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Nuclear Bluff Learning: Nuclear Signaling in Times of Crisis

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1.1 Introduction

"I want to remind those who allows themselves such statements [nuclear threats] about Russia that our country also has a variety of weapons of destruction, and in some areas, even more modern than those in NATO countries. We will without question use all the means at our disposal to protect Russia and our people. This is not a bluff," (as cited in Guardian News 2022).

"We have not faced the prospect of Armageddon since Kennedy and the Cuban missile crisis," US President Biden states (as cited in Borger 2022).

Even if it is often thought that the threat of nuclear war is no longer an issue since the end of the Cold War era, it has once again risen to the surface following Russia's invasion of Ukraine in 2022. Because such a pressing issue has resurfaced in the realm of international relations, I have found the topic of nuclear alerts and nuclear signaling to be of extreme importance. Nuclear alerts refer to the enhancement of one's readiness for nuclear war as well as the threat it makes to the opponent to increase deterrence (Sagan 1995, 99).

The thesis is a comparative case study research that will analyze four case studies: 1969 US nuclear alert crisis; 1973 Israeli nuclear alert crisis; 2017 North Korean nuclear alert crisis; and 2022-2023 Russian nuclear alert crisis. The case study selection intends to compare between nuclear alert crises during the Cold War with nuclear alert crises in the post-Cold

War period. The nuclear alerts have shaped one another as leaders study the previous alerts to learn from their successes and failures, and subsequently add new tools to their nuclear signaling. I present this idea using a new term I have coined "nuclear bluff learning".

In analyzing the process of the nuclear bluff learning, I focus on and distinguish between the two aspects of nuclear signaling: nuclear military alerts, which refer to the operational readiness for nuclear war; and nuclear threats, which refer to the rhetorical use of nuclear saber-rattling. Increasing nuclear readiness for war serves the military purpose of signaling as it reduces vulnerability to attack and prepares nuclear weapons for potential use. On the other hand, the political purpose is to enhance nuclear deterrence by signaling resolve and demonstrating how seriously a government is taking the potential conflict (Sagan 1985, 99). The distinction between those two forms of nuclear signaling is important for the purposes of the thesis, because as will be shown, some alerts focus more heavily on the military readiness aspect, while others emphasize more on the nuclear rhetorical aspect of nuclear signaling.

1.1.2 Research Questions

Why do states raise nuclear alerts despite the likelihood of starting a nuclear war? Do the political benefits of nuclear signaling outweigh its dangers? How have nuclear alert crises changed shape in the post-Cold War period in comparison with the nuclear alert crises during the Cold War? What are the core elements of nuclear signaling and what have leaders learned from previous nuclear alerts?

To address these questions, a series of sub-questions and issues will be examined. What are the similarities and differences between the following four case studies of nuclear alert crises: The 1969 US nuclear alert crisis; 1973 Middle East nuclear alert crisis; 2017 US-

North Korean nuclear alert crisis; and 2022-2023 Russian nuclear alert crisis? What are the similarities and differences between the motives behind the nuclear alert crises and their outcomes? How have the crises shaped one another and developed over time? Given that the first three nuclear alert crises have been averted, and the fourth crisis remaining on alert, to what extent is the successful aversion of those nuclear crises sufficient in supporting the idea that nuclear signaling is an effective means of creating desired outcomes in a crisis in relation to the ongoing 2022 Russian nuclear alert?

1.1.3 Hypotheses

H1: Despite the conspicuous dangers of nuclear alerts, statesmen accept the risk of potential escalation to produce desired outcomes in times of conflict, though the results are not always in their favor.

H2A: The nuclear alert crises presented in the thesis have shaped and influenced one another through a process which I will call ‘nuclear bluff learning’.

H2B: Leaders who raise nuclear alerts in the post-Cold War period see less of a risk in involving domestic audiences in comparison to the Cold War period.

1.4 Theoretical and Methodological Framework

This chapter will present all the relevant theories and the methodology that will be used and applied in the thesis. The chapter will begin with the theories which will be followed by the methodology of the research.

1.4.1 Theoretical Framework

1.4.1.1 Deterrence Theory

The concept of deterrence was put forth immediately with the inception of nuclear weapons in the nuclear age. Deterrence remains the dominant concept of nuclear strategy. The first and foremost step in the American security program in the nuclear age became one that should take measures to guarantee to themselves in case of attack the possibility of retaliating in similar fashion. It is not about who will win the next nuclear war, but more about averting them altogether (Brodie 1978, 65). To achieve deterrence, it is important to ask how one can protect themselves against a surprise attack so that the opponent is deterred. There is a political dimension to this question because the decision to take precautionary measures rests on whether one state thinks another has the intention to destroy it. It is important to reduce the proportion of retaliatory forces which the adversary could have high confidence in destroying and to keep the adversary fully aware of the penalties of their potential miscalculations (ibid., 67).

Deterrence aims to discourage the adversary from taking military action by demonstrating to them the cost and risk which would outweigh their prospective gain. Thus, deterrence aims to work on the adversary's intentions. The deterrent value of military might reduces the likelihood that an adversary would employ military force against oneself (Snyder 1961, 3). Deterrence can be said to be the negative aspect of political power, because it is the power to discourage an adversary rather than compel them. Deterrence is created by applying an implicit or explicit threat of a sanction if the adversary carries out an action that is forbidden or by promising a reward if that forbidden action is not taken. Therefore, deterrence does not

need to depend on the use of military force. For instance, the promise of economic aid might deter a state from taking military action, which would be contrary to their own interests (ibid., 9-10).

Thus, deterrence refers to the dissuasion of someone from acting in a particular way by threatening that individual with consequences to their action (Waltz 1990, 84). It is about dissuading rather than coercing (Santana 2009, 329). In nuclear terms, the deterrence theory holds that to deter an adversary's attack, a state must only possess a force to survive a first strike as well as strike back. However, deterrence ability does not promise to fend off aggressors, thus is not a defense strategy. Rather, it merely entails the ability to strike back and cause mutual destruction. Simply put, deterrence is put in place in the hopes of discouraging a potential attack. As such, Waltz maintains that acquiring nuclear weapons is beneficial as it eliminates the need to fight, because unlike conventional warfare, nuclear deterrence removes elements of war-waging and defense given that only a small number of nuclear warheads are required to reach the targets. For deterrence to work, the disadvantages of initiating nuclear war must outweigh its gains (Waltz 1990, 84-85).

Furthermore, as mentioned above, deterrence is the mere *ability* to strike back: it is about what the state *can* do, rather than what it *will* do (Waltz 1990, 85). That being said, this theory is central to the thesis given that it focuses on the analysis of nuclear alert case studies, and in particular, those that have occurred as a result of 'bluffing' by leaders who do so in order to achieve their desired outcome of the crisis that excludes nuclear strikes. In other words, the purpose of raising a nuclear alert is to serve the political purpose of deterrence (Sagan 1995, 99).

While deterrence's purpose is to provide security and stability to the nuclear state, it nonetheless provides the nuclear state with what is called a "stability-instability paradox". This paradox presents stability in the possession of nuclear weapons as maintaining a minimum of nuclear weapons that would be sufficient to withstand a nuclear attack and be capable of retaliation with assured destruction of the enemy. This provides stability between nuclear states because they would not want to wage an all-out nuclear war. On the other hand, the more the retaliatory forces of nuclear states become invulnerable, thus further increasing the balance between them, the more nuclear threats would become ineffective in the face of limited forms of violence. As a result, the more stable it becomes at the mutually assured destruction level, the more there was instability at lower forms of aggression (Santana 2009, 326).

1.4.1.2 Compellence Theory

Compellence Theory was created by Thomas Schelling, as he distinguished between compellence and deterrence (Art 1980, 5; 1). A state that can compel another state, also has the ability to defend against it and deter it. On the other hand, a state that can deter another state may do so without having the ability to defend against it nor compel it (ibid., 5). When using compellence, a state can thus get its adversary to change their behavior, and take an action that the compelling state wants. It is to stop an adversary from doing something they have already started, or get them to carry out an action that they have not yet undertaken (ibid., 7). On the other hand, when employing deterrence, a state is attempting to get its adversary to *not* take an action the former state does not want. The deterrent use of force is thus the deployment of military force with the intention of preventing the adversary from doing something undesirable or harmful to oneself. This means that deterrence is the threat of

retaliation (ibid., 6-7). Therefore, while deterrent threats aim to persuade adversary not to change their behavior, compellent threats aim to persuade an adversary to change their behavior (ibid., 19).

There is another distinction between compellence and deterrence, and that is one between active and passive use of force. Deterrence's success is measured by not having to use physical force to stop an action from happening. Compellence's success rests on how quickly and closely the enemy conforms to one's demands. It may be difficult to prove deterrence's success, however, because it cannot be made clear whether one state does not carry out an action as a result of deterrence. In other words, we cannot be really certain as to why something did not happen. On the other hand, while compellence is harder to achieve than deterrence, it is nonetheless easier to measure its success because it requires that states alert their behavior in response to a visible forceful action taken by a state (ibid., 8).

Compellence can be done in two different ways. First, there is physical compellence, where military power or the physical use of force refers to actually employing force against the enemy. Second, there is peaceful compellence, which refers to using an explicit threat to use force, or the implicit threat that is communicated by a state that has its forces available for use, or on alert (ibid., 5-6; 2).

In terms of nuclear weapons, peaceful compellence can be employed to alter other states' behavior. Peaceful compellence employs actions that do not result in physical destruction to the adversary, but it requires this adversary to pay a price until it changes its behavior. For instance, an arms race is quintessential of peaceful compellence, because when it is intensely

pursued, it results in one state altering its adversary's behavior, or countering its actions in producing stalemate, or in an outbreak of a war between them (ibid., 19).

The distinction between deterrence and compellence is essential to distinguish between the purposes behind nuclear posture in the case studies presented in the thesis.

1.4.1.3 Signaling

Raising a nuclear alert is also referred to as nuclear signaling, which is another core concept of the thesis. Nuclear signaling is meant to demonstrate the will to use nuclear weapons against the adversary and is referred to as the "core rationale of nuclear weapon ownership" (Gower 2018, 2). However, during the Cold War, nuclear signaling was fraught with incidents and misunderstandings (ibid., 1). For instance, the most infamous nuclear alert crisis was the Cuban Missile Crisis in 1962, which was believed to be the closest the world ever got to nuclear war (Blight et al. 1987, 170). In 1976, during a tense situation between North and South Korea, South Korea cut down a tree in the jointly controlled area. As a result, North Koreans attacked and killed two US army officials while they were trying to cut down the tree (Clements National Security n.d.). In response, the US placed its nuclear weapons on DEFCON 3, threatening to use nuclear weapons against North Korea (Ellsberg 2017, 321). During the Cold War, there were 22 recorded nuclear alerts initially raised by the US (ibid., 319-321).

While there are different forms of nuclear signaling, including long-term signaling and short-term reactive activity and crisis signaling (ibid., 2), the paper will focus on the latter only based on the specific case studies selection.

The thesis also explores a sub-type of signaling, which I call *'yoyo signaling'.* Yoyo signaling refers to the constant increase and decrease in tension of nuclear rhetoric and escalation tactics by a leader carrying out a nuclear alert. The effect of yoyo signaling is important for the player using this tactic. If a leader indicates that they are willing to resort to nuclear warfare as they increase the tension amongst their adversaries, then the adversaries will likely appreciate the moment they decrease the tension, thus pushing the adversaries in the direction they please. It is a manipulative tactic to get adversaries to acquiesce to one's demands in times of crisis.

1.4.1.4 Neo-Realism

Deterrence theory is essentially a realist theory. Thus, neorealism (as well as realism) is also at the heart of nuclear weapons and the threat of using them. Since realism is focused on power, nuclear weapons add to the national power of a state. In realism, power is the aggregation of physical factors such as natural resources, geography, population and industrial capacity. It also refers to the less tangible factors, such as leadership and the type of government. The interesting thing about nuclear weapons is that they do not only contribute to a nation's power, but they also contribute to the perceptions of power one state has of itself as well as the perceptions other states have about a nuclear state. For instance, heads of states might view the acquisition of nuclear weapons as a national achievement and prestige. As a matter of fact, it is sometimes the case that a sense of achievement and prestige are the motivating forces behind the acquisition of nuclear weapons (Davis 1993, 80). As the classical realist Morgenthau said, power is just about anything that contributes to "the control of man over man" (as cited in Santana 2009, 329). From a purely classical realist lens, the possession of nuclear weapons contributes to national power no matter what the actual or

perceived value of security they hold (Davis 1993, 80), as opposed to deterrence, which heavily relies on dissuading its opponent from striking based on its perception of its own opponent and what it might do (Santana 2009, 329).

Realism emphasizes the importance of anarchy in the international society: it is the organizing principle of how states deal with one another. Anarchy, which is the absence of a higher authority in the international system, leads states to seek power to survive in an anarchic world. As nations accumulate power to assure their survival, a security-power dilemma arises as states increase their power to reduce their insecurity, thus other states feel insecure and are inspired to increase their power. This leads to the security-power dilemma where states are constantly readjusting themselves to the distribution of power within the international system. Power is not an end in and of itself, it is a means to serve a state's interests, which is mainly survival (Davis 1993, 80). This very much relates to the concept of nuclear signaling: the 'end' of making a nuclear threat is not to actually carry out the threat, but it is rather merely a 'means' to serve the end of controlling the political outcomes in a given situation.

1.4.1.5 Nuclear Taboo

A taboo is something that is not acceptable to bring up in conversation, let alone do. It is a sort of prohibition of something as a result of a social custom (Merriam-Webster 2022). There is a taboo against nuclear weapons that contributes to the feelings of revulsion towards their use. It is a de facto, normative prohibition of the usage of nuclear weapons. There is evidence to support the idea that the taboo has constrained statesmen from the usage of nuclear weapons since 1945 (Tannenwald 2005, 5). The nuclear taboo refers not to the

behavior of nonuse of nuclear weapons, but rather the normative belief about the behavior of the usage and acquisition of nuclear weapons. This forceful, normative notion of prohibition protects individuals and societies from dangerous behavior (ibid., 8).

Despite the prohibition of the usage of nuclear weapons being a strongly upheld notion in the international community, it is yet a taboo rather than a norm for the following reasons. There are two elements to the nuclear taboo: the objective and the intersubjective elements. The objective element refers to the prohibition of nuclear weapons due to dangerous and uncertain consequences of their usage. Once the line between use and nonuse has been crossed, one would immediately be in a completely new unimaginable world with unthinkable consequences. Thus, the nuclear taboo provides leaders with a wake-up call should they ever entertain the thought of using nuclear weapons. It reminds them that it would be a point of no return if they decide to use them due to the ultimate destruction that would ensue (ibid., 8).

However, unlike other taboos in society which are not banned by law, the usage and acquisition of nuclear weapons is banned under the NPT. NPT prohibits the vast majority of states from acquiring nuclear weapons, and the five declared nuclear states (United States, Britain, France, China and Russia) are only allowed to temporarily be in possession of nuclear weapons pending complete nuclear disarmament (ibid., 9). Nonetheless, the taboo is not a legal norm. International forums such as the UN General Assembly have consistently referred to the usage of nuclear weapons as illegal despite there being no explicit international legal prohibition against nuclear weapons. And yet, the legal use of them has gradually become to be illegitimate thanks to the numerous treaties and regimes that restrict the usage of nuclear weapons (ibid., 10).

Intersubjectively, it is a taboo simply because people believe it to be so. In the 1950s, leaders began using the term 'nuclear taboo' despite a tradition of nonuse hardly being in place. The perception of nuclear weapons as being taboo has a great impact on behavior: if actors perceive them as a taboo with a normative force of prohibition, their behavior and the choices they make when it comes to nuclear weapons will be largely dictated by their perceptions. However, because this rests on their own subjective perception, the normative force against nuclear weapons is merely a taboo rather than a norm (ibid., 9).

In the analysis of the case studies presented in the thesis, the nuclear taboo plays an important role. In the research questions section above, I ask how the crises have changed shape in the post-Cold War period, and how it differs from the Cold War period. Analyzing the nuclear taboo in these two different time periods and contexts will be important for analyzing the changes that occur over the years and how the different periods place a varying level of emphasis on the sanctity of the nuclear taboo.

1.4.1.6 Nuclear Bluff Learning

Nuclear bluff learning refers to the process in which leaders learn how to create a more credible nuclear bluff over time by studying previous nuclear alerts. The nuclear bluff has evolved as a result of a learning process that influenced leaders as they observed how nuclear signaling was used in the past. Leaders have learned from some of the past mistakes, used what they think had previously worked with others, and refined the nuclear bluff to make it their own by adding their own new elements. The two core tools of the nuclear bluff which remained a constant throughout all the nuclear alert crises in the thesis were the following: increasing readiness measures, and subsequently making a speech afterwards. The nuclear

signaling in each crisis always began with raising the alert first, then making a public speech where nuclear signaling is used. The purpose of the increase in readiness measures preceding making a speech is to signal resolve to the adversary and the credibility of the threat. With each successive nuclear alert, a new element is added to the nuclear bluff making it the creator's own unique nuclear alert.

However, proving that the repetitions of behavior and actions, changes and adaptations that occurred over the years and in different time periods occurred purely as a result of learning is quite hard, and it is uncertain. My attempt here will be to present the evidence which may possibly lead to the conclusions that the repetitions, changes and adaptations may have resulted due to the learning process, although once again, it is nonetheless difficult to prove and the findings could be contextual in nature, rather than generalizable.

The learning process which is analyzed in the thesis analyzes the changes in practices and interests between the Cold War period and the post-Cold War period. This is because the practices and the interests of one period can become illegitimate or even downgraded in the later period due to a normative evolution. A change in opinions on slavery or colonialism is an instance of this (Nye 1987, 378). In relation to the thesis, for example, this will apply to the change in normative behavior in the nuclear taboo. I argue that there was a stronger presence of the nuclear taboo in the Cold War period, while later in the post-Cold War period, there was a backsliding in the normative integrity of the nuclear taboo. I theorize that this could possibly be a result of a prolonged period of time that saw no outbreak of nuclear war, which makes the possibility of nuclear war seem too far-fetched. Another reason that might be contributing to this notion is the belief in total destruction of the use of nuclear weapons. Furthermore, nuclear signaling has been used to achieve national interests during

the Cold War, but it did not result in nuclear war. This may have resulted in learning that the use of nuclear weapons is an unlikely possibility to occur anytime in the near future, due to what Nina Tannenwald called "nuclear forgetting" (Tannenwald 2023). Therefore, the idea that nuclear war never broke out once again since 1945, along with the continuing notion of mutually assured destruction, may have possibly given the leaders who use nuclear signaling the belief that nuclear war is highly unlikely. This makes them behave in ways that are contrary to the notion of the nuclear taboo through their nuclear saber-rattling behavior because they do not believe that it is dangerous and might result in nuclear war.

Learning also occurs when new knowledge is presented which can redefine national interests. The learning process occurs as a result of the development of knowledge through study or experience. When there is an awareness of newly understood reasons for undesirable effects, a different approach is often adopted to provide a more effective means of achieving one's interests (ibid.). In my analysis of the case studies, I argue that it is possibly to theorize that the leaders have understood the reasons behind the failure of previous nuclear alerts, and thus adopted a different approach to produce more desirable effects in their crisis bargaining. I also argue that there is reason to believe they have also continued certain behaviors in conducting the nuclear bluff which they believed were effective.

There are different levels of learning on a continuum of ends-means relationships, starting from very simple and ending with very complex. Simple learning uses information that is new in order to adapt the means without changing the deeper goals of ends-means relationship. On the other hand, complex learning involves recognizing conflicts in means and ends in situations that are causally complicated. While simple learning is easier to assess, complex learning is more elusive when there are changes in the deeper goals. Most of the

changes in nuclear behavior are examples of simple learning because they adapt to changed circumstances. Only a few instances involve a change in the deeper goals and the development of new norms. Complex learning can be difficult to objectively assess because perceptions and ideologies play a bigger role in assessing the results when relationships have long and complex chains (ibid., 380).

In the case of the nuclear alert crises I present, I believe that both elements of simple and complex learning are present, albeit in varying levels of emphasis. There is a stronger notion of simple learning in the case studies I present, given that all leaders use nuclear signaling to achieve the ends of getting their adversary to behave in ways they find acceptable or preventing them from behaving in ways they find unacceptable, and that is through nuclear compellence and nuclear deterrence. I argue that it is possible that they employ nuclear compellence and nuclear deterrence after having learned from the leaders' past mistakes in nuclear signaling, and continued what they think may have previously worked. Therefore, there is not much of a change in the deeper goals of the employment of nuclear compellence and deterrence.

On the other hand, while Joseph Nye argues that complex learning often involves a change in the deeper goals (ibid.), I find that his argument, that complex learning can be difficult to objectively assess because perceptions and ideologies are involved, can in fact be related to simple learning too. In my argument of the learning process of the nuclear bluff, I find parallels between the madman theory behavior that Nixon invented (Sagan & Suri 2003, 152), and Kim and Trump's behavior in the 2017 crisis. For instance, Nixon made reference to his "nuclear button" when he said he wanted North Vietnam to fear his rashness because he has his hand on his nuclear button (Sagan & Jeremi 2003, 165). In 2017, when Kim was

threatening the US, he said that he had his "nuclear button" on his desk at all times (Van 2019, 169).

Both Kim and Trump acted madly all throughout the crisis as will later be discussed. However, due to perceptions and ideologies, and perhaps even personalities, it is difficult to objectively argue and be absolutely certain that they behaved this way as a result of learning. Therefore, I think that there is somewhat of an overlap between simple and complex learning, but then again, that is why Nye does not present them as two different blocks, but rather as a continuum (ibid.).

Even though it is difficult to prove the causal links between the case studies, it is nonetheless worthy of analysis and comparison due to the multiple reoccurrences of certain behaviors as well as what seem to be adaptations and changes when certain behaviors have failed to produce effective results.

1.5 Case Selection and Methodological Framework

1.5.1 Case Selection

The four case studies selected for the thesis are as follows: 1969 US nuclear alert crisis; 1973 Middle East nuclear alert crisis; 2017 North Korean nuclear alert crisis; and 2022-2023 Russian nuclear alert crisis. The thesis uses two case studies during the Cold War, and two post-Cold War case studies to compare the case studies and explore how nuclear alert crises can be analyzed over time, particularly between Cold War politics and post-Cold War politics. The case studies are chosen based on the requirement that all leaders in all four events have used the nuclear alert crisis as a political tactic for political gains without intending to wage nuclear war. What is arguably the most conspicuous case study of nuclear

alert crises, the 1962 Cuban missile crisis, is not selected here because the US was in fact preparing for nuclear war, which is a system devised to place the American military forces (Sagan 1985, 101). By doing so, the intention was not to influence the Soviet Union, but rather to get ready for a potential nuclear war (ibid. 107); therefore, there was genuine belief that they were at the brink of nuclear war, which again, is not the criterion the case selection of this study is based on. Furthermore, while the latest case selected (Russian nuclear alert 2022) may be contested as a straightforward case of a nuclear bluff given that the event is currently ongoing, it is nonetheless of great interest and importance to this research. The prior three cases can help analyze the current events between Russia and Ukraine by drawing comparisons between key decisions and intended outcomes.

1.5.2 Methodological Framework

The thesis will use a comparative cross-case study method to compare the four cases of nuclear alert crises and analyze the similarities and differences between the motives of raising the alert and the outcomes of doing so. The comparisons made across the case studies to analyze the following: a comparison of key dimensions in decision-making during the crises over time in varying contexts, and a comparison of responses of the states over time and in varying contexts. As mentioned in the case study selection section above, the method of comparison will be to look at the two cases in the Cold War era in comparison with the two cases in the post-Cold War era to make conclusions of key similarities and differences between the two blocks of cases. Key questions will be addressed using this methodology: what are the key recurrences that take place over time in the four case studies? What is the root cause of this recurrent pattern? And how can the similarities and differences of the case studies be explained? (Goodrick 2014, 6)

The comparative case study method is of great importance given that the aim of the thesis is to provide insights on how and why the nuclear alert crises have been averted; and how and why making the decision of raising a nuclear alert may not always succeed in mitigating a nuclear crisis. The latter point will be answered by looking into the most heated moments in the crisis and its proximity to disaster.

The type of sources that will be used for the thesis will include both primary and secondary sources. For primary sources, I will use speeches, letters, and diaries. For secondary sources, I will use books, academic journals and articles and news reports.

To analyze the case studies, I will explore both the political and the military aspects of nuclear signaling. In regard to the political aspect of nuclear signaling, content analysis will be used to analyze speeches, with reference to their timing, sequencing and the reactions to these speeches. Content analysis helps analyze data within a particular context in regards to the meanings actors attribute to them. Messages and communications are distinct from observable things and events in the sense that they inform about a particular thing other than themselves. They have consequences for both the senders and receivers of those messages and communications. Content analysis relies on the symbolic qualities of communications by tracing the antecedents and consequences of these communications. It investigates communicative contexts and circumstances, such as the psychoanalytical, institutional, and cultural. To further elaborate, respectively, it looks at the psychological conditions that explicate statements made, the interests of the institutions, and the functions that statements serve (Krippendorff 1989, 403-404). This is particularly useful for the purposes of the thesis to explore how and why leaders use nuclear signaling, what consequences it has on themselves and the intended receivers of their signaling, and what interests are being served. The key is to identify the symbolism behind the statements made.

