapons in south asia* (pp. 155–176). Routledge.
- Yoder, B. K., & Haynes, K. (2021). Signaling under the security dilemma: An experimental analysis. *Journal of conflict resolution*, 65(4), 672–700.