In regards to the military aspect of nuclear signaling, I will focus on the standard nuclear analysis of the nuclear alert crises which includes the physical readiness for war (Sagan 1985, 99).

Chapter 2: Literature Review

2. Literature Review

The thesis covers several themes including nuclear signaling, crisis management and deterrence. For each theme, and for the sake of brevity, this section will provide three to four major works on each theme which will be used in the writing of the thesis.

2.1 Theme 1: Nuclear Signaling

Signaling is a form of crisis bargaining that can be subject to multiple perceptions and misperceptions (Kurizaki 2016, 625). In his book, '*How Statesmen Think'*, Robert Jervis (2017) provides extensive explanation to how statesmen use signaling to achieve their political goals, and how perception plays a major role in this political tactic. Understanding signaling is important for communication because actors do not only need to predict others' actions, but they also need other actors to make predictions about their own actions and behavior that accurately reflect their desired message, or 'signal'. Signaling is thus used by actors to project an image that could either be true, or simply false, the latter of which is referred to as a bluff (Jervis 2017, 107-108). To see through such signaling to discern whether it is true or false is an arduous but crucial task (ibid. 109) that is discussed in further detail in Jervis' 1970 *"The Logic of Images in International Relations"* book.

Without exception, the case studies selected for the thesis have all signaled their willingness to use their nuclear weapons without the intention of using them, but rather to control the outcome of the given situation using carefully studied strategies. The book *"To Win a Nuclear War: The Pentagon's Secret War Plans"* by Michio Kaku (1987) discusses how the

US has used the 'art of coercion' to bring across a message to the Soviet Union without intending to use nuclear force. As part of signaling, Kaku explains Kissinger's description of "the strategy of ambiguity" as one that is used in a crisis by threatening to escalate a conflict to take control over a situation. Since initiating nuclear war could prove disastrous and even suicidal, threatening a first strike cannot be credible. Despite being incredible, that very bluff could prove effective because this strategy of ambiguity exploits the confusion that is inherent in any conflict and could give off the impression that an actor could act irrationally. In other words, nuclear force might not prove to be credible, but when it is in the hands of an irrational enemy, the threat value of nuclear threats may be regained (Kaku 1987, 122-123). To give an example of a strategy of ambiguity, Russia has recently raised a nuclear alert which was an instance of nuclear signaling. On October 4, Russia transported rare-armored vehicle on what it called the 'nuclear train'. It was speculated that this train was headed to the frontline in Ukraine, but was later revealed that it in fact was not headed towards Ukraine (Crux 2022). This demonstrates that this is an example of mere signaling that it is ready with its nuclear capability. But nuclear wars, after all, are not fought with trains. Therefore, this was a mere display to the West that it has the weapons and will use it if it wanted to.

During a heated crisis, with each party desperate to establish dominance and produce their desired outcome of the situation, some leaders go an extra mile in making the other party believe they are unpredictable and could strike at any time. This was a tactic used by US President Nixon, which is discussed in detail in the article written by Scott Sagan and Jeremi Suri in 2003, called the *"The Madman Nuclear Alert: Secrecy, Signaling, and Safety in October 1969*". They find that the 1969 nuclear alert crisis was not a competition in risk taking, but rather a mere signal to get the opponent to back down. In 1969, President Nixon

increased US' nuclear alert to signal to the Soviet Union he was ready to take any measure to end the war in Vietnam. He did this based on what he called the "Madman Theory" (Sagan and Suri 2003, 152). This was based on his belief that to instill fear in the enemy and to make them comply, he must encourage the idea that he is mad (Mattusow 1999, 623). Even though this was just a bluff, with no real intention of escalating the situation to full-scale war, the article explains that it complicated the idea that nuclear bluffs are risk-free because they leave things to chance even if Nixon did not intend on that (Sagan and Suri 2003, 153-154). Thus, this reinforces the notion that the hypothesis of the thesis will try to emphasize on, that raising 'nuclear bluffing' does not come without its dangers.

The significance of nuclear bluffing is emerges in *"Nixon's Nuclear Specter: The Secret Alert of 1969, Madman Diplomacy, and the Vietnam War"* by William Burr and Jeffrey Kimball (2015) investigates Nixon's madman strategy and applies it to the 1969 nuclear alert crisis. It explains that the nuclear signal that Nixon raised was merely for political rather than military reasons (ibid., 71).

2.1.2 Theme 2: Deterrence

Another crucial theme to this thesis that is intertwined with signaling is deterrence. Nuclear deterrence is a highly controversial theory that continues to spark a heated debate between its proponents and its opponents. That being said, the literature that will be used will provide insights on the rationale of both sides of the argument.

The thesis aims to explore the effects of nuclear deterrence. Assuming that nuclear signaling or threats may in fact lead to the outbreak of nuclear war seems to be a far-fetched hypothesis given that no nuclear war has erupted as a result of nuclear alerts and threats. This makes the

hypothesis impossible to prove right. Despite there being a difference between nuclear signaling and nuclear deterrence, the line between them is not as clear-cut. Part of nuclear signaling, as mentioned earlier, includes military readiness, even though there might be no intention of using it. There is not much evidence to support the idea that nuclear bluffs could lead to nuclear war given all the averted nuclear alert crises; however, much of the literature on nuclear deterrence discusses the possibility of its failure. "Nuclear bluffs do not stay limited, but rapidly escalate to the possibility of full-scale war," (Kaku 1987, 143). Gerald Segal et al. (1983) express in their book, *"Nuclear War and Nuclear Peace",* that so far, both sides have understood the calculation of risks in the usage of nuclear weapons and has hitherto prevented nuclear war. What cannot be proven, however, is the fact that it is deterrence that has prevented its occurrence. Another grey area is that it cannot be proven that deterrence will in fact continue to do so (Segal et al. 1983, 19).

Given that the thesis aims to explore with statesmen go to such far lengths with nuclear alerts despite their risks, it is important to consider how scholars have approached the effectiveness of deterrence in achieving their desired policy outcomes. Not only that, but literature that also discusses the potential cracks of the theory is of great use to explore how the theory can fail. The book "*Ethics and Nuclear Deterrence*" written by Geoffrey Goodwin in 1982 provides the two different viewpoints on nuclear deterrence. It explains why, on ethical grounds, Christian Unilateralism rejects nuclear deterrence, and why deterrence is in fact necessary for a balance of power. The author explains that nuclear deterrence, despite being necessary for balancing power, can nonetheless prove to be a risk. This point is of great importance for the purposes of this thesis which looks at nuclear bluffs and their highest points of tension with the risk they entail. The author of the book explains that usage of nuclear force, because of its

great destructive power to both parties involved, would be unlikely. However, if the situation lacks a balance of strength between the two parties, where the weaker side lacks proper resistance, or if the stronger side wrongly assumes so, the risk stands. Inasmuch as the occurrence of miscalculations are possible, armed conflict cannot be ruled out (Goodwin 1982, 70).

Literature against the usage of nuclear weapons is also of great relevance, helping the thesis explore the possible side effects of deterrence. Unlike the previous book that lacked an ideological stance on the matter*, "At the Nuclear Precipice: Catastrophe or Transformation"* book by Rich Falk and David Krieger (2008) stands firm in its stance against the usage of nuclear weapons. The book depicts the theory of nuclear deterrence as a failed one. It demonstrates that despite the theory positing that the threat of nuclear retaliation keeps nuclear attacks at bay, it nonetheless spawns threats of great nuclear retaliation. The basic premise of the theory of deterrence itself is based on, what the authors argue is faulty, the assumption of rationality, which maintains that any rational actor will not initiate a nuclear attack knowing that a massive retaliation can be launched against their state. This, the anti-nuclear deterrence theorists argue, leaves to chance innumerable, potentially and utterly destructive occurrences: the actor may not be rational; the actor may irrationally believe they could attack an enemy with impunity; and finally, an actor could simply be suicidal and nonchalant about the possibility of retaliation (Falk & Krieger 2008, 218).

In his book, "*Thinking About Nuclear Weapons: Analyses and Prescriptions*" (1985), Fred Holroyd discusses the psychology of deterrence and provocation. The author discusses when deterrence can work, and when it can fail. He explains that the deterrence theory projects a very limited understanding of threat-making and discouragement. Threat, according to the

deterrence theory, is merely fear-producing. But it is not: it also happens to be provocative. Provocation is not always outweighed by discouragement as this depends largely on the nature of the variable situations. To explain the failure of deterrence in many instances, Holroyd draws a comparison between deterrence used in the penal and the international system, stating that those punished by the penal system can go about committing more crimes as a result of their resentment to the punishment and punisher. When deterrence fails to include the deterred and the deterrer within the same community of morality and emotions, its credibility fails. Similarly, in the international system, deterrence can work within the same community of shared values and aims. However, given the wide local differences, it becomes harder to sympathize with and understand opponents' motives due to the undermining of reliable communication (Holroyd 1985, 75-76).

Furthermore, while nuclear deterrence during the Cold War managed the avoidance of war between the superpowers, it nonetheless prompted the continuation of conflict. The most prominent post-1945 alliances, the North Atlantic Treaty Organization (NATO) and the Warsaw Pact, focused their activities on the deployment of nuclear weapons. Although nuclear weapons were not intended to be used, it was of great importance for the display of power. Nuclear weapons were used in Cold War diplomacy as signals of resolve and threats, but not for war. Nuclear strategists worked on finding the most effect nuclear postures to achieve national gains without risking actual nuclear war (Suri 2008, 1015). Thomas Schelling, a master theorist of nuclear strategy, stated that the importance of the threats of war is that they are "techniques of in- fluence, not of destruction; of coercion and deterrence, not of conquest and defense; of bargaining and intimidation" (as cited in Suri 2008, 1015).

In support of this view, the continuing nuclear signaling and nuclear alert crises in the post-Cold War and current period, this is proven to be true. What is also proven is that this technique is not particular to the Cold War era- it is also used in the post-Cold War era. This emphasizes the importance of understanding nuclear politics all the more urgently today as we face exchanges of nuclear threats by two nuclear powers. So far, the literature on nuclear signaling indicates that nuclear threats are a well-known and important strategy in resolving conflicts and used for bargaining. However, although this is difficult to prove, it must still be known that such threats do not come without great risk. And great risk entails the possibility of nuclear war. Roger C. Molander, an American Government official, stated in his article titled "*How I learned to Start Worrying and Hate the Bomb"* that as he worked in the White House on nuclear strategy, he realized how easily nuclear war might erupt (Kojm 1983, 14). He further expressed, "I knew how poorly we understood the Russians- and how poorly they understood us. I could see the rising problem of nuclear proliferation vastly increasing the risk of superpower confrontation" (as cited in Kojm 1983, 17). Coming from someone who worked for the American government as a nuclear strategist, someone whom the top-level government relied on to make nuclear policy choices, this is not only genuinely worrying, but also raises serious doubts on the nuclear deterrence theory and the usage of nuclear signaling to achieve national gains.

2.1.3 Theme 3: Crisis Management

According to Snyder & Diesing (1977, 6), "an international crisis is a sequence of interactions between the governments of two or more sovereign states in severe conflict, short of war, but involving the perception of a dangerously high probability of war". Even though a crisis naturally entails a serious conflict of interests between parties, that conflict

alone is insufficient in bringing about a crisis. For a crisis to erupt, one party must display conflict behavior to deal with the conflict of interests to produce results that satisfy its interests. Crises occur when one party threatens the other with violence to coerce them into behaving in a certain way while the other party resists (ibid., 7). The thesis thus will explore how leaders use nuclear signaling as a form of a threat to coerce the opponent into yielding to the threatening party's demand. Clearly, leaders want to avoid nuclear war. Yet, they take measures, which as the definition of the crisis goes, takes them to a dangerous point in the probability of war. Therefore, it is worthy to investigate just how they exercise this dangerous activity and pull up in the last minute before an eruption occurs, and more importantly, why they take such a great risk.

In a crisis, a variety of types of behavior converge, blending forms of coercion as well as accommodation. Diplomacy takes a more coercive turn, and the emotional climate becomes more hostile and fearful. The aim is to win the conflict and not to find common ground and achieve common interests. The pressure that is exercised is not through the usage of force, but through the manipulation of the risk of war as well as the fear of escalation. The outcome of the interaction is not determined by the actual physical strength one party has, but by the psychological strength, which is the relative ability of the parties involved in this interaction to withstand risk (ibid., 10). In parallel to the nuclear alert crises, and as explained above in the deterrence theme, nuclear deterrence is not a defense strategy since it cannot guarantee that no state will attack. However, its success lies within its power of suggestion: if you strike me first, I can assure you that you will be struck back- and that is called mutually assured destruction (MAD). Therefore, the power of deterrence is not merely dependent on the physical existence of nuclear weapons, but rather about what the existence of these weapons

suggest. The outcome of nuclear threat exchanges between actors can thus be said to be determined by the psychology of leaders and their perceptions of one another, as well as the perception they assume the other has of *them* (Santana 2009, 329).

While the thesis will tackle events of crises and concepts of deterrence, it will also tap into the politics of the way leaders choose to respond to and manage crises. The book, "*The Politics of Crisis Management: Public Leadership under Pressure"* by Arjen Boin et al. (2005) encompasses a wide range of elements that contribute to the final decision made in a crisis. The book will aid in analyzing the challenges faced by the leaders, the way they make sense of the crisis as it unfolds, the way they implement the critical choices they made, and the way they make meaning of the crisis and communicate it to the world. Furthermore, it is important to look at how crises are terminated and provides lessons for leadership facing crises based on a plethora of real live crises.

The US is at the crux of many nuclear alert crises and is involved in all the cases selected in the thesis. Thus, exploring literature about its decision-making process is essential for the purpose of this thesis. The article "Nuclear Alerts and Crisis Management" by Scott Sagan (1985) discusses a series of nuclear alerts raised by the US and the way in which the crises were managed. The crux of the text is to articulate how the decision to alert nuclear forces was made. Furthermore, Sagan walks us through the mistakes that were made and explains how these mistakes could have been avoided.

To fully understand how and why crises unfold, it is imperative to dissect every stage of the crisis since its inception. When first faced with a crisis, leaders begin with 'sense-making' to initiate the management of the crisis with an important question: how did this happen?

Another question that comes up after a crisis is whether the crisis could have been prevented through early recognition of a threat. However, it is nearly impossible to predict where and when a crisis will take place (Boin et al. 2005, 18-19).

The focus of the thesis is on nuclear alert crises. A nuclear alert crisis occurs when there is a raising of a nuclear alert during a standoff between two superpowers which aims to serve military and political purposes. Militarily, a nuclear alert aims to enhance the state's readiness for nuclear war by alerting nuclear forces and decreases their vulnerabilities to an attack. Politically, the purpose is to increase deterrence: it demonstrates boldly the determination and willingness to use nuclear weapons if need be and shows just how seriously the state regards the stakes at hand (Sagan 1995, 99).

The thesis aims to explore how these nuclear alert crises shape each other and the future of nuclear alert crises. Thus, literature viewing crises as catalysts to change is crucial for the analysis. In their article, "System and Crisis in International Politics", Michael Brecher and Hemda Ben Yehuda (1985) create their own idea of crises. They explain that crises can be understood as catalysts to change in the international system which is of great relevance to the thesis as one of its aims is to understand the impacts of the nuclear alert crises that occurred and how their impacts may have changed over time.

In crises, there can be either stability or instability, which are referred to as crisis stability and crisis instability. These concepts also overlap with deterrence as they are embedded into the fabric of the theory (Powell 1989, 82) which provides clarity as to why leaders choose to behave in certain ways in nuclear alert crises. Crisis stability refers to a situation in which there are mutually effective nuclear strategic defenses as well as mutual survivability of

nuclear defenses and offenses (Powell 1989, 83; Wilkening et al. 1989, v). Crisis instability, on the other hand, refers to a situation in which a state feels obliged to carry out a first-strike to create a more desirable outcome to what seems to be an unavoidable nuclear war (Wilkening et al. 1989, v).

2.1.4 Contribution to the existing literature

As mentioned in the previous paragraph, I aim to explore how the cases of nuclear alert crises I selected have shaped and influenced each other by identifying patterns of behavior and outcomes. For instance, I will explain how Kim Jung Un and Putin have learned from past nuclear alert crises, and adopted Nixon's Madman Strategy to get their way in pressing situations to create a concept I will call, "nuclear bluff learning". On the other hand, I would like to find the anomalies between the cases and to explain the reasons behind them.

Chapter 3: The Cold War Case Studies

Chapter III will present the first two case studies during the Cold War. The case studies will be presented in chronological order. This chapter will begin with a brief historical overview of the cases to provide context in which the nuclear alerts are raised which is important for understanding why decisions were made in favor of nuclear alerts, and how the context can weigh in on whether the nuclear alerts are simply bluffs or not. The chapter will provide an analysis of the cases, explaining their origins, how these crises were managed, and the results of nuclear signaling in each case. The case studies are as follows:

3.1 Case Study 1: The 1969 US Nuclear Alert

3.1.2 Historical context

The 1969 nuclear alert case study takes place during the Cold War. The cause of the alert was due to rising tensions between the superpowers over the Vietnam War. Two major factors catalyzed the war in Vietnam: post-World War II: decolonization and the Cold War. The weakness of the European powers combined with the rise of nationalism led to the destruction of the colonial system in Vietnam, but the change led to a state of conflict in the country, and eventually to an all-out war. Much to the dismay of the French, the Vietnamese nationalists attempted to claim independence in August 1945. The French attempted to regain the lost empire, and as a result, a war broke out in Vietnam in November 1946 and did not end until April 1975 (Herring 2004, 18).

While the Vietnamese were carrying out an anti-colonial war against the French, the US and the Soviet Union were having their own ideological and power struggle over global politics. This conjunction between both events led to internationalization of the Vietnam War. The war was of great interest to the US for an important reason- the nationalist movement was led by communists. This would challenge the US' power on an international scale, and thus the Vietnam War was analyzed by US officials in the context of the Cold War (ibid.).

As North Korea successfully invaded South Korea in June 1950, the US had all the more reason to fear communist expansion in the region (ibid.). To block further communist expansion in Southeast Asia, the US created a non-Communist government in southern Vietnam. In response, North Vietnam led by Viet Minh, the communist nationalist movement supported by the Soviets, dispatched troops to the South to fight. The main goal of the US involvement in the war was to prevent communist expansion and maintaining US cold war commitments of keeping South Vietnam an independent and non-Communist state (ibid., 19). Nixon he was determined to end the war in Vietnam in a way that would secure America's global position (ibid., 20).

3.1.3 Origins of the Nuclear Alert

In 1969, Nixon focused his diplomacy on détente in order to convince the Soviet Union to push North Vietnam into negotiation outcomes that would be acceptable to the US. The strategy aimed at containing the Soviets' use of its rising power by involving them in a web of relationships with the US designed by Nixon. By giving the Soviets a say in the world order, US interests would be served. The détente strategy was very much like the carrots and sticks strategy, providing both incentives and sanctions. It is called the linkage strategy. The

Soviet Union would benefit economically, militarily and diplomatically only if they use their influence to impact the outcomes of the Vietnam War in a way that is acceptable to the US. The "carrots of linkage" included deals on strategic arms, Berlin, the Middle East, and afterwards, US trade. The sticks were denying these deals and creating parallel relations with both the Soviet Union and China, which became referred to as the 'China card'. Furthermore, levering Hanoi by providing favors to or applying pressure on the Soviet Union and later China became known as 'triangular diplomacy' (Burr & Kimball 2003, 116-117).

On October 10, 1969, the US Joint Chiefs of Staff (JCS) sent a secret message to US military commanders all over the world informing them that under the direction of higher authority, the JCS was to increase its military readiness to respond to potential confrontation by the Soviet Union. By October 13, the Strategic Air Command (SAC) halted combat training missions and increased the number of nuclear bombers on ground alert. On a show of force and power, on October 27, SAC carried out an alert operation and launched B-52 bombers with thermonuclear weapons. The bombers took off from California and Washington to Alaska, and then flew back and forth towards the Soviet Union in oval patterns for eighteen consecutive hours (Sagan & Jeremi 2003, 150). SAC B-52s were placed on DEFCON 1, which is the highest nuclear alert level, for an entire month (ibid., 156).

The nuclear alert would signal Washington's dismay at Moscow's policy towards North Vietnam. Therefore, it was decided that a nuclear alert could help increase leverage in the bargaining process and tip it in favor of US interests. It is referred to as a 'secret' alert because the public in the US was unaware that the country was on nuclear alert, whereas signs of this military readiness were apparent around the world. And although US military commanders were the ones implementing the orders of increasing readiness, they were

oblivious as to why they were doing so. As a result of the nuclear alert and as hoped by Nixon, the Soviet Union noticed the nuclear alert and reacted with precautionary actions. However, it remains uncertain as to what Moscow made of the US nuclear alert, and as to whether the message Nixon tried to send had been understood by the Soviets (Burr & Kimball 2015, 265-266).

While the 1973, 2017 and 2022-2023 nuclear alerts were examples of nuclear deterrence, the 1969 nuclear alert was an example of nuclear compellence. Because the US wanted the Soviet Union and North Vietnam to alter their behaviors and take an action not previously undertaken- which is opting for peace-, it can be understood that the aim of the US' nuclear posture and raising the nuclear alert was a form of peaceful compellence rather than deterrence. The US was trying to get them to change the Soviet Union's behavior from supporting North Vietnam in its decision to continue warning with the South, into getting the Soviet Union to persuade North Vietnam out of this decision. Similarly, the US was trying to alter North Vietnam's warring behavior into taking the step to make peace with the south. Thus, because the US's aim was to persuade them to act in ways it found desirable, its behavior is falls under the compellent theory rather than the deterrent one. Deterrence is about dissuasion rather than persuasion (Art 1980, 18). But the US was not deterring either the Soviet Union or North Vietnam from taking an action. The nuclear alert was rather designed to compel both parties to change their behavior in a way that the US found acceptable.

3.1.4 Why was it a secret?

The JCS Readiness Test remained a secret from both the government and the public until an American Journalist, Seymour Hersh, published a book in 1983 called *"The Price of Power"* where he made an account on SAC's alert measures. Documents on the JCS Readiness Test were only declassified in the 1990s, about two decades after the nuclear alert (Burr & Kimball 2003, 114). Even after the declassification of the 1969 events, the once secret nuclear alert is not widely covered in literature except by a select few authors who cover the nuclear alert in detail.

It is important to notice how the nuclear signaling in this case study does not include any verbal communication of nuclear signaling. The nuclear signaling element involved here is the increased military readiness. Why was this the case? It is a common assumption that US and Soviet leaders avoided explicit threats due to the conditions of mutually assured destruction, especially after the 1962 Cuban missile crisis. However, consequent nuclear alert crises tell us otherwise. Another common misconception is that when it comes to nuclear signaling, the US acts as a unitary actor with the president being restricted by bureaucracy. However, with nuclear weapons operations, the president has the freedom to roam and make his own decisions (Sagan & Jeremi 2003, 152).

The 1969 case study reifies this view given that Nixon decided to put the US military on alert for a reason only he knew. He was very much capable of getting this one-man decision implemented despite both the bureaucracy and US military commanders not knowing the purposes behind the nuclear alert. Because there was bureaucratic and domestic opposition against escalating the Vietnam War, Nixon decided not to launch a bombing campaign

against North Vietnam. Instead, he raised a nuclear alert to convince the Soviet Union that he would do what he had decided against- launching a nuclear bombing campaign to persuade the Soviet Union to pressure Hanoi to accept the US's peace terms. This nuclear bluff would essentially make up for the bureaucratic and domestic constraints Nixon was facing (ibid., 152-153).

A third misconception is that nuclear alert crises should be viewed as competitions in risk-taking. Leaders accept some level of danger that military escalation could get out of hand and lead to unintentional escalation. It is that risk that makes nuclear signaling resolve credible; it is "the threat that leaves something to chance" (Sagan & Jeremi 2003, 153). However, the 1969 nuclear alert crisis proves otherwise. When Nixon decided to raise the nuclear alert, he did not do that to compete in risk-taking with the Soviet Union. In fact, he thought it would be a risk-free operation as he ordered the US military not to take any provocative actions against the Soviet Union and ruled out some operations that could possibly lead to accidents. Furthermore, even though they tried to avoid accidents, there was a near-accident with a nuclear-armed B-52 bomber on airborne alert which demonstrates that attempting to avoid accidents in a nuclear escalation does not mean that nuclear accidents will not occur. Therefore, although nuclear alerts are threats that leave something to chance, Nixon did not raise the 1969 nuclear alert with that intention, nor was he aware of the potential threats that could have escalated because of his action (ibid., 153-154).

Crisis signaling has two sub-categories: cheap signals and costly signals. Cheap signals are signals that are merely rhetoric, whereas costly signals display credible resolve. The literature on signaling suggests that displaying military readiness is a public event, and therefore it creates audience costs which enhances the credibility of the nuclear alert. However, the 1969

nuclear alert was carried out in a way that was not public. This suggests that in international relations, actions may not always speak louder than words, and that military readiness could in fact be a cheap signal as it avoids the public commitments of verbal threats and the domestic and international pressure to live up to one's promises to save face. The 1969 nuclear alert was a secret military nuclear alert, and thus a cheap signal as it can be justified as a military exercise. This keeps the stakes low when a leader must back down in a crisis (ibid., 155).

3.1.5 Why a nuclear alert in 1969?

In July, the Nixon administration did not see any progress in the negotiations to reach a peaceful settlement in North Vietnam. Nixon decided to threaten Hanoi with great force if things were not settled. When Hanoi responded by saying they would not yield to these threats, the National Safety Council and the Pentagon created "Duck Hook", a secret conventional four-day air strike plan (ibid., 161-162). The operation would be a devastating bombing of Hanoi and other key areas in North Vietnam. The Red River dike system and the main road links with China would be bombed, and the harbors and rivers would be mined. The main north-south passes would be destroyed, possibly with nuclear weapons (Tannenwald 2006, 712). The surprise and the boldness of the attack would shock Hanoi and make them budge in the peace negotiations. Nixon and Kissinger were strongly in support of the plan; however, opposition of both the public and high-ranking officials of the administration made them back down (Sagan & Jeremi 2003, 161-162).

Nixon was convinced that nuclear threats allowed Eisenhower to successfully coerce North Korea, China and Russia to end the 1953 Korean War. By observing Eisenhower, Nixon

learned that it was important to make the adversary feel that the president is unpredictable and rash to prevent them from pushing you too far and to make them comply. Thus, to resolve the issue at hand, Nixon decided to implement the madman theory by increasing nuclear alert measures (ibid., 162). The orders given by Nixon to the Pentagon indicated that the alert should be "discernible to the Soviets and be both unusual and significant; not threatening to the Soviets; not require substantial funding or resources; not require agreement with the allies; not degrade essential missions; and have minimum chance of public exposure" (as cited in Burr & Kimball 2015, 267). Nixon thus wanted an action that was unordinary yet loud, menacing yet ambiguous to spur doubt in the enemy's mind without making direct threats to the Soviet Union. The aim was to make the enemy not know what he was going to do next (ibid., 267).

The stand-down of the SAC in particular was chosen because it can easily be detected by the Soviet Union without being noticed by the American public. Furthermore, it would also be sufficiently long so that it would be a convincing credible threat. The alert status and flight activity of SAC bombers could be changed visibly; therefore, it is one of the few instruments that can be used for the purpose of nuclear signaling. This was the traditional method of nuclear signaling used by both the US and the Soviet Union during the Cold War, beginning with the 1958 Lebanon crisis and the 1962 Cuban missile crisis. However, unlike in the Cuban missile crisis, it was decided that while SAC bombers would be spread out to more air bases, civilian airports would be excluded because it would have gotten the attention of the press, and Nixon was strongly against that (Sagan & Jeremi 2003, 165). Increasing SAC readiness entails taking all personnel off their routine duties and placing armed and fueled

aircraft on runways and in take-off positions, ready to launch an air attack at any moment (Burr & Kimball 2015, 266-267).

Before deciding on the SAC alert, several other nuclear alert options were on the table. There was an evaluation of the potential advantages and disadvantages of each, and for every option was the repeated refrain from making the Soviets think that this was a bluff (Sagan & Jeremi 2003, 164), yet refraining from provoking the Soviets (Burr & Kimball 2015, 268). For instance, proposals of increased aerial reconnaissance and alert levels for ballistic missile submarines were off the list for being too risky as it could have led to Soviet shootdown, and they could have also been publicly alarming. On the other hand, a less provocative measure of combat aircraft stand-down and increasing the alert for SAC bombers would be greatly noticeable and significant by the Soviets (ibid.).

It was then decided that raising a nuclear alert was the best policy option. Even though DUCK HOOK was disregarded, the verbal threat that Nixon made to Hanoi about using force if peace was not settled indicated that the US will take action against Vietnam, and this could be used to the US' nuclear signaling advantage. Kissinger indicated that he wanted "an integrated plan of military actions to demonstrate convincingly to the Soviet Union that the United States is getting ready for any eventuality on or about 1 November 1969. . . . Rather than threatening a confrontation (which may or may not occur), the objective of these actions would be a demonstration of improving or confirming readiness to react should a confrontation occur" (as cited in Burr & Kimball 2015, 269).

Thus, from this case, we understand that Nixon chose to raise a nuclear alert to indicate readiness for contingencies that might develop without thinking this would be of risk and

without provoking the Soviet Union. The intention of the alert was not a confrontation with the Soviets, but rather only to demonstrate to them that the US was ready in case any new developments against its interests occurred in consistency with the threat that the US would attack North Vietnam after November 1st. Plans of the attack were aborted, but North Vietnam and the Soviet Union did not know that (ibid.).

The purpose of this nuclear alert was political, and not a military one. The political purpose was to persuade the Soviet Union that they should help the US in convincing Hanoi to yield to the US's peace solution to the war. Not only did Nixon and Kissinger not want the American public to know of the nuclear alert, but they also did not want their allies to know. Kissinger informed concerned secretary of defense, Melvin Laird, that the nuclear alert will not cost much money, signaling to Laird that the purpose of this alert was political rather than military without giving away any other details. Laird, nonetheless, understood that this alert was related to Vietnam (ibid., 271).

Wheeler, Chairman of the Joint Chiefs of Staff, wanted to understand the military objectives to appropriately design measures of readiness and analyze reactions of the Soviet Union. However, Nixon and Kissinger did not know what to expect of the Soviet Union. All they wanted was some sign that would indicate that the Soviets would make Hanoi accept a peaceful settlement that the US would set (ibid., 271-272).

The commanders in chief (CINC) provided the instructions for strategic signaling. They began with a stand-down of SAC and increased ground alerts on October 13. Suspending training flights was essential to give the SAC ground alert more weight as it increased the number of nuclear-armed bombers that were on stand-by for alert operations. US air forces in

the US, East Asia, and NATO Europe stood down the training flights to increase readiness (Burr & Kimball 2003, 113). The other commands would follow on October 15 to demonstrate an increase and intensification of US readiness (Burr & Kimball 2015, 272). Later that month, SAC B-52 bombers flew over Alaska and did a nuclear-armed show of force alert, making it the first SAC nuclear-armed operation since the Thule nuclear weapons accident in 1968 (Burr & Kimball 2003, 113-114).

As SAC was beginning to stand down on October 13, Laird warned Kissinger that the Joint Chiefs of Staff (JCS) Readiness Test would interfere with HIGH HEELS- a nuclear command exercise that began in the early 1960s- and that one or the other would have to be canceled, preferably the former. HIGH HEELS is a worldwide operation run by the JCS, the State Department and other agencies. It was an 'exercise' of American war plans in response to Soviet Union preemptive nuclear strike (Burr & Kimball 2015, 276).

Nonetheless, there would be conflict between both occurring at the same time as HIGH HEELS would produce a magnitude of message traffic that would hinder the transmission of information of the Soviet reaction to the nuclear alert. The Soviet Union would also have high message traffic from HIGH HEELS, possibly impairing the way the messages would be read by Soviet analysts. Soviets reading messages of threatening material coupled with stand-down activities, radio silence and US movements could prove disastrous. Laird was against cancelling HIGH HEELS and implementing the JCS Readiness Test as this secret alert could be picked up by NATO officials and thus putting the US in an embarrassing situation (ibid., 276). Laird also understood that Nixon was only raising the nuclear alert as a signal to Moscow, thinking it would be ineffective in achieving its objective and dangerous if misinterpreted by the Soviets (Sagan & Jeremi 2003, 170-171). Nonetheless, Nixon and

Kissinger found it to be more important to go ahead with the nuclear alert before the President's speech on November 3, 1969, to have the time to know whether the signal was received by Moscow and whether it was effective. Therefore, HIGH HEELS was canceled (Burr & Kimball 2015, 276-277).

3.1.6 The November 3 Speech

With anti-war sentiments on the rise applying massive pressure on the presidency, on October 13, 1969, Nixon announced that he would make an address about the Vietnam War on November 3. Vietnam had destroyed Nixon's predecessor, and he was determined not to allow that to be his fate. It was reported by the New York Times that Nixon "spent more time on tonight's speech [November 3, 1969] than on any other single document since his acceptance speech to the Republican National Convention in 1968" (Semple 1969, 17).

For the most part, the speech was a success with euphoria running high days after its delivery. According to Haldeman's diary entry, even the opposition, or what he called "the bad guys", agreed that the president had delivered a great speech and subsequently scored high in the elections (Haldeman 1969).

In his speech, he expressed that he had a plan for peace, but that immediate withdrawal of forces would result in humiliation and defeat and would lead to reckless "great powers" (referring to the Soviet Union) pursuing their goals of conquest. However, the plan for peace was in the making, but that unfortunately it would have to remain secret due to the enemy's perverseness (American Presidency Project n.d.; Newman 1970, 169). The secret could perhaps be hinting at the secret nuclear alert.

Nixon goes on to make threats against North Vietnam and the Soviet Union, stating that if the use of force is further used on American forces in Vietnam, he would take measures against them. "If I conclude that increased enemy action jeopardizes our remaining forces in Vietnam, I shall not hesitate to take strong and effective measures to deal with that situation," and that "*This is not a threat* [emphasis added]. This is a statement of policy" (as cited in American Presidency Project n.d.). He further mentions that he chose a plan for peace, and that he believes it will succeed. Progress would depend on Hanoi's willingness to negotiate seriously with the US (American Presidency Project n.d.).

Nixon makes it clear as indicated above that it is in Hanoi's hands to end the violence by accepting negotiations with the US. If it does not, then he would take effective measures against them, which in the context of the nuclear secret alert, indicates the potential use of nuclear weapons to meet US interests. With a realist tone, he indicates that this is not a threat, but rather a statement of policy, telling the enemy that he means business. He is not waving his nuclear weapons around for a show of force, no; in fact, he makes no mention of nuclear weapons whatsoever. The government has an objective of ending the war on US' terms, and it will do so by any means necessary because it is a 'statement of policy'-it isn't personal, he is not trying to scare them into yielding, it is simply a matter of fact.

3.1.7 Implementation faults and Soviet reaction to the nuclear alert

The high secrecy surrounding the nuclear alert of 1969 demonstrates the problems of implementing strategies of nuclear military signals when those implementing them are kept in the dark regarding their purposes, especially when the implementing military organizations have their own parochial interests. On October 13, Holloway, the commander in chief of SAC reported SAC's compliance with the SIOP (Single Integrated Operational Plan) alert plan. He admitted that he had approved of only a limited number of exceptions to JCS's order with the justification that essential combat crew training and routine rotational flights had to be continued. More importantly, Holloway did not place 20 B-52 bombers at Anderson Air Force Base (AFB) in Guam back on their scheduled nuclear alert without explaining the reasons to JCS. However, internal communications suggest that this was done to protect SAC's organizational interests. SAC vice commander told Holloway that it would simply be easier to use B-52s back in the US and complained that the Vietnam War was taking a toll on the organization's chief mission-to provide nuclear deterrence at home (Sagan & Jeremi 2003, 167).

This unilateral decision made by SAC could have had consequences on how the Soviet Union would receive the nuclear alert. If Nixon was really preparing to launch nuclear weapons on North Vietnam, the B-52s at Andersen AFB would have been the aircraft used to launch the attack. Soviet intelligence collectors thus would draw the conclusion that since no nuclear weapons were loaded on to the B-52s at Anderson AFB, then the US might be preparing for a global conflict, but not a nuclear attack on North Vietnam. This could have

potentially exposed the nuclear alert as a bluff. There is no evidence to prove that White House officials knew about this important detail (ibid., 168).

Furthermore, Holloway advised against dispersing aircraft for the "readiness test" on grounds that that would impair SAC's ability to take further readiness measures in case of a real emergency. This argument suggests that Holloway understood the purpose behind the nuclear alert as being a political signal to Moscow rather than a real preparation for confrontation (ibid., 169). Nonetheless, around October 17, a possible Soviet military response to the nuclear alert took place, although there is no conclusive evidence of it being as such other than the CIA's assumption of it being so (Burr & Kimball 2015, 287).

As Nixon prepared Kissinger for a meeting with the Soviet Ambassador Dobrynin that the latter had requested, with great hopes that the nuclear alert had worked, he suggested that Kissinger imply to the ambassador, should he have asked, that the nuclear readiness measures were in place to prepare for uncertainties, but that they are carefully controlled and do not involve a threat. On October 20, Dobrynin made no mention of the nuclear alert measures in the meeting and talked mainly of the Strategic Arms Limitation Talks (SALT) and Berlin. However, his aide-memoire referred to hints that if the US pursued alternative measures of solving the problem and used force, it would be extremely dangerous. Nixon responded by saying that if the Soviet Union does not help in solving the problem, the US would not stay still (Sagan & Jeremi 2003, 172).

Analyzing the contents of the meeting, Kissinger said that Dobrynin aimed to test the seriousness of the nuclear alerts and to practice their own reverse linkage strategy. Dobrynin dangled leverage of SALT and Berlin to make it hard for the US to pursue a nuclear weapons

attack on Vietnam. Kissinger then recommended that they continue to back up their threats with military movements (ibid., 172-173). On October 26, during the nuclear readiness test, the Seventh Fleet tracked three Soviet merchant ships, but it is unknown what the Soviets made of it or whether they made the connection that this was to signal Washington's anger of North Vietnam (Burr & Kimball 2015, 295-296). The nuclear readiness test measures continued until October 30 and were undoubtedly detected by Soviet warning systems (ibid., 300).

The Soviet Union took some defensive measures including increased activity of signal intelligence collection, staff communications to major headquarters, movement of staff elements to different command posts and increased sensitivity to US aerial reconnaissance flights in the Far East (ibid., 308). Despite this, the nuclear alert failed to induce the desired Soviet and North Vietnamese diplomatic concessions it was designed to accomplish (ibid., 309).

Nixon and other US officials held the agreement to start SALT negotiations in high regard. On October 25, the Secretary of State announced that the negotiations would begin in November (Sagan & Jeremi 2003, 173). Thus, Nixon abandoned the escalation of the nuclear alert because what was more of a priority to him and other US officials was going forward with the SALT negotiations.

Another factor weighing in on the Soviet's lack of expected response to the nuclear alert could be Nixon's change in demeanor as he discussed Vietnam with Dobrynin. In memorandums written to his superiors, Dobrynin commented on Nixon's nervousness about Moscow's stance on Vietnam, constantly circling back to the issue of Vietnam when other

topics were brought forth by Dobrynin. It was unclear whether the word 'nervous' meant that Nixon was seen as being jittery or that he was erratic. It could be that his appearance of agitation and instability failed to intimidate the Soviet Union. Dobrynin attributed his behavior to the next election. Towards the end of the conversation, Dobrynin assured Nixon that the Soviet Union wanted to normalize relations with the US, thus calming Nixon down. The change in demeanor may have thus undermined his tough pose (Burr & Kimball 2015, 290-292).

Furthermore, in the conversation, Nixon informed Dobrynin that the US would *counter*attack North Vietnam if the latter resumed large-scale military operations. Nixon also told him to pay close attention to his November 3 speech on the Vietnam issue. However, Dobrynin did note the following: "If it is a coincidence and the Vietnamese resume large-scale military operations, the United States will be forced to take *countermeasures* [emphasis added]" (as cited in Burr & Kimball 2015: 292). This could have suggested that Moscow may have been worried that the nuclear readiness measures taken would be put into force only as a *counter*attack to North Vietnam, but no clear reaction to the US nuclear alert was reported. Nixon and Kissinger were very disappointed that the ambassador had said nothing about the nuclear alert (ibid., 292).

3.2 Case Study 2

1973 Middle Eastern Nuclear Alert Crisis: The Tri-Nuclear Alert

3.2.1 Historical context

By the 1970s, it was agreed that nuclear parity between the two superpowers, the US and the Soviet Union, had been reached. Towards the end of the 1973 October War in the Middle East, Israel was threatening to completely destroy Egypt's defense. As a result, Moscow sent an urgent letter to Washington proposing a joint superpower intervention to call for a reinstitution of the cease-fire. The Soviet Union threatened that it would take unilateral action if the US refused (Betts 1987, 123).

Since the 1967 defeat, Egypt tried through peaceful means to retake control of the Sinai region but failed. Thus, former President Sadat planned to break the cease-fire between Egypt and Israel, inviting former President Hafez Assad to join the surprise attack (Bar-Joseph & Yossef 2014, 588-589). On October 6, the surprise attack on Israel was launched. Impressive victories were made by the Arab armies in the first stage of the war. By October 7, almost 300 Israeli soldiers were killed, and as a result, the Israel Defense Forces (IDF) hardly had any ground forces to defend Sinai against the Egyptian army. The Syrian army managed to occupy the southern sector of the Golan and entered the IDF central command camp in the Golan. However, the IDF resisted and managed to push the Syrians out of the camp, and within two days the IDF reoccupied it (ibid., 593-594).

In the south, the situation was dire for the Israelis. A badly coordinated IDF counterattack resulted in a loss of 50 of 200 tanks in the face of Egyptian infantry tank hunters, making it clear that Egyptian anti-tank capabilities could not be managed by the IDF (ibid., 594).

In response to this, Israel decided to raise a nuclear alert. Literature on the Israeli nuclear alert in 1973 is highly ambiguous, with no agreement among scholars suggesting whether the nuclear alert had been undergone for signaling or for defense precautions. Avner Cohen, an Israeli specialist in Israeli nuclear policy, wrote an article for the New York Times in 2003 stating that Moshe Dayan, Israel's former Minister of Defense, had brought the nuclear option to the table with the prime minister during the 1973 October War. Cohen's analysis was that Dayan wanted the US to take notice of the nuclear alert to make them realize how serious the situation was for Israel. The nuclear option being entertained by Dayan was confirmed in an interview by Dayan's war spokesman. The US picked up signals that Israel had placed its Jericho missiles- ones that could be fitted with nuclear weapons- on high alert in a very easily detectible way "probably to sway the Americans into preventive action" (Cohen 2003, A17). Avner Cohen would later write a co-authored article in 2013 to prove the opposite, as will be explained later in this section.

The Israeli nuclear alert was raised on October 8 after a meeting Golda Meir, former Israeli Prime Minister, had with her kitchen-cabinet (Hersh 1991, 225). Kissinger then started to provide air supply to Israel, and three days later, provided them with a massive US airlift. By October 21, Israelis were 20 miles from Damascus and had crossed the Suez Canal, surrounding the Egyptian Third Army. A few days later, a permanent ceasefire was established between the warring countries officially ending the war (Cohen 2003, A17).

Still another account on the Israeli nuclear alert was briefly discussed by Uri Bar-Joseph, an Israeli political scientist. The article was initially submitted to the US Department of Defense before it was approved for public release. The author suggests that Sadat opted for a peace treaty with Israel despite jeopardizing Egypt's leading status in the Arab world to avoid nuclear confrontation. The author goes on to say that although Sadat's policy was not entirely reliant on the fear of nuclear war, but that it was "quite important in his calculations" nonetheless (Bar-Joseph 1982, 207).

However, the war had in fact nullified some of Dayan's assumptions, particularly the assumption that Arab countries would not wage full-scale war against Israel before neutralizing the Israeli nuclear danger. More importantly, the author suggests that there is some evidence to prove that when Syrian forces were about to go further with the invasion into territories too close to Israel, Dayan placed Israel's nuclear forces on alert. "*If* [emphasis added] this actually happened, it might explain the appearance of a Soviet military supply vessel carrying nuclear warheads in Port Said on 25 October 1973" (Bar-Joseph 1982, 216). The author implies that this was a 'signal' by Moscow that it disapproved of raising a nuclear alert. It also showed that despite Israel's nuclear weapons, the Arab states could simply ignore its nuclear threat because the Soviet Union would provide them with nuclear guarantees (ibid.). However, as mentioned earlier, there was no evidence that the Soviet Union alerted its nuclear responses in 1973 and did not do so as a response to the US nuclear alert either (Sagan 1985, 129).

This implies a failure of nuclear deterrence both in 1976 and 1973. However, "the secret nature of the 1967 and 1973 *nuclear alerts* [emphasis added] allowed Israel to back down without significantly damaging its reputation" (Maoz 2003, 55). The referral to the 'nuclear

alerts' is made by a professor of political science and a Distinguished Fellow at the Interdisciplinary Center in Israel (UC Davis n.d.).

Another account on the Israeli nuclear alert was made by Seymour Hersh, an American journalist and Pulitzer Prize winner (The New Yorker n.d.), in his 1991 book "*The Samson Option".* He stated that Israeli leadership decided to place nuclear missile launchers on alert and made operational, along with 8 F-4s on 24-hour alert on October 8 (Hersh 1991, 225). There were two purposes: getting the Soviets to apply pressure on the Arabs and reduce their offensive; and apply pressure on the US to resupply their military (ibid., 227). They created a target list, including the Egyptian and Syrian military headquarters near their capital cities. They did not target the Soviet Union, but they knew that the Soviets would quickly gain knowledge of the nuclear alert (ibid., 225-226). One assumption was that once the Soviets learn of the nuclear alert, they would compel Egypt and Syria to limit their offensive and not advance past the pre-1967 borders. Mohammed Hassanein Haikal, editor of Al-Ahram, stated that the Soviet Union had warned Egyptian leadership that the "Israelis had three warheads assembled and ready" (as cited in Hersh 1991, 227).

In a meeting with Kissinger on October 9, Dinitz, Meir's advisor, said that Meir was ready to go to the US for an hour to meet President Nixon and plead for urgent arms aid. Kissinger rejected the proposal on grounds that the proposal was either out of hysteria or blackmail. The referral to the latter clearly indicated that Israel was attempting to use nuclear blackmail to get the US to provide it with arms. According to Kissinger's memoirs, the Israelis had been assured on the same day that they would receive the aid they needed (ibid., 228-229).

Nonetheless, as mentioned earlier, Avner Cohen wrote a co-authored article in 2013 stating that the rumors of Israel raising its nuclear alert to blackmail the US and the Arabs were false. Israel did take some steps in readying its nuclear weapons. However, it was not to send a signal to the others, but rather simply to take precautionary measures (Colby et al. 2013, 2).

The authors of that article argue that the accounts on the nuclear alert that indicated the alert was meant to manipulate US and Soviet behavior were unreliable. Their investigation included speaking to top US officials during the 1973 crisis and going through classified and unclassified documents. They finally maintained that there was no evidence to suggest that Israel alerted its nuclear forces to affect the outcome of the war (Colby et al., 2013, 30-31).

3.2.2 The October War and the nuclear alerts

In the October War, nuclear signaling was used by the several parties involved: Israel, the Soviet Union and the US. However, there is much disagreement on whether Israel and the Soviet Union had in fact used nuclear signaling by raising nuclear alerts to influence the outcome of the war. Therefore, the main focus of this section will be on the US nuclear alert and Soviet reaction.

3.2.3 The US capitalizes on the Israeli nuclear alert

Assuming that the Israeli nuclear alert was raised to manipulate the US to provide it with arms, is it the reason the US finally stepped in to help Israel? It cannot be said that that was the sole reason the US intervened. Kissinger told the secretary of defense that his goal out of this war was to "let Israel come out ahead, but bleed" (as cited in Hersh 1991, 227). This indicates that the US was planning on intervening in any case to make Israel win the war, whether there was a nuclear alert or not.

On the other hand, in his meeting with Schlesinger, the secretary of defense, Kissinger showed his concern that Israel might use nuclear weapons to settle the war. Schlesinger stated that "there was an assumption that Israel had a few nukes and that if there was a collapse, there was a possibility that Israel would use them" (as cited in Hersh 1991, 230).

Furthermore, Hersh recounts an off-the-record meeting Kissinger had with Sadat on November 7 where he informs the Egyptian President that the decision to supply Israel with weapons was to avoid nuclear escalation. Keeping his promise of confidentiality, Sadat informed Mohammed Haikal that the Israeli nuclear threat was credible without revealing who provided him with the information (ibid., 230-231). Informing Sadat of the nuclear threat was not an innocent heads-up to the Egyptians. The US could very well have been jumping on the Israeli nuclear threat's bandwagon to get Cairo to settle the war on terms the US found acceptable.

This makes the 1973 nuclear alerts crisis quite a unique one. What was the US trying to achieve by warning Cairo? Did the US really think that Israel would use a nuclear option after receiving American support, especially two weeks after the ceasefire was achieved?

In a way, it can be argued that this attempt was to signal to Cairo that Israel could be out of their control if pushed too far. It was not in the US's hand, and the US only aimed to warn a friend, thus keeping the relations cool between the US and Egypt because it was not the US making those reprehensible threats. In context of the Cold War, it was important that the US did not lose Egyptian support to the Soviets, while at the same time achieving its objectives of securing Israeli integrity and ending the war. Perhaps it was even that 'confidentiality' that

Kissinger entrusted Sadat with that further reinforced the notion that the US was trying to help Egypt by providing it with such information.

3.2.4 The effectiveness of Israeli nuclear deterrence

While Israel presented itself with nuclear ambiguity, the Arabs were aware that it possessed nuclear capability (Ziv 2007, 78; 86). If that was the case, then why did nuclear deterrence not work, hence the outbreak of the war?

It is argued that the Egyptian plan for the October War was initially confined to the Suez Canal zone, fearing that moving past that zone further into Israel would trigger an Israeli nuclear response. Nuclear deterrence provides 'general deterrence', which refers to deterring threats to a state's survival. Nuclear weapons, however, do not provide 'specific deterrence', which refers to deterring threats to specific and limited interests. Such was the case in the October War: there was a limited challenge presented by the Arabs to Israel rather than challenging the latter's vital interests. Therefore, the existence of nuclear weapons could not deter the limited attack (ibid., 86).

3.2.5 The US and the Soviet Union

When the cease-fire sponsored by the superpowers broke down on October 24 on the Suez Canal putting the Egyptian Third Army in considerable danger, the superpowers were called upon to send forces to the Middle East to enforce the cease-fire that had broken down. Ambiguous yet worrying intelligence had come in that day indicating that the Soviet Union was contemplating a military intervention. The US would vehemently oppose this and would even use force to prevent Soviet military forces from entering Egypt because they would be

impossible to remove and would give the Soviet Union easy access to intervene against Israel (Sagan 1985, 122).

Despite the US insisting that it would not accept Soviet troops in Egypt, Dobrynin informed Kissinger that Moscow had become very angry that they want to send troops to Egypt. Moscow gave them an ultimatum which was regarded as one of the most serious challenges to American presidency. The ultimatum was as follows: the Soviet Union and the US should both send troops to Egypt to enforce the cease-fire without delay. General Secretary Brezhnev continued, "I will say it straight that if you find it impossible to act jointly with us in this matter, we should be faced with the necessity urgently to consider the question of taking appropriate steps unilaterally" (as cited in Sagan 1985, 124). The Soviet Union attempted to show its resolve by making such an explicit ultimatum, showing how important this issue is to it. First, it gives the US the choice to act jointly with it, and second, if the US fails to cooperate, then the Soviet Union would feel obliged to act on its own to respond to a dire situation in need of immediate action.

Whether that was a bluff or not, the US would take it seriously and respond. Because placing conventional American forces in Europe was not so 'dramatic', it was suggested that there be a global military alert with SAC's nuclear forces on alert to shock the Soviets and give the US time to take effective diplomatic action. Kissinger's rationale behind the management of this crisis is that playing it "safe" and keeping things "balanced" in a crisis can be most risky. Gradual escalation shows moderation and gives the enemy a chance to match each move. This can be interpreted as a lack of resolution on part of the leadership thus prolonging the conditions of risk (ibid., 123-124). A leader must show that they are ready to "escalate

rapidly and brutally to a point where the opponent can no longer afford to experiment" (as cited in Sagan 1985, 124).

And once again, it was decided that the best option was to raise the nuclear alert (in the same way as the nuclear alert was raised in 1969- without explicit threats) for it to be picked up by the Soviets. Slowing down the Soviet's intervention would give the US the time to change the situation through diplomatic means and therefore reducing the need for US and Soviet intervention. This alert would serve 3 other important purposes: it would compensate for its lack of strategic parity with the Soviet Union; it would signal to the North Vietnamese a latent nuclear threat; and it would signal resolve to the Soviet Union without risking domestic political upheaval at home (ibid., 124-125).

At precisely 11:41 p.m. on October 24, all American military commands were ordered to place their forces at DEFCON 3 "with minimum public notice" (as cited in Sagan 1985, 125). And as described in the 1969 secret nuclear alert, many of the same activities were undertaken. That included cancelling all routine training missions, testing Command and Control network, increasing the B-52s on heightened alert, but only a minor increase in the US land-based missile force alert status (ibid., 125-126). There was no public announcement of the nuclear alert (Blechman & Hart 1982, 140). This move, it was believed, would send a clear signal to the Soviets without risking serious public debate at home, although the news quickly picked up on the developments (ibid., 142). If the US government did not want to risk "serious public debate", it could then be considered a cheap signal by the Soviets as this would indicate that the US did not plan to follow through with its threats.

The next day, Nixon sent a message to Brezhnev saying that the US would not accept unilateral action and that "this would be in violation of our understandings, of the agreed Principles we signed in Moscow in 1972 and of Article II of the Agreement on Prevention of Nuclear War" (as cited in the Office of the Historian n.d.). Without threatening to use nuclear weapons, Nixon says that if the Soviets act unilaterally, the would be in breach of the Agreement on Prevention of Nuclear War, thus implying that due to their breach, the US will have good reason to act in similar fashion, and more precisely, in breach of the agreement by potentially waging nuclear war.

While Nixon made more coated nuclear threats to the Soviet Union, he made a more imposing nuclear threat to Egypt on October 25. In a backchannel message sent to Sadat, Nixon wrote, "I ask you to consider the consequences for your country if the two great nuclear countries were thus to confront each other on your soil. I ask you further to consider the impossibility for us for undertaking the diplomatic initiative which was to start with Dr. Kissinger's visit to Cairo on November 7 if the forces of one of the great nuclear powers were to be involved militarily on Egyptian soil" (as cited in the Office of the Historian n.d.).

In this message, Nixon conveys more daring rhetoric to Egypt as opposed to the Soviet Union. Surely, he does not make explicit nuclear threats to Sadat; however, he openly invites Sadat to imagine the aftermath of the US and the Soviet Union's-two nuclear powers-confrontation on Egyptian soil. This implies that they would both use nuclear weapons in Egypt. The message to the Soviet Union, on the other hand, merely states that the Soviet Union would be in breach of the Agreement on the Prevention of Nuclear War, without mentioning the potential of waging war against the Soviet Union, let alone nuclear war, although it is more discretely implied through the mere mention of the agreement.

In response to a message sent by Kissinger to the Egyptian leadership detailing the steps the US had taken to stop renewed fighting, the Egyptian Presidential Advisor for National Security Affairs, Ismail, wrote to Kissinger that since the US refuses a joint US-Soviet presence, then they ask the Security Council to provide an international force in Egypt (Office of the Historian n.d.). While the Office of the Historian (working for the US Department of State) does not have Sadat's direct response to concealed US nuclear threats, Sadat was aware of US' nuclear posture. In his "*In Search of Identity: An Autobiography*", Sadat mentioned that the "Americans declared nuclear mobilization- which gave them a lot of trouble as they hadn't consulted their NATO allies" (Sadat 1978, 266). Sadat does not mention that he had received nuclear threats, but rather merely that the US was mobilizing its nuclear forces. He also does not mention that this had any effect on his decision-making during the war.

Shortly after the nuclear alert was raised to DEFCON 3, WSAG received intelligence that 8 Soviet An-22 planes- each with the capacity to carry 200 or more troops- were getting ready to fly from Budapest to Egypt within a few hours. As a result, the US further increased its readiness measures by ordering an alert of 82nd Airborne Division and sending the aircraft Franklin Delano Roosevelt to the eastern Mediterranean. On October 25 at 5:40 a.m., when the US was sure that the Soviet Union had picked up on the nuclear alert, General Scowcroft delivered a reply by Nixon to Brezhnev mainly stating that "Such [unilateral] action would produce incalculable consequences" (as cited in Sagan 1985, 126; Nixon 1978, 939).

The reason the message was delivered by Scowcroft and not Kissinger was to demonstrate the Administration's displeasure with the ultimatum they received, thus relationships would no longer be "business as usual" (Blechman & Hart 1982, 140). Nixon repeats the threat of

"incalculable consequences" and uses it twice in his message to the Soviet Union. The reference is made in tandem with the nuclear alert which he was sure that the Soviets had received, and understood, thus implying the US was ready to use nuclear weapons if the Soviet Union decides to act unilaterally (ibid., 141).

In his memoirs, Nixon wrote that Haig and Kissinger were in full support of his policy, "including the military alert" (Nixon 1978, 939). Only this was not only just a "regular" military alert, but it was also a *nuclear* alert. Just as the word 'nuclear' was often omitted in conversations about raising a nuclear alert in the 1969 crisis, the theme also seems to be recurrent in the 1973 crisis.

In the Soviet naval activity, there was a suspected nuclear specter in a Russian ship carrying radioactive material on October 22 which US intelligence picked up. They were certain that was nuclear material on the ship; however, the reason behind the radioactivity that was picked up was never confirmed. The ship arrived at Port Said on October 25, and it was suspected that it was transporting warheads for a Soviet SCUD missiles brigade. However, the radioactivity could have come from something else other than nuclear warheads, and the rumor was never confirmed (Blechman & Hart 1982 ,137).

As mentioned earlier, the US began with raising a nuclear alert without announcing it. After raising the alert, they began discretely hinting at the possibility of nuclear war to both the Soviets and the Egyptians without making explicit threats. Shortly after the news took notice and reported the developments, Kissinger took the opportunity to emphasize the danger of nuclear war in a previously scheduled press conference for October 25 (ibid., 142-143). In an ominous tone, Kissinger said the following:

"We possess, each of us, nuclear arsenals capable of annihilating humanity. We, both of us, have a special duty to see to it that confrontations are kept within bounds that do not threaten civilized life. Both of us, sooner or later, will have to come to realize that the issues that divide the world today, and foreseeable issues, do not justify the unparalleled catastrophe that a nuclear war would represent" (as cited in Blechman & Hart 1982, 143).

The message was loud and clear for the Soviets. Kissinger made clear that they both have nuclear weapons that could see the world to total destruction. Therefore, they both had an important duty to make sure that did not happen. In other words, Kissinger was reminding the Soviets not to take an irresponsible step towards unilateral intervention in Egypt. Doing so would mean a breach of their "special duty" to make sure the world is not reduced to ruins because the US would subsequently engage them in nuclear war. In other words, he says: don't intervene, and we won't engage you in nuclear war. Very quickly, the US returned the ultimatum to the Soviets, but several notches higher.

However, although the US seized the opportunity to show that they can be more dramatic, they did not plan on having a public confrontation with the Soviet Union, nor did they want a public outcry. Kissinger revealed that he was shocked when the global alert had reached the news all over the world, and he stated, "we would now have a *public* confrontation" (as cited in Sagan 1985, 128). This again indicates the lack of willingness to follow through with the threats given that the domestic element of the threat was initially and intentionally omitted, making it nothing but a bluff.

Even though it was not intended, the news picked up on the alert and reported to its audience about the event. Rufus Miles Jr., a former government administrator, wrote a letter to the

editor of the New York Times on October 27, 1973, expressing his concern about raising a nuclear alert for, specifically stating the alerts of the SAC nuclear bombing squadrons (Miles 1973).

3.2.6 Was the nuclear alert a success or a failure?

Hours after the press conference, the crisis ended. In the early afternoon, the Soviet ambassador to the UN halted his efforts at securing Soviet and US troops in the UN peacekeeping force. Israeli military activity also ceased. It yielded to the US demand that they allow humanitarian convoys to reach the Egyptian Third Army (Blechman & Hart 1982, 148-149). The Soviets sent a message to the US informing them that they were sending a small number of observers to oversee Israeli compliance in the cease-fire (ibid., 143).

Some disagree on when exactly US objectives had been reached and the crisis terminated. For instance, one Soviet aircraft arrived in Cairo early in the morning of October 25 but returned back immediately. It seemed that the aircraft, containing the intervention force, was ordered to reverse its course when the Kremlin decided it was too great a risk. Furthermore, normal activities of Soviet military forces were returning to normal. On the other hand, others argue that it was not clear that the crisis had been mitigated when he gave the press conference. In this case, the purpose of the statement was to show to Moscow in the strongest terms that the US would not under any circumstance tolerate unilateral intervention, and that it was prepared to risk nuclear war to prevent that from happening. The inability of those who participated in the management of the crisis to indicate exactly when the crisis ended shows how confrontations and communication between states can be difficult to accurately analyze (ibid., 143-144).

But was the success of cooling the crisis the result of the nuclear alert? That is difficult to say for a number of reasons. First, it is impossible to know what intentions the Soviets had on the 24th and 25th of October. It could be that the ultimatum they gave the US was simply to shock them into applying pressure on Israel to act according to the cease-fire. Therefore, despite making the Soviet intervention more dangerous due to the nuclear alert, saving the Third Army is what made Soviet intervention no longer necessary (Sagan 1985, 127). The US, therefore, had to accept an important compromise coupled with its resolve of nuclear signaling- the latter did not work on its own (ibid., 129).

Second, WSAG sent a message to Sadat in Nixon's name threatening to withdraw American involvement in peace talks with Israel. Sadat quickly changed his position, thus reducing Soviet opportunity to unilaterally intervene (ibid., 127). However, it could also be the case that Sadat changed his position because what he was simply after was a settlement acceptable to Egypt, and not because he was deterred by the US' nuclear power.

Another important consideration is how the Soviet Union interpreted the nuclear alert. On the one hand, as emphasized previously, for the nuclear threat to be credible, the nation making the threat must have vital interests at stake. US threats in the Middle East would be credible only if it is in response to a Soviet threat (Blechman & Hart 1982, 153), which happens to be the case in the 1973 crisis. Therefore, it could be that the Soviet Union took this threat as credible.

On the other hand, could it be possible that the Soviets had known it was only nuclear signaling for political objectives? After all, in a National Security Council/ Joint Chiefs of Staff meeting on October 24, it was said that "the Middle East is the worst place in the world for the US to get engaged in a war with the Soviets" (Office of the Historian n.d.). It could

also be possible that the Soviets understood that. Furthermore, after the 1967 war, Kissinger described US policy in his visit to Israel. The US' Middle Eastern policy was that it would not wage war with the Soviet Union over territories which Israel occupied after 1967, and the Soviet Union was well-aware of this fact (Bar-Joseph 1982, 215). This could be an indicator that the Soviet Union might have understood the US nuclear alert in 1973 was only a form of signaling rather than a credible nuclear posture. It is also argued that both the Soviet Union and the US did not want war, which made general deterrence quite robust. The confidence in that general deterrence could be argued to have been the reason the US raised its worldwide alert without fearing escalation (Lebow & Stein 1995, 163-164).

Finally, after several nuclear alerts made by Nixon, in an interview in 1979, Foreign Minister Anatoliy Gromyko (Burr & Kimball 2015, 333; Lebow & Stein 1995, 488n37) stated that "Americans put forces on alert so often that it is hard to know what it meant" (as cited in Lebow & Stein 1995, 333).

Nonetheless, the timing of the return of Soviet aircraft from Cairo after Kissinger's speech was very telling about the extent to which the Soviets took the nuclear threat seriously.

3.3 An Analysis of the Cold War Cases

3.3.1 Nixon's Madman theory

Nixon's Chief of Staff, Haldeman, quoted Nixon: "I call it the Madman Theory, Bob. I want the North Vietnamese to believe that I've reached the point that I might do anything to stop the war. We'll just slip the word to them that 'for God's sake, you know Nixon is obsessed about Communism. We can't restrain him when he is angry-and he has his hand on the nuclear button'-and Ho Chi Minh himself will be in Paris in two days begging for peace" (as cited in Sagan & Jeremi 2003, 165).

The behavior that Nixon displayed in the 1969 nuclear alert is quintessential of his belief in what he called the “Madman Theory”. It was also described by Nixon and Haldeman as “the principle of the threat of excessive force” (as cited in Burr & Kimball 2003, 117). Nixon was adamant that coercive power of military force would be stronger if his enemies believed that he was capable of using excessive force that would seem unreasonable to others. This, combined with a reputation of being ruthless, would suggest that he has qualities of madness: irrational, unpredictable, reckless risk-taker, furious and obsessed. He believed it was essential to US relations with the Soviet Union and other adversaries as it would instill fear and uncertainty in the adversaries’ minds and thus serve as a deterrent (ibid.). He stated: "If the adversary feels that you are unpredictable, even rash, he will be deterred from pressing you too far. The odds that he will fold will increase and the unpredictable president will win another hand” (as cited in Sagan & Jeremi 2003, 162).

But Nixon did not come up with nuclear signaling strategy. He believed that threatening the use of nuclear weapons would make his opponents acquiesce to his demands because he thought it had worked for Eisenhower when he threatened to use nuclear weapons on North Korea unless there was a truce. A few weeks later, the Chinese called for a truce and the Korean War ended. However, it is unclear whether this was the reason the war had ended (Bennet 2011, 231-232).

3.3.2 Why did the 1969 nuclear alert fail to produce its desired outcome?

Nixon wanted to achieve the goal of making the North Vietnamese negotiate a deal that was acceptable to the US by raising a secret nuclear alert to hint to the Soviet Union that if they did not help, then Nixon, being the "madman" he is, would use nuclear bombs on North Vietnam. The tactic did not work. What ended up happening was the Soviet Union using "reverse linkage" and extending their carrot of SALT negotiation potential which Nixon happily accepted (Sagan & Jeremi 2003, 172-173). But achieving progress in SALT negotiations was not Nixon's objective of the nuclear alert.

There are several assumptions made by authors on the issue as to why the nuclear alert failed to achieve its objective:

a) Nixon showed anxiety and jitteriness in his communication with Dobrynin (Burr & Kimball 2015, 290)
b) Moscow's demonstration of willingness to normalize relations appeased Nixon thus the latter took the bait and put off the alert (Sagan & Jeremi 2003, 172-173)
c) There was poor operational management that gave away that the nuclear alert was a bluff due to Nixon's obsession with secrecy thus it failed to scare the Soviets (Sagan & Jeremi 2003, 167; Jervis 2017, 195)

Despite the logic in these assumptions, it would be impossible to discern the reason behind the lack of Soviet reaction and what they thought of the nuclear alert without referring to Soviet and Vietnamese records of the event (Lawrence 2017, 201).

In his review of Burr and Kimball's book *Nixon's Nuclear Specter*, Lawrence (2017) suggests that the account omits geopolitical and domestic political contexts in which Nixon and Kissinger operated (p. 202). Perhaps this might suggest that the Soviets considered North Vietnam to be of less geostrategic significance to the US when compared, for instance, with Cuba. The Cuban missile crisis in 1962 is believed to be the closest point the world came close to nuclear war between the two superpowers (Blight et al. 1987, 170).

Fidel Castro of Cuba had developed close ties with the Soviet Union, and because the latter did not have military bases close to the US as the US had bases close to Russia's borders in Turkey, the Soviet Union decided to establish a military base in Cuba and began installing missiles (Miller & McAuliffe 1994, 24). As a result, the two superpowers found themselves in confrontation with one another. Both had a lot of interests at stake but would have to make some concessions to step away from the brink of nuclear war (Forrest 2013, 12). In the end, they made a deal that Moscow would remove the missiles from Cuba and in return the US would promise not to invade Cuba and remove its missiles from Turkey (ibid., 13).

It would be understandable, thus, for the US to take such stern measures against the Soviet Union and consider nuclear war when its enemy begins deploying missiles in a country that is in such proximity to the US. The possibility of nuclear war in this case considers the geopolitical and geostrategic context in which the crisis is situated, and superpowers truly believed that there was a possibility of nuclear war as a result. However, in the 1969 case, the geostrategic location may not have been so straightforwardly tied to US' priorities, and thus this could explain Lawrence's criticism of the explanation of the 1969 nuclear alert crisis' failure of achieving its goal. Blechman and Hart (1982) in their article titled "Political Utility of Nuclear Weapons" explain that nuclear threats are credible when the threatening party's

vital interests, such as its geostrategic location or economic value is at stake. “Only in certain places and very special circumstances might attempts to manipulate the risk of nuclear war be credible” (Blechman & Hart 1982, 153).

The Soviets perhaps did not believe that the US would go such far lengths and break the nuclear taboo over North Vietnam, a country that is halfway across the world from the US and could have thus understood that the nuclear alert was just a tool of political signaling that they chose to pretend they took no notice of. Ignoring the alert could have been a way of not entertaining the US’ attempt at scaring the Soviets and refraining from giving them the satisfaction of a frustrated response, thereby discouraging more of this behavior from the US because they would learn it is futile.

The secret nuclear alert of 1969 is now only one commonly known nuclear alert that took place during the Vietnam War. However, as it turns out, Daniel Ellsberg, once a consultant to the Department of Defense and the White House turned into an American whistleblower leaking Pentagon Papers, revealed that there were far more nuclear threats during the war than was known to government officials, including himself. A Pakistani political scientist informed Ellsberg that he had met with the North Vietnamese negotiating team just before the Christmas bombing in 1972, and the team told him that the US has threatened nuclear attacks on North Vietnam *thirteen* times (Ellsberg 2017, 314-315). This just goes on to tell us how little we know of the nuclear aspect of bargaining and how often nuclear signaling is used to resolve conflict in ways that are desirable for those threatening nuclear war without the public ever gaining knowledge of it.

3.3.3 It's only an alert (1969)

What I found interesting in the literature covering the 1969 nuclear alert crisis is that when referring to the increases in nuclear alerts for the purposes of nuclear signaling and thus political gains, the word 'nuclear' was not always there to refer the alert and in the increased readiness. As one reads, focus can be easily lost on the true nature of the alert as merely being a 'ground alert', or that measures were taken for 'increased readiness'. Reading through literature on the 1969 nuclear alert, it becomes imperative to circle back to double check that the contents of what was being read was in fact about a nuclear alert. Take for instance this example: "The instructions each of the CINCs received were tailored to their roles and missions and their importance for *strategic signaling* [emphasis added]," (Burr & Kimball 2015, 272). Here, the term nuclear signaling is swapped for "strategic signaling".

"It is also noteworthy that Haig and Kissinger accepted the recommendation to disperse SAC bombers to additional satellite military air bases, but to exclude dispersal to civilian airports, which were in the plans to be utilized (as they had been during the Cuban missile crisis) at high states of *alert* [emphasis added]," (Sagan & Jeremi 2003, 165).

"He [President Nixon] ordered a multifaceted *military alert* [emphasis added] for three weeks in October 1969," (Jervis 2017, 194).

"Kissinger asked Secretary of Defense Melvin Laird to increase the nation's preparations for war so that "the other side" will "pick this up"," (Suri 2008, 1026). Suri (2008) goes on to cite a telephone call between Alexander Haig and Kissinger, with Kissinger saying that Nixon ordered the secretary of defense "to initiate a series of increased *alert measures* [

emphasis added] designed to convey to the Soviets an increasing readiness by U.S. strategic force," (as cited in Suri 2008, 1026).

Furthermore, this nuclear alert which may have been one of the biggest secret US military operations was known to the insiders of the operation as the "Joint Chief of Staff Readiness Test", (Burr & Kimball 2003, 113). What occurred in 1969 was a nuclear alert, not just any alert. This quote omits two things: a) it is a nuclear alert, and b) increased readiness refers to increase readiness for nuclear war. Even in conversations with one another, top officials in charge of this nuclear alert often omitted the word 'nuclear', and the question is, why?

There is a big difference between increasing readiness for conventional war, and increasing readiness for nuclear war, or at least, posing as though one is 'preparing' for nuclear war. The semantic value of words plays a huge role in politics.

The reason for this could be that the word 'nuclear' beefs up the intensity of the alert, and as Sagan and Jeremi (2003) suggested, Nixon did not think that raising a nuclear alert was at all risky or provocative, and therefore omitting the word 'nuclear' from discussions of increased readiness and increased ground alerts would give the action less weight in terms of gravity. Euphemisms are used to make things seem more permissible, acceptable and less morally reprehensible, thus avoiding negative emotions in audiences (Aytan et al. 2021, 744).

Given that the 'nuclear taboo' has existed since 1945 (Tannenwald 2005, 5), the euphemism used in 1969 could have been used to mitigate the psychological negative effects of the word 'nuclear' on its recipients. Furthermore, the cause of this could be the 'nuclear taboo' at play. For instance, in a telephone conversation with Johnson, McNamara referred to "very dangerous alternatives that we can't even put in writing here, [and] certainly don't want to

talk to anyone else about" (as cited in Tannenwald 2006, 696). Tannenwald suggests that the reason he omitted the words 'nuclear weapons' could be because of the nuclear taboo against writing anything down on nuclear options (ibid.).

Be it what this may have been, using the word 'nuclear' to describe the alert and the increased readiness remains essential whether it was intended or not. When describing the situation, it must be referred to as a 'nuclear alert' and 'increased nuclear readiness', because there is a stark difference between conventional weapons and nuclear weapons. Omitting the word 'nuclear' lessens the seriousness of the action.

Even though the taboo word 'nuclear' was not emphasized, raising nuclear alerts for political leverage can have serious implications on the nuclear taboo, with the evidence of several other nuclear alerts that occurred subsequently. Furthermore, the 1969 nuclear alert crisis presents a baffling paradox: Nixon found that the most low-risk method of scaring the Soviet Union was through a nuclear alert, of all things. The nuclear alert was a substitute for a military escalation (Burr & Kimball 2015, 271). To reiterate, threatening nuclear war was seen as the least risky way of getting another nuclear-armed state to acquiesce. It was a less risky policy both domestically and internationally. Domestically, Nixon would lose his standing in the polls and further strengthen the Vietnam War protests. In terms of US-Soviet relations, if information of the nuclear alert had reached the press, Soviet leaders could have reacted with countermeasures leading to consequences that were unpredictable (ibid., 274).

In the Washington Special Actions Group (WSAG) meeting on September 4, 1969, Kissinger expressed his concern about creating a situation where a state would rely on nuclear weapons to settle disputes. He said that if such a principle was created, that the consequences for the

US would be grave (Office of the Historian n.d.). The consequences sure are grave, but not only to the US.

3.3.4 Cold War Period cares about domestic audience costs

In both case studies, the 1969 nuclear alert raised by the US, and the 1973 nuclear alerts, the domestic element of the alert was absent, meaning that the nuclear alerts were meant to be secret from the domestic audience. If the alerts are secret, then what's the point of raising the nuclear alert in the first place? It seems counterintuitive that if a state intends to signal resolve to its adversary, it would hide its actions from its public. Keeping the alert a secret makes it a cheap signal with low credibility of resolve (Sagan & Jeremi 2003, 155).

Then why is it so important for leaders to keep it a secret despite the costly compromise they have to make on their credibility? If leaders issue threats or promises that they fail to see through, leaders will suffer from domestic audience costs. This means that citizens would think less of their leader who issued false threats and promises and then backed down than of leaders who never committed in the first place. Therefore, the prospect of losing domestic support is enough to make a leader fear issuing threats they know they will not follow through. The importance of audience cost, however, varies from one type of political regime to another. Domestic audience costs are thought to be higher in democracies than they are in autocracies (Tomz 2007, 821-822).

Nonetheless, despite the Soviet Union not being a democracy during both crises -in 1969 and 1973- it did not issue any public threats. The Soviet Union seemed to have a more reserved and careful attitude towards making nuclear threats than the US did during the Cold War. The US began, in both case studies, to make nuclear threats albeit coated ones, as opposed to

the Soviet Union's reserved reactionary behavior rather than initiatory behavior. The Soviet Union simply responded to Washington's behavior by alerting their nuclear forces very subtly and in ways that were difficult to detect and even understand by the US. In contrast, when the US raised its nuclear alert by alerting its forces, the actions were quite loud and clear in comparison, to the extent that that the newspapers and the public would pick up on the nuclear alert despite the government not wanting that to happen.

In the 1969 US nuclear alert, the Russians did not respond to the US as the latter had hoped and the war continued. It therefore proved that the nuclear alert had failed to reach its political objective (Burr & Kimball 2015, 309). The US kept the secret alert, and it is possible that the Soviet Union was aware that it was a bluff, and that communicating nuclear intentions to its public as a democracy would mean it would have to follow through with its promises. Therefore, the lack of communication to the public that the US was threatening nuclear war could be said to have signaled to the Soviets that this was only a bluff.

In 1969, Nixon was careful not to issue public threats also because statesmen fear coming off as liars. It is argued that in the case that the costs of an unexpected action are very high, a state would rather damage its own reputation by not following through with the 'unexpected action' than pay the cost of living up to its commitment (Jervis 1989, 86). Therefore, Nixon preferred a cheap signal over having to tarnish his signaling reputation by not following through with his nuclear threats. The case is similar in 1973, but different circumstances had pushed it in a different direction.

In 1973, the news picked up on the nuclear alert due to its conspicuity rather than because of the government's intentional communication. After Kissinger's stern speech filled with

veiled nuclear rhetoric in the press conference on October 25, it is believed that the Soviet aircraft possibly carrying a small intervention force that had arrived in Cairo quickly turned back (Blechman & Hart 1982, 143-144). This could have been the direct result of including the domestic audience which made the threat credible.

In the press conference, I conclude that what Kissinger was attempting to say to the Soviets the following: We both have nuclear weapons and it would be such a shame if we had to use them, because we would lead the world to total destruction- so don't test us.

The public getting wind of the news may have given Washington more courage to go publicly. And going publicly with the threat may have signaled more credible resolve to the Soviets. After all, the US's objective had been achieved: the Soviets abandoned their mission to intervene unilaterally. Therefore, it can be argued that despite the US not being explicitly clear in the nuclear threat it made, going publicly with a speech by Kissinger that hinted at the possibility of nuclear war made the Soviets shy away, as they could have drawn a comparison between the way the US kept the 1969 nuclear alert a secret and the way the 1973 nuclear alert made its way to the news, and not only that, but Kissinger also going public with what seemed to be a nuclear threat to the Soviets.

If that is the case indeed, then it was not the military aspect of the nuclear alert alone that held power over the adversary. Alerting the nuclear forces did not yield the results the US had hoped for. However, after delivering the speech, and including the important aspect of the domestic element, the Soviet Union backed down. The rhetorical aspect of nuclear signaling seemed to have influenced the Soviets as it confirmed the idea that if the US, a democracy, had communicated its willingness to do whatever it takes to stop Soviet

unilateral intervention, then it would, whether it liked it or not, have to follow through with its promise. In other words, the Soviet Union might have feared that the US would feel pressured into following through with its threat to save face before its public. Therefore, it seems that in comparison to the 1969 nuclear alert, the 1973 nuclear alert achieved more of a success as a result of making a public threat. Nonetheless, it was still clear that during the 1973 crisis, there was reluctance to communicate nuclear threats, because as explained earlier, going public with the threat was not the plan to begin with.

Finally, it seems that the Cold War period was more concerned with the nuclear taboo. This was made clear in the way that the statesmen refrained from using the word 'nuclear' and from the refrain of making explicit nuclear threats.

Chapter 4: Post-Cold War Case Studies

Chapter IIII will present the following two case studies during the post-Cold War period. The case studies will be presented in chronological order. This chapter will begin with a background overview of the cases to provide context in which the nuclear alerts are raised which is important for understanding why decisions were made in favor of nuclear alerts, and how the context can weigh in on whether the nuclear alerts are simply bluffs or not. The chapter will provide an analysis of the cases, explaining their origins, how these crises were managed, and the results of nuclear signaling in each case.

4.1 Case Study 3: 2017 US-North Korean Nuclear Alert Crisis

4.1.1 Historical context

In the post-World War II period, the US and the Soviet Union emerged as rivals. The Soviet Union began moving its forces into the northern part of Korea which raised an alarm bell for the US. To save what could be saved, the US decided to draw an arbitrary line through the midpoint of the Korean peninsula to temporarily divide distinct zones of responsibility for the administration of Korea between the US and the Soviet Union, with the former taking control of the south and the latter taking control of the north. The Korean leaders, Kim of the North and Rhee of the South desperately attempted to reunify their country (Van 2019, 14-15).

Kim attempted to pressure Stalin to back him in his attempt to reunify Korea and retake the south. Thus, the north led an invasion into the south, but was swiftly met with a US-response in fear that a lack of action would result in the Soviet Union spreading more of its communist influence in Asia. Nonetheless, by 1951 there was no decisive end to the Korean War (ibid., 15-17). A peace treaty between the north and the south was never achieved in the decades that followed the war given that no party had been willing to compromise to terms acceptable to the other (ibid., 18). Kim thought that the only impediment in his way to taking over the south and reunifying Korea was the US. The war ended in 1953, but a rivalry between the north and the south was firmly entrenched (ibid., 19).

In 1959, North Korea began building its nuclear program with the help of the Soviet Union (Ahn 2011, 178). By 1993, North Korea declared a semi-state of war against the West as it

refused to comply with the International Atomic Energy Agency's request for inspections. Causing international tension would foster a "rally around the flag" syndrome and thus diverting the attention away from the economic decline. Thus, the continued effort in developing a nuclear weapons program in North Korea was the result of the continued economic decline, a weak regime and subsequently, the need to support the regime's survival (Ahn 2011, 179).

North Korea's nuclear program has been a threat to the US since. When US President Obama handed power over to Trump in 2016, he highlighted the importance of freezing North Korea's nuclear program on the US foreign policy agenda (Van 2019, 90). US discourse on North Korea began to be increasingly focused on launching a first strike against the latter. Obama's strategic patience, it was believed, had let to the increase of North Korea's missile and nuclear capability (ibid., 92). On December 1, 2016, a former commander of United States Forces Korea said that the US had planned to launch a preemptive strike if North Korea placed an intercontinental ballistic missile (ICBM) on a launch pad though they were uncertain whether it possessed a nuclear warhead (ibid., 92-93).

Hawkish rhetoric began building up, and news media outlets began stirring up stories with bombastic headlines such as, "What the US Would Use to Strike North Korea,"; "Should Washington Strike North Korea's Dangerous ICBMs Before It's Too Late?"; "What Would Happen in the Minutes and Hours after North Korea Nuked the United States?"; and "Pre-empting a North Korean ICBM Test" (as cited in Van 2019, 93). Commentaries that were averse to an attack against North Korea focused heavily on the pressing matter of military strikes: "Washington's Dangerous Drums of War on North Korea" and "Attacking North Korea Would be a Disaster" (as cited in Van 2019, 93).

Thenceforth, the nuclear tensions between the US and North Korea began rising, leading to the nuclear alert crisis in 2017.

4.1.2 The calm before the storm: The slow rise in nuclear tension

Prior to the US presidential elections in November 2016, former US officials met with North Korean officials to urge the latter to freeze their nuclear program. This included freezing nuclear testing, missile launching and fissile material production as this would gesture to the new US administration confidence-building measures from North Korea. In turn, the US would also take its own confidence-building measures by dealing with North Korea's security concerns, creating joint military exercises, and initiating a dialogue on a peace treaty between the two states. Thus, it was clear that Kim Jong Un knew what the US would look for to assess whether he was serious about pursuing negotiations (Van 2019, 94).

After the elections, North Korea laid low for months. Its apocalyptic rhetoric was drastically toned down and there were no nuclear detonations and minimal missile activity (ibid., 94). Furthermore, in the following two months, Trump's team met with North Korean officials behind closed doors. Kim Jong Un was testing Trump's waters to see whether he would be as hostile to North Korea as Obama had been. Once Kim realized that Trump would take the same path, he accelerated his plans to build nuclear arsenal that would range the US. Two weeks after Trump won the elections, North Korea issued a 9-page statement which aimed to shape Trump's policy toward North Korea (ibid., 95).

In the memorandum, North Korea blamed the US for its "criminal acts" which pushed North Korea into strengthening its nuclear capability. The memorandum also claimed that the "heinous hostile maneuvers" by the US against North Korea aimed to politically suffocate

them and subsequently lead to the collapse of the regime. It claimed that pursuing a strong nuclear capability was a "just" and "righteous" countermeasure of self-defense. Furthermore, it stated that the Obama administration attempted to defame the supreme dignity of their country, which was "the gravest of all sins" and would forever be engraved in their national memory. It described Obama's "strategic patience" as "strategic suffocation" that aimed at the demise of the regime. It went on to cite the long list of sanctions and criticisms that the US had made against North Korea. It further condemned the US for its consistent increase in scale and intensity of hostile joint military drills with South Korea (The Diplomat 2016).

In response to North Korea's claims that the drills were belligerent, the US maintained that they were merely defensive drills, which North Korea did not buy into. It called it a "deceptive veil" as it mobilized nuclear striking means on North Korea's doorstep. The memorandum also maintained that the US was increasing its military exercises and arms build-up to wage a second Korean War, all the while internationalizing the sanctions to stifle its economy (The Korean Central News Agency 2017).

While the message did not contain threats to the US, the language used in the memorandum was quite stern and portraying Pyongyang's anger at how it had been mistreated by the US. It used words such as 'hostile', 'malicious' and 'heinous' to refer to the US' actions to demonstrate how evil it thought the US was. More importantly, as explained by Van earlier, it was also perhaps to signal to Trump that if he wanted better relations with North Korea, then he had to demonstrate that he would not follow in the previous administration's footsteps (Van 2019, 95).

The memorandum also points at something more fundamental: it demonstrates how threatened it feels by the US's nuclear show of force. Despite the memorandum briefly citing an example of belligerent rhetoric by Obama saying, "We don't want them getting close. We could, obviously, destroy North Korea with our arsenals" (as cited in The Diplomat 2016), Pyongyang shows its concern lies mainly in the military aspect of nuclear signaling and attempts to say that it will not have any of it. For instance, the memorandum goes on to condemn the US for moving its B-1B, B-2 and B-52 nuclear strategic bombers to Guam which flew to South Korea several times as a drill to practice dropping nuclear bombs as a surprise preemptive attack on North Korea (The Diplomat 2016).

4.1.3 Nuclear-charged rhetoric and nuclear bomb detonations

On January 2, 2017, Trump tweeted, "North Korea just stated that it is in the final stages of developing a nuclear weapon capable of reaching parts of the U.S. It won't happen!" (as cited in Van 2019, 96). Trump indicated that if North Korea did in fact do so, then the US would respond back with military force (ibid., 96). Three days later, in a joint meeting of American, South Korean and Japanese officials, it was decided that the US, Japan and South Korea would continue to apply enormous pressure on North Korea in hopes that it will make the right decision and abandon its nuclear weapons program (ibid., 96-97).

On January 19, 2017, the US received information that North Korea had placed ICBMs on two mobile missile launchers as a preparation for a missile test to be detonated if Trump makes any belligerent declarations on North Korea. On February 3, Secretary of Defense James Mattis travelled to Japan and South Korea where he affirmed that if North Korea uses nuclear weapons, the US response would be "effective and overwhelming" (as cited in Van

2019, 98). Pyongyang assumed that Trump's policy would not be much of a departure from Obama's strategic patience policy towards North Korea's nuclearization. As such, on February 12, 2017, North Korea fired its first missile test (KN-15) since Trump's election. Previously, the missile tests North Korea had launched were supposedly for research and development, but it was clear that thenceforth, it was to prepare for a nuclear first strike (ibid., 98).

The day after the successful missile test, North Korean agents assassinated Kim Jong Un's brother, Kim Jong Nam. He was assassinated using a chemical weapon in the public eye at an airport in Malaysia. The aim was to terrify the world by using a chemical weapon of all types of weapons at an international airport (ibid., 98-99). This piece of performance art was meant to send the US the message that he could commit the most heinous atrocities, and no one would be able to stop him from doing so. More importantly, he also intended to signal his madness.

After hearing the news, the Trump team commented, "You can't help but think, Jesus, maybe [Kim] is crazy" (as cited in Van 2019, 99). Perhaps, this is what Kim Jong Un intended from the beginning- to implement his own version of Nixon's madman theory. If North Korea's adversaries believed it was impulsive, then the adversaries were more likely to behave passively towards them to avoid provocation (Roy 1994, 311). As mentioned in the 1969 case study, Nixon's madman theory did not mean the leader had to be mad at all; in fact, there was much rationality in pretending to be 'mad'.

After tweeting, "it won't happen", North Korea went ahead and tested its first missile launch since Trump's election. This could have been a way for North Korea to tell the US that it will

not be threatened, and that it was bold enough to go ahead despite warnings that seemed to indicate that the US was ready to take military action. Trump's team was still making reviews of US foreign policy towards North Korea, and therefore, this could have been the reason why the administration had not yet started to be increasingly assertive with North Korea (Van 2019, 100).

Soon after, nevertheless, the US and South Korea went ahead with pre-scheduled military exercises that began on March 1, 2017, and ended on April 30, 2017. The purpose of this annual exercise was to prepare both armies to respond to a war which would be provoked by North Korean aggression. This ritual affirmed the idea that the US was deeply committed to South Korea's defense. Since 2012, the exercises included nuclear-capable bombers, and the US also sent B-1 bombers from Guam. The 2017 exercises were no exception (ibid., 100-101).

In the previous years, North Korea had responded very angrily to the exercises. It would condemn the exercises as a practice to invade the country. In 2015, North Korea's Committee for Peaceful Reunification of Korea stated that "Such large-scale joint military exercises... are little short of a declaration of a war" (as cited in DW 2015). The language was always bold and belligerent in response to the joint military exercises. In 2016, North Korea condemned the exercises as being a "beheading operation" aimed at removing Kim Jong Un's regime. The National Defense Commission therefore declared that North Korea would prepare for a "preemptive attack so that they may deal merciless deadly blows at the enemies" (as cited in Fifield 2016).

In 2017, however, there is hardly any coverage on North Korea's official public statement of response to the military exercise. Instead, North Korea decided this time that it will not use charged rhetoric, and rather only opt for a show force. On March 5, North Korea launched five medium-range missiles into the Sea of Japan, three of which landed in the exclusive economic zone of Japan. The March 5th missile test was only the first in a series of tests that ran through the end of April- coincidentally ending with the US-South Korean joint military exercise (Van 2019, 101). In response, the US did two things: first, it placed a Terminal High Altitude Area Defense anti-missile system to South Korea (ABC News 2019); and second, it used veiled threats to deter North Korea. For instance, former Secretary of State Rex Tillerson issued a public statement saying, "Let me be very clear. The policy of strategic patience has ended. We're exploring a new range of diplomatic, security and economic measures. All options are on the table" (as cited in Washington Post 2017).

By saying that "all options are on the table", Tillerson seems to possibly be suggesting that the US is considering a nuclear option. Trump then takes the less conventional means of expressing discontent with North Korea's actions by taking on Twitter saying, "North Korea is behaving very badly. They have been 'playing' the United States for years. China has done little to help!" (as cited in Insider 2017). As in the 1969 case study, the US used China to apply pressure on the Soviet Union and Hanoi through triangular diplomacy (Burr & Kimball 2003, 116-117). And as we see unfolding in this case study as well, the US is once again involving China in its bargaining with North Korea. However, the situation here differs in one important way: the country that the US wants the pressure applied on is a nuclear-capable one. The US had repeatedly called on China to pressure North Korea into abandoning its nuclear weapons program. Nonetheless, it has not. This opens the possibility

that North Korea sees this as a sign of weakness by the US, having to resort to another nuclear state to aid it in achieving its security objectives. Thus, North Korea would not take the US' threats seriously. In any case, the US was determined that if coercive signaling through military deployments and exercises that included nuclear weapons did not work, it would resort to military force (Van 2019, 104).

During the month of April, the US began mimicking North Korea's theory of victory. It deliberately generated friction with North Korea using military "saber-rattling" and heated rhetoric as North Korea's nuclear capability was expanding to miniaturizing a nuclear device to fit on a mobile ICBM (ibid., 110). On April 8, the Commander of US Pacific Command, Harry Harris suggested redeploying the *USS Carl Vinson* aircraft from a planned port visit and exercise with Australia to the Korean Peninsula instead. This would be a strong deterrent signal to North Korea showing that the US was ready to act (ibid., 110-111). He stated that "Deterrence = Capability × Resolve × Signaling" (as cited in Van 2019, 111). However, signaling as a method of deterrence is considered cheap talk and simply chest-thumping which only exacerbates friction between adversaries. Furthermore, a signal could mean anything from an imminent threat to an escalation of hostilities, rather than a reliable indication of willingness to go to war. It was in fact the status quo that deterred a North Korean attack. And ironically, military signaling risked the failure of deterrence by provoking North Korea to behave likewise (ibid.)

On April 12, when asked by Fox News what he was thinking on North Korea, Trump stated, "We're sending an armada. Very powerful. We have submarines, very powerful, far more powerful than the aircraft carrier, that I can tell you. And we have the best military people on

Earth. And I will say this. He [Kim Jong Un] is doing the wrong thing. He is doing the wrong thing" (as cited in Van 2019, 112).

In this statement, Trump mimics Kim's tough rhetoric using the hyperbole of "an armada" as well as rhetoric that seriously increases the risk of war. Placing an aircraft carrier close to an adversary loaded with nuclear weapons and anti-ballistic missiles was not a trivial act as it provides an indication of when the US would attack (ibid., 112-113). The next day, anonymous senior US intelligence officers leaked a rumor to NBC news that the US was preparing a plan to launch a strike on North Korea to preempt a North Korean missile test. NBC also reported that two US Navy destroyers that were armed with Tomahawk cruise missiles that had just attacked Syria without warning were placed off North Korea's eastern coast. These factors, along with the administration's emphasis that "all options are on the table" quickly concerned the public, which was the reason the administration had to disavow the story (ibid., 114).

Shortly after, North Korea beefed up its own rhetoric in response. North Korean news outlet threatened, "If the U.S. dares opt for a military action . . . the DPRK is ready to react to any mode of war desired by the U.S" (as cited in Van 2019, 115). "Any mode of war" refers to the nuclear option being on the table. North Korea's Foreign Minister also noted that the Trump administration is comparatively more aggressive than the previous one but warned that North Korea would go to war if the Trump administration chose this path (ibid., 115-116).

Tensions continued to rise as Trump personalized the nuclear standoff with Kim. "He's [Kim Jon Un's] gotta behave," Trump condescendingly remarked (as cited in Van 2019, 117).

Towards the end of April, however, Trump then showers Kim with praise as a young leader whose father had just died, claiming that he deserves credit. He goes on to say that if it were acceptable, he would be honored to meet Kim in person. This was meant to signal to North Korea that the US was open to having a presidential summit, something that had not been thinkable previously (ibid., 118). Nonetheless, Trump continued to send mixed signals of both belligerence and willingness to peacefully negotiate. War threats were still omnipresent perhaps to deliberately create a crisis mood. But in any case, "What starts out as a bluff can end with follow-through" (Van 2019, 120).

So far, nothing the US did worked to denuclearize North Korea, nor did it tone down the latter's belligerent rhetoric. However, in March and April, Kim did not test an ICBM; therefore, it is possible that he took Trump's threats seriously. But deterrence was only buying the US time (ibid., 125). In the final week of April, North Korea tested another ballistic missile. North Korean media then released a video that quickly went viral of North Korean missiles aimed at images of US aircraft carriers and the White House. The video ominously ends with the US Capitol exploding and the following message: "The final collapse will begin" (as cited in Van 2019, 125).

This was not only threatening language, but also a graphic representation of the threats they were making. This took nuclear signaling to a whole new level of an imagined dystopic near future if the US did not back off. In the 1973 nuclear alert crisis, the US invited Egypt to imagine what it would be like if the "two nuclear great nuclear countries were to confront each other on [their] your soil" (as cited in the Office of the Historian n.d.). The US used its language to convey a thinly veiled threat of the risk of nuclear war. The US also threatened the Soviet Union with "incalculable consequences" if it followed through with its plans of

unilateral action (Nixon 1978, 939). What it did not do, however, was provide a vivid video illustration of those consequences. North Korea, on the other hand, invites the US to imagine the consequences of its actions as well, but with its own new addition: visual aid. This was no dystopian Hollywood film, this was a video produced by the state of North Korea to be disseminated to the whole world, and in particular of course, to the Americans, to shake them to their core. This would leave nothing to the imagination.

4.1.4 4th of July 2017 nuclear crisis: A package of gifts

Provocations of missile tests continued until July 4, 2017- The US' Independence Day. Kim told Korean Central News Agency that he had wrapped up "a package of gifts" for the US on its Independence Day, and that the US would be displeased to witness this strategic option (Hayden & Martinez 2017). The nuclear signaling used by the US did not achieve what it was set out to do. It was everything the US had implied it would not tolerate (Van 2019, 132). For the first time, North Korea launched a two-stage ICBM capable of hitting the US, heeding no warnings they received from the US (McLaughlin & Martinez 2019). Petty as it was, this was quite the "screw you" attitude towards Trump, believing that coming off as impervious to threats from the strongest military power in the world added impenetrable layers to its deterrence (Van 2019, 134).

In response, Tillerson stated, "The United States strongly condemns North Korea's launch of an intercontinental ballistic missile. Testing an ICBM represents a new escalation of the threat to the United States, our allies and partners, the region, and the world" (as cited in McLaughlin & Martinez 2019). Despite Trump's hyperbolic and beefed-up rhetoric towards North Korea, US' actions had been consistent with Obama's policy of strategic patience. In

other words, Trump and his administration were saying one thing, and doing another (Van 2019, 132).

Predictably, Trump took on Twitter hours after the launch to mock Kim, “Does this guy have nothing better to do with this life?” (as cited in McCurry 2017). As the crisis unfolded, each party issued its own threats and demonstrated its readiness for war. The risk of nuclear war was greatly heightened (Van 2019, 132). Nonetheless, by demonstrating that North Korea could launch a nuclear bomb on the US, Kim perhaps felt certain that the US would not invade (ibid., 134).

Two weeks later, CIA Director Mike Pompeo commented on Kim saying, “It would be a great thing to denuclearize the peninsula, to get those weapons off of that….but the thing that is most dangerous about it is the character who holds the control over them today. … I am hopeful we will find a way to separate that regime from this system….The North Korean people I'm sure are lovely people and would love to see him go” (as cited in Windrem & Arkin 2018). This tough talk clearly indicated that Pompeo was suggesting that the US overthrow Kim’s regime or assassinate Kim. No one, however, in the US administration had ever publicly discussed “separating” Kim from his regime, or in other words, assassinating him (Van 2019, 135). But Trump was hawkish in his rhetoric as he soon learned from Kim, whom he called “Little Rocket Man” (as cited in Keneally 2018). Therefore, it was only expected that such rhetoric would also come from his administration.

Shortly after, on July 28, Kim launched another ICBM that flew even further than the previous one. Kim stated, “We have demonstrated our ability to fire our intercontinental ballistic rocket at any time and place and that the entire U.S. territory is within our shooting

range" (as cited in Van 2019, 136). The blatancy of the nuclear signaling tells the US that North Korea can launch a nuclear attack on the US. In response, Trump, once again, took on Twitter to vent out his frustration with China's inertial North Korea policy (Van 2019, 136). On August 5, China and Russia, which had been vetoing UN resolutions of sanctions against North Korea had finally yielded into banning North Korean coal exports, the country's primary source of revenue (ibid.).

On August 8, North Korea announced that it had miniaturized nuclear warheads that can fit on ICBMs. Trump responded by stating that North Koreans "will be met with fire and fury, and frankly, power the likes of which this world has never seen" (as cited in Van 2019, 138). The response was a passionate one, and more importantly, it indicated that the US was threatening nuclear war against North Korea. The aim was to put a stop to North Korea's bellicose behavior rather than denuclearizing the country. As the threat went viral and raised an alarm around the world, a US administration official told Reuters that the administration did not discuss the escalation of rhetoric to Kim's statements nor the effects of doing so (ibid., 138-139).

In the 1969 nuclear alert, Nixon had kept the purpose of the alert secret from the top officials. In contrast, while Trump did not intend on keeping his nuclear alert secret, he did not communicate to his administration how he intends to signal his 'fury' with Pyongyang. It is difficult to know exactly what happened behind the scenes, particularly in the post-Cold War period. In the two Cold War case studies, access to national archives was readily available to provide direct insights into the top decision-makers' thoughts through their diary entries and special group meeting memos. Given the relative novelty of this case study, such sources are unfortunately not easily available, making it difficult to provide evidence as to how and why

certain things unfolded, and perhaps even more importantly, the intention behind each action, speech, and even Tweet. Nonetheless, it can be assumed that this was simply the way Trump did things. He did not share his every thought with his team, nor tell them what he was going to publicly state.

Thus, Tillerson downplayed Trump's blatant nuclear threat of 'fire and fury': "nothing that I have seen and nothing that I know of would indicate that the situation has dramatically changed in the last 24 hours" (as cited in Van 2019, 139). This was not the first time Tillerson contradicted Trump. Hours later, North Korea issued its own very alarming threat. It threatened to launch a Hwasong-12 on the area around Guam to contain US' major bases, including Anderson Air Force base. "It's a daydream for the US to think its mainland is an invulnerable heavenly kingdom" (as cited in Van 2019, 139). There was a new element to Kim's threats: North Korea was now threatening to bomb US bases that hosted nuclear weapons. This could trigger US military action preemptively or in retaliation (Van 2019, 139-140).

A reporter asked Trump what he made of North Korea's assumption that his fire and fury threat was nonsense, to which he replied, "Maybe it wasn't tough enough. They've been doing this to our country for a long time . . . That statement may not be tough enough . . . What they've been doing, and what they've been getting away with is a tragedy, and it can't be allowed" (as cited in Van 2019, 139). He also threatened that if North Korea hits Guam, then it would "be in trouble like few nations ever have been in trouble in this world" (as cited in Van 2019, 140). This 'trouble' could have possibly meant a nuclear strike which 'few nations' (Japan) had ever had to endure before.

In his own way, Kim showed a brief signal of restraint. He threw the ball in the US' court, and said, "if the Yankees persist in their extremely dangerous reckless actions on the Korean Peninsula and in its vicinity, testing the self-restraint of the DPRK, the latter will make an important decision as it already declared . . . it will be the most delightful historic moment when the Hwasong artillerymen will wring the windpipes of the Yankees and point daggers at their necks" (as cited in Van 2019, 141). As strong as the imagery was in this threat, a degree of restraint was in place to say that as long as the US did not threaten North Korea, the latter would not attack Guam (ibid.). Trump thought, "[Kim] is starting to respect us" (as cited in Van 2019, 141). In the meanwhile, the US continued to work hard on its economic sanctions against North Korea (ibid., 142). The use of economic sanctions against the adversary is a new aspect to the nuclear alert crises case studies used in this thesis. At the height of tensions, the US continued to use its economic sticks to further pressure Pyongyang into yielding not only to denuclearization, but more importantly to reducing the tensions around the nuclear alert crisis they both contributed to.

To firmly confirm North Korea's concerns, Trump tweeted on August 11, 2017, "Military solutions are now in place, locked and loaded, should North Korea act unwisely" (as cited in Holmes 2017). This was not just tough rhetoric- the US and South Korea would go ahead with massive military exercises starting August 21 through August 31 during a greatly heightened nuclear alert (ibid.).

On August 25, North Korea launched three intermediate-range ballistic missiles into the Sea of Japan (McLaughlin & Martinez 2019), possibly as a way of showing its anger towards Washington for conducting the military exercises which it deems threatening. However, it still shows a good degree of restraint nonetheless, considering that it did not launch the long-

range ICBMs that the US had continuously warned against. Therefore, while it did not tone down its belligerent rhetoric, North Korea had certainly toned down its belligerent actions. This could be as a result of China and Russia's reluctant yet eventual support of the economic sanctions on North Korea.

In response to flying the missile over its ally, the US conducted a mock bombing drill simulating surgical strikes of North Korea's key facilities. Four US F-353B fighter jets, two US B-1B bombers and four South Korean F-15 fighter jets joined to fly over the Korean peninsula in a show of force (Lee et al. 2017).

On August 28, North Korea fired another intermediate-range ballistic missile (IRBM). Once again, the White House commented, "all options are on the table" and that "talking is not the answer" (as cited in Van 2019, 143). This meant one thing: the US is threatening war. Was the administration bluffing or did they really mean they were going to rage war? After all, Trump had time and time again shown his lack of impulse control and passionate responses through his emotional tweets (ibid., 143). Whether or not this was what the administration meant for to happen, Trump was the face of the US and its policy. And repeated incidents showed that North Korea's crossing of US-imposed thresholds was met with hawkish rhetoric, but no military or nuclear action as had been promised. This was because launching a limited military strike on North Korea would only further push North Korea in the direction of acquiring nuclear weapons, and worse yet, into possibly using nuclear weapons (ibid., 165).

On September 3, North Korea launched its largest nuclear test yet. Two weeks later, Trump made a speech at the UN threatening that if the US "is forced to defend itself or its allies, we

will have no choice but to totally destroy North Korea. Rocket Man is on a suicide mission for himself and for his regime" (as cited in Van 2019, 146). Kim found Trump's remark of "Rocket Man" demeaning, and called him a "mentally deranged dotard". He further stated that he would make Trump "pay dearly for his speech calling for totally destroying the DPRK" (as cited in Van 2019, 147). Kim and Trump were again exchanging personal insults in a shockingly petty manner for two nuclear-state leaders.

4.1.5 2017's final test and an end to the crisis

On November 28, North Korea launched an ICBM into Japan's exclusive economic zone. This displayed North Korea's ability to launch missiles carrying nuclear warheads anywhere in the US (ibid., 157). In turn, Trump called Kim a "sick puppy" (as cited in Van 2019, 158). As mentioned earlier, launching a limited strike on North Korea would have simply been counterproductive to achieving US interests. As a result, they refrained from doing so despite what their rhetoric had continuously suggested (ibid., 165). This suggests that the nuclear blackmail and threats the US was issuing were only bluffs.

Nonetheless, after Kim demonstrated his ability to launch a nuclear attack on the US, he showed his openness to return to the negotiating table and resume dialogue after a period of petty insult exchanges. Clearly, this was his intention all along- to arrive at the negotiating table with flexed muscles and to be assured the adversary knew exactly what he was capable of, to command the respect he thinks he deserves in the negotiation (ibid., 168).

In 2018's New Year's address, Kim made what seemed to be a positive and crisis-ending speech to the South Koreans (Van 2019, 168), "We should improve the frozen inter-Korean relations and glorify this meaningful year as an eventful one noteworthy in the history of the

nation"; "The north and the south should desist from doing anything that might aggravate the situation, and they should make concerted efforts to defuse military tension and create a peaceful environment" (as cited in The National Committee on North Korea). For good measure, he even wished the Olympic Games which was to be hosted in South Korea to be a success (ibid.).

To Trump, on the other hand, Kim's comments of his o were threatening, "The whole of its mainland is within the range of our nuclear strike and the nuclear button is on my office desk all the time; the United States needs to be clearly aware that this is not merely a threat but a reality" (as cited in Van 2019, 169). Despite the menacing crust of the speech, Kim implied he was not saying this to threaten the US (ibid.). This speech did not sound much different from previous US administrations' rhetoric to signal resolve. Yet, Trump took it on a personal level and responded pettily and reprehensibly in his tweet, "Will someone from his depleted and food starved regime please tell him that I too have a Nuclear Button, but it is a much bigger & more powerful one than his, and my Button works!" (as cited in Van 2019, 169).

Trump did not only sound childish, but he also stooped low to taunt North Korea as being "food starved". Previously, he would poke fun at Kim which was regarded as humorous; however, Twitter comments on the tweet expressed disappointment in Trump as his remarks were "unpresidential" (ibid.). Quite frankly, many of his tweets and remarks on Kim had been "unpresidential" all throughout the year-long nuclear alert crisis.

In early March, with South Korea's intervention, South Korea's national security advisor announced that Trump had agreed to meet Kim and that North Korea was committed to denuclearize. Kim had also agreed to halt nuclear and missile testing (CBS News 2018).

Kim had lived up to his promise: no North Korean missiles were launched in 2018. While this may seem the resulting success of Trump's unconventional North Korea policy of continuously bashing the leader on Twitter, it was what Kim had already planned for. In his New Year's speech, he said he would divert his attention from testing to mass production (Smith 2018).

In any case, the crisis had already defused, and the tide changed from a war of petty insults to beautiful love letters between the two leaders. Speaking at a rally in late September 2018, Trump said, "We went back and forth, then we fell in love. He wrote me beautiful love letters. And they are great letters. We fell in love" (as cited in Bardella 2018).

The rhetoric took a 180-degree turn. It signaled Washington's willingness to tone down its belligerent tone and behavior to pave way for building a more meaningful relationship with Pyongyang and finally secure US interests by getting North Korea to denuclearize. Nonetheless, just because this was not a belligerent message and rather a romantic one does not mean that Trump cannot still be considered impulsive and passionate in his responses. This means that with any slight changes in North Korea's behavior, the tide would change again, and Trump would take on Twitter for name-calling revenge.

4.2 Case Study 4: 2022-April 22, 2023 Russian Nuclear Alert Crisis

4.2.1 Background context

"We will not allow Europe and the U.S to take Ukraine from us," a Russian official told the Financial Times (as cited in Kuzio 2022, 41). Since the fall of the Soviet Union, there have been tensions between Russia and Ukraine over Crimea (Bebler 2015, 194). On February 22, 2014, the Ukrainian President Yanukovich, who had good relations with Russia, fled the country, paving way for a nationalist and anti-Russian president who openly supported the West. Protests between pro-Russia and pro-Ukraine broke out, with pro-Russians asking for cessation and calling on Russia to help. Therefore, Russia created a draft amendment to the constitution to incorporate parts of Ukraine into Russian territory with the justification that Ukraine discriminated against national minorities. On the 28th, Russia invaded Crimea (Bebler 2015, 195).

In Spring 2014, self-proclaimed "People's Republics" in Donetsk and Luhansk were formed in the Donbas region whom Moscow backed. In 2019, Russia began distributing Russian passports to the inhabitants which later becomes the central argument to Russia's recognition of their independence (Goncharenko 2022). Thus, to justify its invasion on February 24, 2022, Russia claimed that it was acting in self-defense to protect the Donbas inhabitants from Ukraine's "systematic extermination" of them (Wesolowski 2022).

Russia further claimed that the reason for its invasion was to demilitarize and "denazify" Ukraine, which the latter dismissed as propaganda. Furthermore, Russia's foreign minister said that Ukraine seeking to acquire nuclear weapons was a "real danger" that required

Russia's immediate response (Farge 2022). In 2021, Ukrainian diplomat warned that Ukraine may feel compelled to acquire nuclear weapons if it does not gain NATO membership (Kyiv Post 2021).

There are speculations that the reason Russia invaded Ukraine was because of NATO's expansion in its backyard. Therefore, NATO's expansion eastward only naturally triggered a hostile reaction from Russia (Zanchetta 2022). After all, Putin did mention his concern about that in the speech he made after invading Ukraine, "The North Atlantic alliance continued to expand despite our protests and concerns" (as cited in Fisher 2022). A contrary argument, however, maintains that the main threat to Putin and his autocratic regime is in fact democracy, and not NATO in itself (Faul & Person 2022, 30). The fundamental cause of tensions was the democratic breakthroughs the post-communist countries had during the color revolutions, which Putin believes to be US-backed coups (ibid., 32). Whatever the reason was, the war led to a nuclear alert crisis that would keep the world on its toes for more than a year to come.

4.2.2 Nuclear signaling starts

On February 21, 2022, Putin made a speech where he explains how much of a threat Ukraine and NATO are to Russia. He stated that Ukraine had the nuclear technologies and delivery vehicles which had been created during the Soviet times. Therefore, it would be easy for Ukraine to acquire nuclear weapons. He warned that if Ukraine acquired these weapons, the situation in the world, and particularly for Russia, would drastically change. He went on to comment on the continuous support that Ukraine receives from the West, and that they may help Ukraine acquire nuclear weapons which would pose yet another serious danger to

Russia (Kremlin RU 2022). Right before invading Ukraine, Putin attempted to place blame on his adversaries. In his words, Ukraine has behaved badly by trying to acquire nuclear weapons which places Russia at risk, while the West is complicit in providing support to Russia's neighbor, positioning Russia in what seems to be a dangerous spot (ibid.).

Subsequently, Putin begins the war with immediate nuclear-charged rhetoric and a nuclear alert meant to signal to both Ukraine and NATO that is willing to do whatever it takes to protect Russia's vital interests. On February 24, 2022, Putin makes another speech where he immediately signals nuclear resolve. He states that Russia "is today one of the most powerful nuclear powers in the world and, moreover, has certain advantages in a number of the latest types of weapons. In this regard, no one should have any doubts that a direct attack on our country will lead to defeat and dire consequences for any potential aggressor" (as cited in Kremlin RU 2022).

Immediately, we see signs of nuclear signaling. Putin clearly says that Russia is weaponized with the most advanced nuclear devices, nuclear technology which supersedes that of other nuclear weapons states. If anyone should come to Ukraine's aid by invading Russia, the latter would respond with nuclear weapons, though he does not explicitly say that, yet. The threat of responding with nuclear weapons is euphemized with "dire consequences" to any state that attacks Russia. He comes off very strongly right at the very beginning of the conflict, kickstarting it immediately with nuclear blackmail.

He ends his speech ominously by issuing one last stern nuclear threat: "Now a few important, very important words for those who may be tempted to intervene in ongoing events. Whoever tries to hinder us, and even more so to create threats for our country, for our people,

should know that Russia's response will be immediate and will lead you to such consequences that you have never experienced in your history. We are ready for any development of events. All necessary decisions in this regard have been made. I hope that I will be heard" (as cited in Kremlin RU 2022).

"Whoever tries to hinder us" implies that Russia would not only be triggered by those who would issue threats against it, but also by those that try stop Russia's invasion would also be met with nuclear force. He threatens that if they decide to do either of those things he has warned against, they will be faced with something they had never experienced in their history- and that is a strong reference to nuclear war. Most countries have experienced conventional war, but only one state has experienced nuclear war- and it isn't a member of NATO. The last part of this quote implies that he does not wish to lead the world to nuclear war though he will if he has to, hence he hopes to be heard. Furthermore, to make this nuclear threat come off all the more vehemently, he clearly states that they are ready for any sort of developments, which essentially means that Russia's nuclear forces are on alert.

The important aspect of nuclear signaling in this instance is that *before* issuing a public nuclear threat, Putin had carried out strategic nuclear exercises on February 18, 2022. A photograph of Putin was shared on Reuter's website which they got ahold of after Russia's RIA news agency aired the footage as he ordered the drills to begin and then watched them take place from the Kremlin. The nuclear exercises involved launching hypersonic ballistic missiles and other weapons from warships, submarines and warplanes. The drills also involved missiles launched from land which struck targets on land and sea in the far east peninsula of Kamchatka (Balmforth & Kiselyova 2022).

Amid heightened tensions and the huge build-up of troops in the north, east and south of Ukraine, the nuclear alert was immediately picked up as a signal by the West that Russia was about to invade Ukraine. When asked, Russia denied its plans of invasion. In aired RIA footage, Chief of General Staff Gerasimov told Putin that the aim of the exercise "is to train the strategic *offensive* [emphasis added] forces' actions aimed at delivering a guaranteed defeat of the enemy" (as cited in Balmforth & Kiselyova 2022). The message Russia was trying to send, therefore, was that it was ready to launch an offensive attack on its enemy if provoked by the slightest. The Defense Ministry subsequently released footage of a hypersonic ballistic missile striking a land target (ibid.).

What is important to note that from the 1st to the 4th and last case study presented in this thesis is that nuclear signaling has always begun with a show of nuclear force *before* issuing a public nuclear threat. Doing it the other way around, by making a nuclear threat in a speech or otherwise, would indicate a lack of resoluteness and sincerity, or at least that is what the leaders seem to think, and what they have learned from one another. Therefore, to carry out a nuclear bluff it is believed, the physical aspect of nuclear signaling has to precede the rhetorical signaling.

A few days after the invasion on February 27, 2022, Putin ordered Russia's nuclear forces to a heightened alert status of a "special combat of duty". During a meeting with defense officials, Putin explains why he did so, "Western countries aren't only taking unfriendly economic actions against our country, but leaders of major NATO countries are making aggressive statements about our country. So, I order to move Russia's deterrence forces to a special regime of combat duty" (as cited in Bugos 2022).

The nuclear alert followed a decision to hold a meeting between the Ukrainian and Russian delegation for talks in Belarus. Therefore, the nuclear alert was interpreted by Ukrainian Foreign Minister Dmytro Kuleba as an attempt to raise stakes and apply more pressure on the Ukrainian delegation during the talks (Arndt & Horovitz 2022, 16).

4.2.3 NATO response to Putin's nuclear signaling

The matter of fact is, NATO had not made "aggressive statements" against Russia. On February 24, the day of the invasion, NATO condemned the invasion and called on Russia to cease its military operation immediately. They conveyed their support for Ukraine's sovereignty and territorial integrity, and its right to self-defence. Further, they indicated that they would provide Ukraine with support while making sure Russia does not attack any of its members, "We will continue to do whatever is necessary to shield the Alliance from aggression" (as cited in NATO 2022). The rhetoric was purely defensive and did not indicate that NATO was planning an offensive against Russia. Yet, Putin has, from the get-go, used a reverse tactic of blame to imply that he had been provoked to act the way in which he did, which perhaps allows him the room to later back down from his charged nuclear rhetoric, and save face.

Furthermore, White House press secretary Jen Psaki stated that Putin's decision to place nuclear forces on high alert was unprovoked, and that the claim that it was a response to NATO's "aggressive" comments about Russia was a manufactured threat that was never made. She explains that Putin uses this tactic of manufactured lies to justify his own aggressive actions. Putin's nuclear signaling was only escalating the crisis (Fossum et al. 2022).

Shortly after, Belarus abandoned its status as a non-nuclear state and reaffirmed its willingness to host Russian tactical nuclear weapons. The next day, on February 28, 2022, Russia's UN Ambassador, Vasily Nebenzya was asked whether there was a scenario in which Russia would use nuclear weapons, to which he answered, "On the use of nuclear weapons, God forbid it," and that Russia was only exercising "a kind of deterrence" (as cited in Bugos 2022).

While Putin had certainly and strongly insinuated his readiness to use nuclear weapons through his rhetoric, the administration had not yet bluntly threatened the use of nuclear weapons by explicitly mentioning it. However, Putin's earlier statement indicated that Russian military was preparing its offensive forces in case other nations would cross Russia. In this statement, however, the rhetoric has been toned down from 'offensive' to 'deterrence', and clearly indicating that Russia does not wish to use nuclear weapons. Because of this push and pull policy of nuclear signaling, I will call this tactic *'yoyo signaling'*, as there is a constant increase and decrease of nuclear rhetoric and escalation tactics. The effect of yoyo signaling is important for the player using this tactic. If Putin indicates that he is willing to resort to nuclear warfare as he increases the tension amongst his adversaries, then the adversaries will likely appreciate the moment he decreases the tension, thus pushing them in the direction he pleases.

In response to Putin's nuclear signaling, NATO announced on February 28 that it had reviewed its Deterrence and Defence Posture. It enhanced its defensive posture in the eastern part of NATO, and Admiral Bauer stated, "…our defensive shield is standing strong, ready to protect and defend all Allies, and our Alliance from aggression" (as cited in NATO 2022). According to NATO's 2022 Strategic Concept, Deterrence and Defence included a

combination of nuclear, conventional and missile defence capability (NATO 2022, 6). Nonetheless, NATO's 2022 Strategic Concept, which was published on June 29, 2022, was not aggressive to Russia. The report on the Strategic Concept states, "NATO does not seek confrontation and poses no threat to the Russian Federation" (NATO 2022, 4).

Despite explicitly stating that they have no intention of having a confrontation with Russia, the report states that NATO will use nuclear weapons if the adversary uses nuclear weapons against its members. They also warn that their weapons are strong enough to incur the enemy "unacceptable" costs. Nonetheless, NATO's nuclear weapons only serve three purposes: ensure peace, prevent coercion and deter aggression. The report on the Strategic Concept further explained NATO's policy on nuclear weapons, "Nuclear weapons are unique. The circumstances in which NATO might have to use nuclear weapons are extremely remote. Any employment of nuclear weapons against NATO would fundamentally alter the nature of a conflict. The Alliance has the capabilities and resolve to impose costs on an adversary that would be unacceptable and far outweigh the benefits that any adversary could hope to achieve" (NATO 2022, 7).

4.2.4 More yoyo signaling

The Strategic Concept was perhaps a direct response to Putin's announcement of transferring nuclear-capable Iskander-M missiles to Belarus on June 25, 2022 (Arndt & Horovitz 2022, 76). The G-7 immediately condemned Russia's actions and reiterated their continued support to Ukraine, and urged Russia to behave responsibly as any use of nuclear weapons would be "met with severe consequences" (as cited in Arndt & Horovitz 2022, 77). To de-escalate, on June 28, Russia denied that it was planning to station nuclear weapons in Belarus (ibid.).

On July 6, Russian Deputy Chairman of the Security Council of Russia Medvedev responded with strong nuclear signaling in response to calls for the creation of tribunals for investigating Russia's actions. He said that "the idea of punishing a country that has one of the largest nuclear potential is absurd. And potentially poses a threat to the existence of humanity" (as cited in Arndt & Horovitz 2022, 81). Now the rhetoric has changed from using nuclear weapons in an offensive manner should any state threaten Russia, to using it only for deterrence, and finally implied to be used against those who entertain the idea of holding war crime tribunals to reveal Russia's atrocities.

The next day, however, Valentina Matvienko, speaker of the Russian Federation Council, immediately reduced the charged nuclear rhetoric that was made the previous day. She stated that it was unacceptable to talk about nuclear war to begin with, and that any "sane" person knows that nuclear war spells the end of humanity. She assures that Russia's nuclear weapons are only for deterrent purposes, and reinforces the idea that Russia is a sane, and civilized nation- not a rogue one ruled by a 'madman'. "We behave like a civilized country, and we do it openly, we declare this publicly and strictly follow our obligations, and we are doing everything to ensure that nothing like this happens" she stated (as cited in Arndt & Horovitz 2022, 81). This becomes the first indication since the beginning of the war where Putin intends to portray himself as a sane, rational and 'civilized' statesman, derailing from the path that Kim and Trump took in 2017. This provides reassurance to Russia's adversaries that they know exactly what to expect from Putin, and that he was not going to use the element of nuclear surprise with them during this conflict. Putin benefits from this as it draws a red line of his boundaries very clearly to the adversary, and at the same time demonstrates that his calculations are well thought through.

The US did not think that Putin's nuclear signaling was a bluff. It regarded his nuclear signaling as highly concerning, and that is why it continuously throughout the crisis made sure to clarify that it did not intend to wage war on Russia despite the aid it provided to Ukraine. US senior officials were convinced that Putin was "quite prepared to consider using a small nuclear weapon against Ukraine if he sees his army facing certain defeat" (as cited in Arndt & Horovitz 2022, 89).

Potential arms control negotiations soon returned on August 1 in New York at the NPT Review conference. The US expressed its intention to begin negotiations on a new arms control agreement to replace New START as it expires in 2026, but that Russia must first demonstrate its readiness to operate in good faith (ibid., 89).

In the conference, Russia received censure from other states for its aggressive nuclear rhetoric. Thus, Putin took the opportunity to de-escalate promising that Russia believed that there could be no winners in a nuclear war, and therefore, such a war must never be fought. Furthermore, to reinforce the idea of Russia being a civilized and rational state, Putin stated that Russia had always been committed to keeping the world safe from WMDs. He stated that Russia had been committed to security and stability; however, these achievements had been "devalued" by the "US policy of ignoring Russia's *red lines* in the field of security" (as cited in Arndt & Horovitz 2022, 90). Again, Putin shifts the blame on the West and essentially says that Russia felt cornered into make these nuclear threats, though it never wanted such escalation because it is a "responsible" nuclear power.

After dramatically toning down the hostile nuclear rhetoric, Russia communicated its unhappiness with the support US is providing to Ukraine. It blamed the US for its

responsibility in the rocket attacks on residential areas in Donbas and other regions (ibid., 91-92). Nonetheless, nuclear de-escalation continued until September 21, 2022.

4.2.5 This is not a bluff"

Almost 7 months into the war, Putin began showing recognition that Russia was losing the war. Furthermore, fears that NATO's military aid to Ukraine would be used to attack regions in Russia. Therefore, it seems that for those two reasons, his desperation and NATO's military aid to Ukraine, he makes a stern speech in which he makes a lightly veiled nuclear threat on September 21, 2022 (Giles 2022).

In his speech, Putin states that in the West's "aggressive anti-Russian policy", they have been discussing delivering long-range weaponry to Ukraine which would allow the latter to strike Crimea and other regions in Russia. He called it "acts of terror" and went on to say that "even nuclear blackmail has come into play" where high ranking officials from NATO have discussed the "possibility and admissibility of using weapons of mass destruction against Russia- nuclear weapons" (as cited in Giles 2022). Contrary to his claims, as mentioned earlier, NATO had been very careful to affirm that its nuclear weapons were only for the purpose of deterrence and protection against aggression.

Putin goes on, "I want to remind those who allow themselves such statements about Russia that our country also has a variety of weapons of destruction, and in some areas even more modern than those in NATO countries. If the territorial integrity of our country is threated, we will without question use all the means at our disposal to protect Russia and our people. This is not a bluff. And those who try to blackmail us with nuclear weapons should know that the 'prevailing winds' can also blow in their direction" (as cited in Giles 2022).

First, NATO did not use nuclear blackmail against Russia. Second, why state that "this is not a bluff?" One would assume that a strong and credible threat would have to speak for itself, without needing to say what it is *not* rather than what it *is*. Compare between the following:

"This is not a bluff"; and "This a nuclear threat". Which one comes off stronger?

Furthermore, shortly after the stern speech Putin gave, the Diplomatic Academy of the Foreign Ministry held a conference for the 60th anniversary of the Cuban Missile Crisis. It emphasized the lessons learned, and in particular, respecting each other's red lines (Frolov 2022). Even though this might come off as nuclear signaling, which to an extent can certainly be interpreted that way, this can also be a way of signaling an opportunity rather than a threat, as they invite the adversary to reminisce a successful ending to the supposedly most serious nuclear crisis in history, as is often cited. Referring to respecting each other's red lines could simply be another attempt to remind NATO of what Russia does not want them to do, but the celebration of the anniversary in itself was a positive sign rather than an ominous one. This could further support the idea that Russia did not intend to use nuclear weapons in the war.

So far, Putin has been cautious in the language he has been using, possibly to give him room to back down when he sees the time is fit for de-escalation. At any rate, NATO did not take the speech lightly. Days before Putin made the speech, it was announced that the Biden Administration had already held off Ukraine's request for longer-range missiles known as Army Tactical Missile Systems (ATACMs) as US defense officials advised against doing so in fear of setting off a wider war with Russia. Biden assured that the US would not send Ukraine long-range missiles to strike Russia (Kube & De Luce 2022).

On October 3, a massive freight train was spotted moving military equipment including nuclear arms making its way to the frontlines. The clip was posted on Telegram by Rybar, a pro-Russian channel. In so doing, Russia intended to signal an imminent nuclear escalation. This event also coincided with Russia's nuclear submarine leaving its White Sea base (Averre 2022), while head of Russia's region of Chechnya, Ramzan Kadyrov wrote on Telegram on October 1, "In my personal opinion, more drastic measures should be taken, right up to the declaration of martial law in the border areas and the use of low-yield nuclear weapons" (as cited in Light 2022). It becomes a reaffirming notion that Russia's nuclear signaling and rhetoric becomes more escalatory as it feels it is losing the war. It is further displaying its unwavering willingness to escalate the war to pressure the West to abandon Ukraine (Ott 2022).

A nuclear war is not fought with a train, however. Therefore, it can be argued that Moscow's military signal was political in its intentions. It mainly signaled its resolve rather than to increase its preparedness for nuclear war, as time would also come to prove, given that until today [April 22, 2023], Russia has not used nuclear weapons to settle the war. Furthermore, if Russia was in fact planning to use tactical nuclear weapons on Ukraine, the element of surprise would have been to Russia's advantage, rather than advertising all its nuclear readiness measures to further prepare its enemies for an imminent response. After all, the one and only nuclear war that was fought took the world by surprise (Arms Control Association n.d.).

In response to the moving train, however, Ukraine's President Volodymyr Zelenskyy acknowledged the signal as a real threat, "Maybe yesterday it was a bluff. Now it could be a reality" (as cited in Ott 2022).

The Biden Administration was certainly taking Putin's threats most seriously. The following month on October 6, Biden warned that Putin's nuclear threats are leading to the most serious "prospect of Armageddon" since the Cuban missile crisis. He stated that he knew Putin "fairly well" to know that he was not "joking when he talks about the potential use of tactical nuclear weapons" (as cited in Abutaleb 2022).

Biden did not just attempt to signal to Putin that he understood that his nuclear threats were credible, however. He intended to also make a threat of his own, one that is perhaps more mellow in comparison to Putin's aggressive rhetoric. "I don't think there's any such thing as the ability to easily [use] a tactical nuclear weapon and not end up with Armageddon," Biden warns (as cited in Abutaleb 2022). Biden signals to Putin in this statement that if Putin decides to use tactical nuclear weapons, NATO will respond in the same fashion, ultimately leading to 'Armageddon'.

4.2.6 Beginning of a new year and an end to the New START

Things start taking a more different path in the following year as Putin realizes he is in a strategic limbo. On February 21, 2023, Putin does two important things in his speech to mark the anniversary of the invasion of Ukraine. First, he claims that the West has made "no secret of their goal: to inflict - as they say, this is direct speech - "the strategic defeat of Russia." What does it mean? For us, what is it? This means finishing with us once and for all, that is, they intend to transfer a local conflict into a phase of global confrontation. This is exactly how we understand all this and will react accordingly, because in this case we are talking about the existence of our country" (as cited in Kremlin RU 2023). He further blamed the West for trying to "crush" Russia's economy through their economic sanctions. In this part of

the speech, Putin intends again to create false claims to justify something he is about to do, as we have seen occur earlier in the conflict.

Towards the end of the very lengthy speech, Putin announces that Russia is suspending its Strategic Offensive Arms Treaty, but emphasizes, "I repeat, it does not withdraw from the Treaty, no, it suspends its participation" (as cited in Kremlin RU 2023). He goes on to claim that the US is thinking about nuclear weapons testing, in which case Russia would ensure its own nuclear weapons testing. He assures, however, "Of course, we will not be the first to do this, but if the United States conducts tests, then we will conduct them. No one should have the dangerous illusion that global strategic parity can be destroyed" (as cited in Kremlin RU 2023).

First, to lay the ground for a dangerous development of the conflict and a dangerous development in the world of nuclear non-use, Putin puts the blame on the West, claiming that they are out to strategically defeat Russia and stifle its economy. After that, he announces the suspension of the treaty that assures a limit placed on both US and Russian deployed intercontinental-range nuclear weapons which was supposed to have been extended to February 4, 2023. Therefore, this does not only mean that Russia would be testing nuclear weapons as he had warned, but they would also place IRBMs which would be a serious threat to the US, who would most likely have to take the same aggressive nuclear posture, thus further heightening the tension of nuclear war.

However, Putin is also very careful in the way he makes his threat using crisis bargaining techniques. While he does announce the suspension which he hopes would stir up a whole lot of anxiety in Washington, he also keeps one foot through the door by emphasizing that it was

a ‘suspension’ rather than a withdrawal. This indicates that Putin’s attempt was to scare the US into ending the military support it is providing Ukraine, as well as ending the stifling economic sanctions that is destroying the Russian economy. If the US acquiesces, then Russia would end its suspension of the treaty.

Furthermore, announcing the end of the START treaty also signals that Russia will not abide by anyone’s rules. Before announcing Russia’s suspension of the treaty, Putin states that NATO representatives “are giving signals, and in fact putting forward, an ultimatum: you, Russia, carry out everything that you have agreed on, including the START Treaty, unquestioningly, and we will behave as we please. Like, there is no connection between the START issue and, say, the conflict in Ukraine” (as cited in Kremlin RU 2023). This last sentence also indicates that his suspension of the treaty is directly related to the situation in Ukraine, and that if NATO acquiesces to his demands, his decision on the treaty would be reversed.

He also once again throws the ball in the US’ court. He explicitly says that he would not be the first to test nuclear weapons, but that if the US started its own nuclear tests, Russia would follow suit as well to make sure it is ahead of the nuclear game, because as the speech insinuates, Russia is not willing to give up on a balance of power.

In response to Russia’s suspension of the treaty, Biden called it a “big mistake” (as cited in NBC News 2023). Furthermore, Biden made a speech where he stated the Russia had miscalculated that Ukraine would easily crumble in the face of the invasion. In fact, the collapse never happened, and Kyiv still stood strong and tall, he stated (Nicholas 2023). This response meant that the US understood what Putin was trying to do by suspending the treaty.

What Biden was essentially saying is, “do what you will, Putin, because we are not withdrawing our support from Ukraine.”

4.3 Analysis of the Post-Cold War period: What’s New?

This section will begin with a simple table of comparison between the Cold War period and the post-Cold War period and will present the new additional elements of the latter period. Afterwards, there will be a detailed analysis of the findings presented in the table.

Cold War Period Themes	Post-Cold War Themes
Domestic audience costs matter	Domestic audiences do not matter
Strategy of ambiguity and secrecy	Using enhanced nuclear rhetoric and dystopic imagery leaving nothing to the imagination
Nuclear Taboo: no or very careful use of the word ‘nuclear	Nuclear forgetting (Tannenwald 2023): The word ‘nuclear’ is heavily used in threats. Nuclear threats are the norm, not the anomaly

Post-Cold War Additional Themes
Holding nuclear exercises and tests despite tensions
It’s personal
Capitalizing on ubiquity of social media
Suspending nuclear arms treaty

4.3.1 Some unique factors of the 2017 nuclear signaling

In the case studies presented so far, nuclear signaling has been used in one or two of the following ways: raising a nuclear alert via alerting nuclear bombers and placing them on standby without communicating any malicious nuclear intentions; and signaling resolve through public statements, the latter of which was used only very vaguely and discretely. North Korea, on the other hand, has not only used nuclear-charged rhetoric, but has also used nuclear bomb detonations as a means of signaling its resolve.

In the 1969 case study, nuclear rhetoric was not used. The nuclear alert was meant to remain top secret to the extent that not even high-ranking military officials had knowledge of the purpose of the alert (Burr & Kimball 2003, 114). Thus, it was a cheap signal as it did not involve a domestic audience, thus possibly demonstrating to the Soviets that it was a mere bluff (Sagan & Jeremi 2003, 155).

In 1973, the US again used its military component of nuclear signaling by raising a worldwide military and nuclear alert, and therefore did not intend to include the domestic and international audience in its crisis escalation and threats which signals a lack of genuine resolve. Though the subsequent outcome was not its intention, the press got ahold of the news, and it had an audience both domestically and internationally. When the public got wind of the news, the US found itself on the spot: the nuclear alert clearly meant to signal resolve to the Soviets which was easily understood by those who reported the news.

If the US had backed down and not made a public statement, it would have not only signaled a cheap signal to the Soviet Union, but also shown weakness and irresoluteness. In the 1969 nuclear alert, it was also assumed that Nixon's lack of resoluteness in his meeting with

Dobrynin could have led to the failure of using the nuclear alert for political leverage (Burr & Kimball 2015, 290). Therefore, Nixon and Kissinger may have learned from that lesson. More importantly, there was a worldwide audience, and the stakes had just gotten much higher. The US had found itself in a situation where it could not back down, and the only other viable option was to escalate; otherwise, their reputation would be at risk, and the outcome of the crisis would be a dangerous one. Though they may have not seriously considered going to nuclear war with the Soviet Union, they felt this was their only option.

The Soviet Union did not budge to the US's demands until Kissinger publicly made coated nuclear threats aimed at the Soviets (Blechman & Hart 1982, 143-144). Though unintentional, it was perhaps the amalgam of both aspects that led to the success of the nuclear alert crisis: the physical aspect of raising the nuclear alert, and the verbally communicated nuclear threat, though the latter was made rather cryptically and less conspicuously. And this could be because the US would have rather maintained its image internationally as a "civilized", rational state that would not easily wave its nuclear stick. It was important to present itself as a mature nuclear state that could be trusted to lead the world.

What we see in this 2017 case study is a revised and a much more dramatic version of the 1973 crisis. Kim shows his awareness that it is important to use both tools in nuclear signaling: a physical show of force, and verbal public threats to include the domestic audience. However, he does them both differently in his own unique way. This could be expected from quite a unique country as well. First, the regime type matters greatly when it comes to nuclear signaling as mentioned earlier. It is argued that domestic audience costs are higher in democracies than in autocratic states (Tomz 2007, 821-822). Second, Kim Jong Un

has a cult of personality (Lee 2011, 9). This would certainly make his attitude towards nuclear signaling quite different. Third, not only is North Korea a totalitarian state, but it also has an isolationist foreign policy. The ideology is based on what the North Koreans call *juche* which translates into self-reliance (Koga 2009, 25). This also helps maintain the regime's legitimacy by making society closed off from foreign information (ibid., 28), in which case, he can make loud nuclear threats without worrying about his domestic audience finding out what the world thinks. All three factors play an important role in how Kim uses nuclear signaling. This results in the way he uses his nuclear rhetoric and his choice to detonate nuclear bombs for testing as well as signaling purposes.

What is also unique about this case study is that the leader of the US also happened to have a cult of personality (Vakil 2022). The ubiquity of social media has also played an interesting role in this crisis. Both leaders' cult of personality combined with Trump's use of twitter to issue nuclear threats has made the 2017 case study quite different from any other nuclear alert crisis.

4.3.2 2017's new elemental additions to the nuclear alert

This nuclear alert crisis was quite different from the previous Cold War case studies in several ways, despite there being fundamental elements still present. The 2017 US-North Korean nuclear alert crisis contained the fundamental aspect of nuclear alerts: using both the rhetorical and physical aspects of a nuclear alert. Nonetheless, those elements were used quite differently from the previous nuclear alerts.

4.3.2.1 US President capitalizes on the ubiquity of social media

What is completely new to the idea of the nuclear alert is a president using his personal social media account to express his immediate emotions with tens of millions of his followers. While Obama had been the first to use social media (Forbes 2020), he did not use his platform to mock and make petty insults at other leaders whenever things did not go his way. Trump, on the other hand, did not spare a chance to vent his feelings on Twitter and poke fun at Kim Jong Un, which is a new phenomenon to the nuclear alert.

How did this impact the nuclear alert crisis? For one, initiating insults on Kim only triggered more warnings and insults from the Korean leader. It seemed as though the more he felt insulted and dishonored by the leader of the strongest military in the world, the more he meant to assert himself more strongly as being unrelenting. The insults and petty remarks Trump made only added fuel to the fire.

The easy access the impulsive leader had to Twitter allowing him to tweet his every thought about Kim created a greater distance between the leaders which could have possibly been the

reason the tensions were elongated and high all year round in 2017. Even though both countries were surely on the edge of their seats at the height of the crisis, Kim would not have been able to demonstrate willingness to negotiate after receiving one insult after the other. This would have made him seem weak both domestically and internationally, something which he could not afford.

4.3.2.2 It's personal

Another prevalent theme in this crisis was the feelings of personalization amongst both leaders (Van 2019, 117). While taking it 'personally' is not completely new in international relations, it was taking it to extreme lengths such as what was witnessed in 2017. Both leaders were more focused on directing their insults and threats at each other, rather than at each other's states. It became a game of personal revenge between Trump and Kim as the world listened to what they had to say about each other. They were not just two madmen dealing with foreign affairs, they were two madmen who took things very personally. Furthermore, Trump's insults to Kim were the epitome of a white man's infantilization of the "Other". Calling him "little (Rocket Man)" (as cited in Keneally 2018), "short" (as cited in The Guardian 2017), "sick puppy" (as cited in Van 2019, 158), was all an effort at pointing to Kim's smallness.

Making it seem so 'personal' was not in anyone's favor. The idea that it was two people, despite them being nuclear-state leaders, having a go at each other reduced a nuclear crisis to a spectacle of theatrics. And what do people do in a spectacle? They watch. This, perhaps subconsciously, pushed the rest of world into sideline roles of spectators rather than concerned agents of change. It removed both leaders from their roles as leaders of countries,

albeit temporarily as one watched, making them two ordinary people who call each other names and threaten each other pettily when triggered.

But the matter of fact is, this was a *nuclear* standoff. One between the United States and North Korea. Not between Trump and Kim. The former instance entails that the rest of the world would be in danger of an eruption of nuclear war as a result of the reckless escalatory nuclear rhetoric, while the latter euphemizes the situation as a tiff between two individuals, though surely the end result would both be the same. But reducing the situation as it was made out to be to a 'tiff' between two madmen made a laughing joke out of the sanctity of the nuclear taboo.

4.3.2.3 Seriously enhanced nuclear rhetoric and dystopic imagery

The 1969 nuclear alert was secret. Nonetheless, Nixon intended for the raised nuclear alert through readiness measures to speak for itself (Burr & Kimball 2003, 114). The 1973 nuclear alert was a little more pronounced, yet with vague and veiled threats. In his public statement, Kissinger said that nothing would justify a nuclear war (Blechman & Hart 1982, 143). And what that essentially means is that the US has no intention to initiate the war, but hinting that if pushed to the brink, it just might. In the 2017 nuclear alert, however, there is a more obvious reference to the option of using nuclear weapons to resolve the crisis and a demonstration of the willingness to opt for it. "All options are on the table" (as cited in Washington Post 2017).

More blatantly, both leaders referred to their "nuclear buttons" as readily available to them anytime they felt they needed to hit it (Van 2019, 169). Calling it a nuclear 'button' also reduces the waging of a nuclear war- one that would result in proper and total catastrophe for

years to come- to something that is down for one person to decide based on the whims of their emotions. Not only is it up to them to decide to push it and when, but it also implies just how 'easy' and uncomplicated the process would be. This does two things: first, Kim attempted to scare the US by implying he had all the power and could simply wage nuclear war whenever he pleases; and second, it takes away the prestige of the nuclear taboo, which can spell bad news for the future. Opting for nuclear war is neither easy nor uncomplicated. It is terribly consequential and suicidal.

Furthermore, a new element added to nuclear signaling was the use of video illustrations of the devastation North Korea can cause the US with its nuclear weapons (Van 2019, 125), providing Americans with the image of the utter destruction of their homeland in a dystopic imagined and imminent future. The purpose of disseminating this video to the adversary was to instill fear in them and make nuclear war seem more palpable. It says, "We picture destroying you very vividly. Soon, this is what we'll do to you. But first, we want you to know how bad you're going to get it." This strikes me as one of the most blatant nuclear threats made throughout the year-long crisis. The whole idea of a government producing such a video of what it would like to do to a people is dystopic in and of itself- it seems like it is right out of a dystopic fiction film.

4.3.2.4 Domestic audience will appreciate the show

In the two previous case studies, the nature of the alerts was much more reserved in fear of the audience costs. In this case study, however, the domestic audience element does not seem to weigh in in either of the leader's calculations. On the contrary, they shamelessly put on a show for the whole world to watch, and for Trump, his stage was mainly Twitter, all the

while knowing that opting for the use of nuclear weapons was not really an option. It seems that there was no worry that making a nuclear threat and not following through with it would cause any embarrassment. Kim, and Trump in particular, perhaps thought the world would enjoy a bit of a show. For instance, it is clear on Trump's face when he calls Kim "Little Rocket Man" that he is happy with the audience's laughter, so he goes on to call him a "sick puppy" when encouraged by the audience (Washington Post 2017, 0:20).

This dispels the theory that leaders, particularly in democracies, are concerned about domestic audience costs. Or this could simply mean that what the leaders thought was that the more they used tough nuclear rhetoric, the more likely the other was going to back down, in which case it turned out to be a miscalculation. This clearly did not work for either party, because the US repeatedly called on China to intervene (Insider 2017), while North Korea towards the end of the crisis reached out to South Korea to intervene (CBS News 2018). In any case, this nuclear alert crisis was by far the most unconventional one the world witnessed. It left nothing to the imagination- the secrecy and mystery in which the past nuclear alert crises were shrouded in was a thing of the past.

Leaving nothing to the imagination goes quite contrary to the strategy of ambiguity previously employed in the Cold War cases. While the intention of using nuclear force in a first-strike might not be credible, being an irrational madman with nuclear weapons in his hands increases the value of threats (Kaku 1987, 122-123). However, both Kim and Trump in their own ways completely abandoned the strategy of ambiguity that keeps the adversary guessing, because they simply expressed every whim they felt at any given moment, potentially leading to the lack of credibility of their threats. Because they expressed

themselves aggressively far too often, their intention of seeming like madmen to give off the notion that they may act irrationally at any point had not worked very well.

4.3.3 Post-Cold War themes

4.3.3.1 Domestic audience costs don't matter

The Cold War period showed much more reluctance towards including domestic audiences when making nuclear threats. That especially goes to the US which had initiated many nuclear threats during the Cold War (Ellsberg 2017, 319-321), while Russia had been far more reserved in its nuclear rhetoric during the Cold War, excluding the Cuban Missile Crisis event. This showed how the US was concerned about its image before its domestic audience. It did not want to make public threats it could not follow through because, as it seemingly believed, that would have tarnished its reputation. When the news caught wind of the nuclear alert in 1973, alarmed, Kissinger exasperated, "We would now have a public confrontation" (as cited in Sagan 1985, 128). The Cold War period was thus fraught with fear of domestic costs, something that did not really follow through the post-Cold War period.

In the two case studies I chose for the post-Cold War period, there was no reluctance to make nuclear threats and to include domestic audience costs. In the 2017 case study, the US blatantly engaged in petty exchanges of insults and nuclear rhetoric. North Korea also blatantly engaged in nuclear rhetoric and threats, though realistically speaking, North Korea could have been obliterated if it had engaged in nuclear war with the US, given that the US has far more nuclear warheads than North Korea (ICAN 2020).

In 2022-2023, the US employed much more reserved nuclear rhetoric than in 2017, however. On the other hand, Russia did not, even though that up to date [April 22, 2023], Russia has

not used any tactical nuclear weapons in the war in Ukraine. Nonetheless, it employed tough nuclear rhetoric all throughout the crisis. However, the difference in this crisis is that while Russia's nuclear rhetoric was quite tough, it specified multiple times the scenario under which it would use its nuclear weapons: if its territorial integrity was harmed (Giles 2022), in other words, if the weapons NATO supplied Ukraine was used on Russian soil and Russia was thus attacked. And so far, this has not happened.

Many insinuations, nonetheless, were made about using nuclear weapons. For instance, Putin stated that if anyone "tries to hinder us, and even more so to create threats for our country, for our people, should know that Russia's response will be immediate and will lead you to such consequences that you have never experienced in your history" (as cited in Kremlin RU 2022). In other words, Putin meant that if anyone stopped in his way in the invasion of Ukraine, he would use nuclear weapons, which is a deviation from the nuclear threat under the circumstance that Russia is attacked.

It is argued that democracies are the only type of states that could be harmed from domestic audience costs. Therefore, they are the only types of government that are concerned with such thing. However, Trump's presidency and his nuclear saber rattling with North Korea proves otherwise. Besides, it is not true that a democracy is the only type of government that can be adversely affected by domestic audience costs. It would be incorrect to assume, for instance, that the North Korean regime does not have to deal with domestic audience costs because it is a dictatorship, and that it is not concerned with losing international credibility. While such governments do not face the intensity of domestic audience costs in democracies, they do nonetheless have factional fighting which means that the North Korean regime's inner circle does face audience costs for belligerent rhetoric that it does not live up to.

Furthermore, North Korea does care about its international reputation given the fact that it has a significant presence in several international organizations, including the Association of Southeast Asian Nations Regional Forum, the World Health Organization and others (Richey 2016, 98-99).

The same could be said for Russia, which is a nuclear power state and also has an important international presence. Nonetheless, this did not deter it from making nuclear bluffs that it did not live up to.

4.3.3.2 Holding nuclear exercises despite tensions

In the 2017 North Korea-US nuclear alert crisis, each side was conducting its nuclear exercises, and for North Korea, it was its bomb tests, despite escalating nuclear tension and rhetoric. North Korea also proceeded with its nuclear testing despite US warnings (McLaughlin & Martinez 2019). The situation is quite similar in this case study as well.

In this crisis, both NATO and Russia decided to go ahead with their nuclear exercises despite the heightened tensions between them and Russia's insinuations of its willingness to use nuclear weapons. The NATO exercise, which was to start on October 17 and run until October 30, involved US nuclear capable B-52 bombers and jets, but it was announced that it would not carry live ammunitions (Gordon 2022). NATO reassured that the exercise is routine training and "it is not linked to any current world events" (as cited in NATO 2022). It is clear that NATO wanted to ensure that escalations did not rise as a result of this routine exercise. Yet, despite knowing it raised the risk of escalation, they feared that cancelling the nuclear exercise would send a "wrong signal" to Moscow. The US had already cancelled its routine Minuteman III missile test earlier in the year in its attempt to avoid the increase in

tension between NATO and Russia. When their efforts at de-escalation were not reciprocated, NATO decided it should not cancel routine exercises that were essential for its defense; instead, its firm, predictable behavior and military strength was believed to be the best way to prevent escalation (Gordon 2022).

The last time Russia held a nuclear exercise, it was ahead of its invasion of Ukraine. Coinciding with NATO's routine nuclear exercise was also Russia's annual nuclear exercise. Yet, in an attempt to diffuse heightened tensions, Russia notified the US that its annual nuclear exercise had begun on October 26. This exercise typically involves large-scale maneuvers of nuclear forces which include live missile launches (Martin & Watson 2022).

Russia also decided to go ahead with its own annual nuclear exercise despite the heightened tension for two purposes: military training purposes and political purposes. Canceling the exercises would have signaled to the West that Russia's will to continue the conflict was wavering. It also intended to keep alive the fear that Russia is on alert should any aggressor dare to cross its 'red lines'.

In December, Putin made a speech where he begins by saying that he recognizes that the war in Ukraine is going to be protracted. He also touches on the prospects of nuclear war. He said that in terms of nuclear weapons, their strategy is defensive and only revolves around a retaliatory strike, "That is, when we are struck, we strike in response" (as cited in Yeung & Krebs 2022).

Putin de-escalates his nuclear rhetoric in this speech, despite his previous behavior when feeling cornered during the war. Furthermore, in a second instance during this crisis, Putin again emphasizes on the fact that he is not a madman, and that Russia is a responsible nuclear

state (Yeung & Krebs 2022), completely deviating from the 2017 crisis where both leaders were in a competition to prove who was maddest.

In December, Putin stated, "We have not gone crazy. We are aware of what nuclear weapons are. We have these means, they are in a more advanced and modern form than those of any other nuclear country, this is obvious. But we are not going to brandish these weapons like a razor, running around the world" (as cited in Yeung & Krebs 2022). Surely, Putin has not gone crazy. He is a rational statesman. The last part of this quote, however, goes completely against his rhetoric and behavior since the beginning of the crisis, as he had been yoyo signaling all throughout the year. Nonetheless, since the nuclear exercises, his nuclear rhetoric had been drastically toned down.

Putin's behavior changes as the situation he finds himself in changes. When he made this speech, he stated that Russia's territorial gains were a significant result. Perhaps at this point, he does not feel the war is lost, and that is why he toned down his nuclear rhetoric (Yeung & Krebs 2022).

4.3.3.3 Suspending arms control treaty

Even at the darkest moments during the Cold War, Moscow and Russia continued their diplomatic negotiations concerning nuclear weapons (Graef & Thies 2022, 5). Russia went on to suspend the last standing nuclear arms treaty between them (Reuters 2023).

4.3.3.4 Nuclear threats are not unique to the Cold War

Since the end of the Cold War, with every new nuclear alert, news papers and policy experts rush to call the nuclear alerts the tensest nuclear crisis since the 1962 Cuban Missile Crisis.

The 2022 Russian nuclear alert crisis was described as "a new level of confrontation not witnessed since the most difficult days of the Cold War" (Fix & Keil 2022, 10). The New York Times called the 2017 North Korean-US nuclear alert crisis a "Cuban Missile Crisis in Slow Motion" (Sanger & Broad 2017).

However, based on the ubiquity of nuclear alert crises, they cannot be said to be a feature particular only to the Cold War period. It would therefore be a mistake to say that nuclear alerts that occur in the post-Cold War period are aberrations. Since the inception of nuclear weapons, nuclear threats have been prevalent in crisis bargaining in international relations. The rhetoric that is used to indicate that such nuclear alerts bring the tension as high as it was during the Cold War wrongly informs others that such alerts and heightened tensions are only a thing of the Cold War.

Furthermore, the Ukraine War has led to the assumption that the world is facing a redux to the Cold War given the seriously heightened tensions between the West and Russia (Fix & Keil 2022, 10). However, the heightened tensions, even heightened nuclear posture and rhetoric to settle disagreements, is not the core indicator of a return to the Cold War. If Russia suspends its participation in the New START, the last arms treaty between Russia and the US, and no treaty replaces it, the danger of returning to the Cold War might begin. The core indicator of a return to the Cold War would be a renewed arms race, which a suspension of such a treaty would eventually lead to.

Given that the war is still ongoing, and a multiple of factors weighing into the crisis, there is no way to tell what is going to happen. The yoyo signaling used in this nuclear alert crisis has certainly worried the US. After all, the strategic geographical location of Ukraine can be very

telling when assessing whether Putin's nuclear threat was a bluff or not. Perhaps the US assumed that it was possible for Russia to use its tactical nuclear weapons given the geopolitical realities. Therefore, they attempted to reduce escalations by assuring Russia that they did not intend on harming its territorial integrity without receding support from Ukraine. Doing so would have signaled the US and NATO's weakness, and their inability to protect members and partners. This would have given Russia the green light to pursue further aggressive actions.

However, as a result of Putin's continued yoyo signaling, the US eventually grasped his tactics. After announcing Russia's suspension of the New START, Biden, despite having called it a big mistake and an irresponsible thing to do, said "I don't read into that that he's thinking of using nuclear weapons or anything like that" (as cited in Singh & Pitas 2023).

4.3.3.5 Nuclear threats are the norm

The post-Cold War case studies show a stark contrast to the Cold War case studies. During the Cold War, the nuclear taboo of using the word nuclear was highly prevalent. The nuclear threats made were mainly through raising the nuclear alert and alerting nuclear forces rather than going publicly. In the post-Cold War, however, nuclear threats became the norm rather than a taboo. The temporal evolution of the nuclear alert has resulted in the erosion of the revulsion from the word 'nuclear' and has eventually led to statesmen more openly threatening the use of nuclear weapons as the memories of Hiroshima and Nagasaki become more and more of a distant memory, in comparison to the leaders who lived through them. This, Tannenwald (2023) refers to, is called nuclear forgetting. This explains why the Cold War period was shier in using explicit nuclear threats.

Chapter 5: Nuclear Bluff Learning

The nuclear alert has existed since the inception of nuclear weapons. However, the way that leaders use the nuclear alert for political signaling has differed throughout the years, and there were several differences between the nuclear alerts during the Cold War and the post-Cold War period. This thesis has provided some evidence that the nuclear bluff has evolved as a result of a learning process that influenced leaders as they observed how nuclear signaling was used in past crises. At least in some of these cases, there is some evidence that leaders have learned from some of the past mistakes, used what they think had previously worked with others, and refined the nuclear bluff to make it their own by adding their own new elements. The two core tools of the nuclear bluff which remained a constant throughout all the nuclear alert crises in the thesis were the following: increasing nuclear readiness measures, and subsequently delivering a speech. The nuclear signaling in each crisis always began with raising the alert first, then making a public speech where nuclear signaling is used. The purpose of the increase in readiness measures preceding making a speech is to signal resolve to the adversary and the credibility of the threat.

While the two aspects of nuclear signaling, and the nuclear bluff learning analysis, the physical aspect of increasing military readiness, and the rhetorical aspect of nuclear saber-rattling are presented separately, they are not always connected and working hand in hand. Nuclear signaling includes both of these aspects, and there is some reason and evidence to conclude that following the order of the nuclear bluff learning process by first beginning with increased readiness followed by nuclear rhetoric seems to be the method undertaken to carry

out what would be assumed a somewhat correct method of nuclear signaling, the reality can often be messier on the ground. In theory, the increase in nuclear readiness would precede nuclear rhetoric. Empirically, they can often be disconnected or too intermingled to accurately identify the point in time which defined the 'one' action that was taken to increase nuclear readiness measures and the 'one' nuclear threat speech that defined the outcome of the nuclear bluff.

This is the case for two reasons. First, as we see in the 1969 case study, Nixon did not make explicit nuclear threats in his November 3rd speech. However, using the evidence of the 1973 case study where Nixon made explicit nuclear threats after raising the nuclear alert could potentially be suggestive of the learning process. The 1969 nuclear alert had failed because it was a cheap signal with no public commitment, and in 1973, explicit threats were made after raising the nuclear alert. Thus, there could be reason to believe that this occurred as a result of learning from the 1969 mistake.

Second, as we see in the post-Cold War period, it is hard to pinpoint an exact itinerary of nuclear bluff step 1 and nuclear bluff step 2 around which the entire crisis revolved. This was due mainly to the elongated nature of both crises. The US-North Korea crisis was stretched over the course of a year, and the Russian crisis is now crossing over a year. This means that there was a series of both steps employed numerous times during the crises. Furthermore, in the 2017 crisis, it was difficult to clearly draw the line between the steps, in particular with Trump. This could be a result of the lack of availability of documents which could prove the US' increase in readiness measures, because as we've seen with the Cold War case studies, a lot of the documents that were later declassified revealed a lot of important information that shapes the analysis of the nuclear alerts, or this could be because the US simply did not

increase its nuclear posture, and it is hard to say why. Nonetheless, because North Korea began its nuclear signaling to deter the US from initiating a first-strike, the nuclear bluff steps below will look at how North Korea first employed its nuclear signaling, rather than the US' main nuclear bluff steps.

In my following analysis, I will present the beginning of what triggered the nuclear alert crises with the very first nuclear readiness measures and the first nuclear-rhetoric packed speech employed.

5.1 Nixon 1969

Main tools of the nuclear bluff

1- The Increase in nuclear readiness measures

Before doing anything else, one thing has been uniform throughout all the case studies: the increase in nuclear readiness measures begins before any other step in the nuclear alert crisis. In 1969, the nuclear alert was raised to DEFCON 1 (Sagan & Jeremi 2003, 156).

2- Delivering a speech

After raising the nuclear alert, making a public statement is an essential subsequent step. The 1969 nuclear alert was secret. Nonetheless, Nixon made his November 3 speech where he stated that he had a plan for peace, but that it was a 'secret' plan (American Presidency Project n.d.; Newman 1970, 169). There was no mention of a nuclear alert, or increased nuclear posture- nothing in his speech indicated he was willing to use nuclear weapons.

Sub-tool of the nuclear bluff

1-Acting like a madman

Nixon had initially drawn inspiration from Eisenhower, whom he believed to have threatened North Korea, China and Russia out of the Korean War. Nixon believed that behaving unpredictably can put an adversary on their toes and thus make them acquiesce to his demands (Sagan & Jeremi 2003, 162).

2- Keeping it a secret

Keeping it a secret was essential to avoid domestic audience costs. This resulted in the alert being a cheap signal (Sagan & Jeremi 2003, 155).

With all these tools combined, the nuclear alert did not produce its intended result (Burr & Kimball 2015, 309).

5.2 Nixon's 1973 Learning

Main tools of the nuclear bluff

1- The Increase in nuclear readiness measures

All American military commands were ordered to place their forces at DEFCON 3 (Sagan 1985, 125).

2- Delivering a speech

Raising the nuclear alert to DEFCON 3 was not enough to deter the Soviets. Circumstances such as the news catching wind of the alert pushed Nixon and Kissinger into making a public

statement where the latter made a veiled nuclear threat at the Soviets (Sagan 1985, 128). Shortly after, the crisis ended (Blechman & Hart 1982, 148).

In order to save face, Washington realized that since it was now public that the US had its nuclear forces on alert, it would need to make a public statement. It would also be beneficial to do so a) because the 1969 secret nuclear alert had failed and b) since it was now public, making a public threat was essential to signal resolve to the Soviets. The result was a success. Therefore, Nixon and Kissinger had learned from the failure of 1969, and though pushed by circumstances, they decided to take a new turn in their crisis bargaining by vocalizing the nuclear threat to their adversary.

5.3 Kim and Trump's Learning

Main tools of the nuclear bluff

1-The Increase in readiness and a show of force

In January 2017, North Korea placed its two ICBMs on mobile launchers to be tested. It was speculated by a South Korean news agency that the North Korean officials had intentionally leaked the information as a form of nuclear signaling (Yonhap 2017).

2- Delivering a speech

After displaying a show of force, Kim made his first public nuclear threat, "If the U.S. dares opt for a military action . . . the DPRK is ready to react to any mode of war desired by the U.S" (as cited in Van 2019, 115).

Sub-tools of the nuclear bluff

1-A madman's performance art and enhanced nuclear rhetoric: Leave nothing to the imagination

It is possible to argue that there's anything Kim and Trump learned from the 1973 nuclear alert crisis, it is the importance of vocalizing their nuclear threats, but taking it up to a much more dramatic level. First, it was important for both Kim to act mad, and instill fear in his adversary's mind that he will act unpredictably, which he successfully did, as Trump's team commented: "You can't help but think, Jesus, maybe [Kim] is crazy" (as cited in Van 2019, 99).

Acting crazy was not Kim's only strong suit. He was also quite good with his performance art, and timing for that matter. Assassinating his older brother in a Malaysian airport using WMD right after launching the first missile test despite US warnings (Van 2019, 98) was meant to show the extent of his madness and resoluteness to use WMD to settle score with his adversaries.

The July 4 "package of gifts" was also another spectacle awash with practical nuclear signaling (Hayden & Martinez 2017) which was intended to show the US that North Korea was willing to attack what is most valuable to it if its existence was threatened.

Another form of his performance art was the video North Korea produced of its missiles destroying the White House, ending with "The final collapse will begin" (as cited in Van 2019, 125). This takes nuclear alerts to a new dystopian world as North Korea invites its adversary to a graphic representation of what it wishes to do to it, leaving nothing to the imagination.

The nuclear rhetoric he used was also very intense and also left nothing to the imagination. The previous case studies had spurred doubts in the adversary's minds by keeping them guessing what the next step was. With the 2017 case study, however, all intentions were not only perfectly communicated, but also exaggerated. For instance, Kim threatened that if the US did not stop its hostile actions against North Korea, "it will be the most delightful historic moment when the Hwasong artillerymen will wring the windpipes of the Yankees and point daggers at their necks" (as cited in Van 2019, 141). He also threatened a nuclear strike on "the heart of the US" if they tried to remove him from power (Cohen & Starr 2017).

Kim started being more vocal with his nuclear threats and the disturbingly descriptive things he would like to do to the US when he began feeling threatened by them, also as a result of Trump's rhetoric towards North Korea. Trump's nuclear signaling took stage on his most preferred platform, Twitter, where he made most of his threats and insults at Kim and his country. Trump had made many stern threats, but to no avail. After North Korea announced it had miniaturized nuclear warheads to fit on ICBMs, Trump said that the North Koreans "will be met with fire and fury, and frankly, power the likes of which this world has never seen" (as cited in Van 2019, 138).

Furthermore, Kim seemed to have studied US nuclear rivalry history and Nixon's madman theory quite well. He made reference to having a nuclear button on his desk which he could use anytime (Van 2019, 169), which is something Nixon had said when he explained to Bob what he thought the madman theory was. Nixon explained what his adversaries would say if they thought he was mad: "We can't restrain him when he is angry-and he has his hand on the nuclear button'-and Ho Chi Minh himself will be in Paris in two days begging for peace," (as

cited in Sagan & Jeremi 2003, 165). The term ‘nuclear button’ is quite specific, which makes this instance a potential learning outcome of the nuclear bluff.

On the other hand, it is difficult to prove that Kim and Trump learned from Nixon’s madman theory. It could be argued that both these leaders naturally have the characteristics of a madmen, which dispels the notion of the acting as a madman as a learned process.

2- Testing and exercises continued despite tensions

In this case study, and as will be explained in the following one, it is prevalent that in the post-Cold War period, nuclear signaling is much less restrained. In 2017, North Korea continued its missile testing and went as far as testing its ICBM despite serious warnings from the US not to do so (McLaughlin & Martinez 2019). In turn, the US continued its routine nuclear exercises with South Korea despite the tensions it causes with North Korea (Van 2019, 100). This element seems to be essential in the post-Cold War period to signal serious resolve to the adversary and to imply that they will not be coerced to behave in ways acceptable to their adversary.

3-Involving Domestic Audience

One can draw parallels between 1973 and 2017. It is possible to assume that Trump and Kim learned from the impact of Kissinger’s speech had on the outcome of the crisis. The implicitly implied veiled nuclear threats in 1973 had turned out to be a success. Therefore, it is possible to draw the conclusion that Kim and Trump understood it was important to vocalize their nuclear threats in public speeches to make sure their threats would not be correctly assumed as bluffs or cheap signals. Many of the threats Trump made, for instance, were certainly not followed through. The US had warned stern action time and time again

against testing the ICBMs, yet North Korea went ahead anyway and without facing military action. Yet, these threats were made publicly and without worry of domestic audience costs.

5.4 Putin's Learning 2022-2023

Main tools of the nuclear bluff

1- The Increase in nuclear readiness measures

Before invading Ukraine, Putin put his nuclear forces on alert. This was to show his willingness to use nuclear weapons after the war had started in case NATO tried to interfere or attack Russia. Footage of Putin watching the exercises was aired by a Russian news agency, which was meant to be a strong signal of Russia's nuclear readiness (Balmforth & Kiselyova 2022).

In response, NATO enhanced its readiness posture, including nuclear readiness and then made an announcement of that. In the announcement, NATO was careful to make clear that it did not intend to show any signs of aggression to Russia (NATO 2022).

2- Delivering a speech

After raising the nuclear alert and invading Ukraine, Putin made a speech where he threatened to potentially use nuclear weapons, though he does not explicitly say so. "Whoever tries to hinder us, and even more so to create threats for our country, for our people, should know that Russia's response will be immediate and will lead you to such consequences that you have never experienced in your history" (as cited in Kremlin RU 2022). The last part sounds very much like the threat Trump made when he said the North

Koreans “will be met with fire and fury, and frankly, power the likes of which this world has never seen” (as cited in Van 2019, 138).

Sub-tools of the nuclear bluff

1-Issuing explicit nuclear threats and saving face

Here’s how Putin used the credibility of involving both a domestic and international audience in his nuclear signaling while at the same time saving face when not seeing his threats through: he blamed the adversary for pushing him to the edge first. To justify placing the Russian nuclear forces on high alert and make threats, Putin blamed the West for making aggressive comments against Russia, and he continued to do that throughout the crisis (Fossum et al. 2022).

The art of blaming the adversary for pushing you to behave in a reprehensible way gives you leeway to create a push back and return to a non-aggressive position without giving up on issuing nuclear threats which you will not see through. If Russia manufactures claims that the West was making aggressive comments, and therefore it is also making aggressive comments and taking defensive action, then Russia can at any time ‘acknowledge’ that an aggressive posture is no longer taken against it, and thus it would not need to follow through with a threat that would lead to catastrophe. The threat was not there to begin with, but Russia would be able to come back from not following through with its dangerous nuclear rhetoric without seeming weak before its domestic and international audience as long as it pretends that the reason it took such posture was as a result of the West’s aggressive comments about Russia.

Furthermore, another thing Putin may have learned from the past is Nixon's speech in the 1969 secret nuclear alert, where he threatened that if US forces in Vietnam were jeopardized, the US will take effective measures in response. Nixon stated, "This is not a threat. This is a statement of policy" (as cited in American Presidency Project n.d.). "This is not a threat" vaguely resembles Putin's "This is not a bluff" (as cited in Guardian 2022). Whether or not it is effective to say 'this is not a threat' or 'this is not a bluff', Putin was speaking his adversary's language to make his message clear. However, there is a difference between a 'threat' and a 'bluff'. Nixon's statement comes off much more strongly than Putin's. Saying that it is not a bluff gives off the notion of jitteriness. No one had mentioned Putin was bluffing, and in fact, NATO was very careful not to be provocative to Russia. Perhaps it is this jitteriness that may have eventually resulted in Putin's failure to achieve his objectives.

Biden, on the other hand, was far more reserved in his rhetoric. He did not make blatant nuclear threats against Russia and had in fact made clear that the US did not intend to go to war with Russia several times. Unlike Trump who was very vocal with his every whim, Biden showed great reservation in his dealings with Russia.

2-Yoyo signaling

Putin used yoyo signaling all throughout the crisis. He was constantly escalating, then de-escalating the crisis using nuclear rhetoric and the military aspect of nuclear signaling. The rhetoric began with the threat of Russia using nuclear weapons in an offensive manner should any state threaten Russia: those who "create threats for our country, for our people, should know that Russia's response will be immediate and will lead you to such consequences that you have never experienced in your history" (as cited in Kremlin RU 2022).

Then the rhetoric goes to using it only for deterrence. For instance, Russia's UN Ambassador stated, "On the use of nuclear weapons, God forbid it," and that Russia was only exercising "a kind of deterrence" (as cited in Bugos 2022). Right after de-escalating, Russia then threatens to use nuclear weapons, not in self-defense, but simply for "the idea of punishing a country that has one of the largest nuclear potential is absurd. And potentially poses a threat to the existence of humanity" (as cited in Arndt & Horovitz 2022, 81).

The effect of the yoyo signaling is to stir up the adversary's anxiety, and once you de-escalate for a brief moment, the adversary appreciates the short truce and would be willing to make concessions before you escalate once again. I assume this was Putin's intention; whether the tactic was fruitful or not, that is another thing. Although it did not produce his ultimate objective, which is the West abandoning Ukraine, it did help keep them on their toes as they continuously throughout the crisis emphasized that they do not intend to go to war with Russia. However, it seems that it had finally dawned on NATO that Putin's yoyo signaling was only meant to keep them on their toes rather than signaling credible resolve. The constant increase and decrease in tension finally revealed that the signaling was not credible. Evidence of this would be the fact that NATO did not abandon Ukraine as Putin had hoped. Thus, Putin's yoyo signaling eventually failed to achieve his ultimate objective.

3- Nuclear exercises not cancelled despite tension

Both Russia and NATO went ahead with their annual scheduled nuclear exercises despite the tensions between them and the exchange of nuclear rhetoric (Martin & Watson 2022; Gordon 2022). This was to signal to one another that they were ready at any moment to respond with

nuclear weapons if the situation required it. NATO also did not want to send the wrong signal to Russia that it was backing down from its position (NATO 2022).

4-Suspension of the last standing arms treaty with adversary

In 2023, Russia announced its suspension of the New START Treaty (Kremlin RU 2023). Putin tries to scare NATO using the suspension as a form of signaling and bargaining. This was meant to push NATO into acquiescing to his demands of ending military aid to Ukraine and lifting the economic sanctions. This is the most dramatic thing Putin had done in his effort at nuclear signaling. Even during the tensest days of the Cold War, arms control agreements were made between the US and the Soviet Union (Graef & Thies 2022, 5). The New START Treaty was the last standing nuclear treaty between Russia and the US (Reuters 2023).

To justify what he did, he put the blame on the US who was supposedly planning to carry out nuclear testing, in which case Russia would do the same (Kremlin RU 2023). Again, he shifts the blame to be able to come back from his position of 'suspending' rather than withdrawing Russia's participation in the treaty.

5- I'm not crazy. Therefore, I'm not bluffing

There is a stark contrast between the way Putin carried himself during the 2022-2023 events and the way Trump and Kim did in 2017. The latter two leaders were in a competition of who was crazier than the other. However, Putin had explicitly said several times that he has not gone mad, "We have not gone crazy. We are aware of what nuclear weapons are" (as cited in Yeung & Krebs 2022).

Even though he used dangerous nuclear rhetoric, it was not as petty as Trump and Kim's in 2017. Trump in particular was tweeting his every whim, which might have made him seem less serious. Perhaps it is possible to argue using the evidence of Putin repeatedly making references to himself and Russia being rational and civilized that this was a result of the learning process. Putin's aim was to show that he was rational and knew exactly what he was doing, rather than someone who made passionate responses that had not been thought through very well. This would make his threats all the more credible and threatening.

On the other hand, it is also possible that this is simply Putin's character, and that his character differs greatly from the natural madman characteristics that Trump and Kim possess.

5.5 How the Nuclear Bluff Learning answers the research questions

The case studies presented and the analyses of the cases all culminate in answering the research questions posed in thesis. Why do states raise nuclear alerts despite the likelihood of starting a nuclear war? Do the political benefits of nuclear signaling outweigh its dangers? How have nuclear alert crises changed shape in the post-Cold War period in comparison with the nuclear alert crises during the Cold War?

To address these questions, a series of sub-questions were posed. What are the similarities and differences between the motives behind the nuclear alert crises and their outcomes? How have the crises shaped one another and developed over time?

The answers to these questions have been answered implicitly throughout the thesis through the presentation of the case studies, their analyses, and the "nuclear bluff learning" process.

This section will focus on explicitly referring to the answers to some of the questions posed in the introduction.

The first question around which the thesis revolves is why states decide to take such a risk by raising a nuclear alert. One reason is the more obvious one: the nuclear alert is a form of deterrence. The theory of deterrence is all about threatening adversaries with consequences to their actions (Waltz 1990, 84). It is about dissuading the adversary from acting in ways that are undesirable, rather than coercing them through force (Santana 2009, 329). It is the notion that one state c*an* annihilate its adversary, rather than the fact that it w*ill* do so (Waltz 1990, 85). This is what is seen throughout the case studies.

In each of the nuclear alerts raised, the intention behind the nuclear signaling was to stop their adversary from acting in ways they found unacceptable. For instance, in 1973, the US raised its nuclear alert to prevent the Soviet Union from acting unilaterally in the war (Sagan 1985, 124). The intention was not to force them through coercion, or in other words, by using nuclear weapons. Therefore, the purpose of nuclear signaling was to serve the political purpose of deterrence, rather than its military purpose (Sagan 1995, 99), with the proof that hitherto, nuclear war has not broken out. Moreover, with the help of historical archives of the 1969 and the 1973 nuclear alerts, diary entries of officials, and meeting memos, it was clear that the intention of the nuclear signaling was to serve the political purpose of deterrence. This assumption is of course harder to make in the post-Cold War period because such documents are not available to reveal the intentions, but a pattern of action was recurrent with new elements that have revealed the purpose of the nuclear signaling.

Leaders who raised the alert also did so to make their adversaries act in ways they found acceptable, and to push them to act in particular ways. For instance, in 1969, the US raised the nuclear alert to apply pressure on the Soviet Union to push Vietnam into ending the war (Sagan & Suri 2003, 152). This makes the reason behind raising the nuclear alert clear: it is to reap the political benefits of getting the adversary to act in desirable ways.

There is another more implicit reason. One would assume that raising a nuclear alert or using nuclear signaling is a dangerous thing to do. In the ongoing Russian nuclear alert crisis, NATO has continuously warned against Russia's dangerous nuclear rhetoric (Abutaleb 2022). However, the comparison between the Cold War period and the post-Cold War period shows that the latter is much less reluctant to use the taboo word 'nuclear' and to be most explicit with nuclear threats. This seems to imply that to the leaders in the post-Cold War period the risk of nuclear war is most likely improbable. It is argued that Nixon in 1969 did not see a risk in raising the nuclear alert; therefore, doing so was not a competition in risk-taking (Sagan and Suri 2003, 152).

However, there is an important difference between the two periods, which is the way in which they communicated the nuclear alerts. As mentioned earlier in the thesis, the Cold War period used a shier, more subtle, and less explicit way of raising the alert. In contrast, the post-Cold War period used a bolder method of nuclear signaling and did not shy away from using the term 'nuclear' as much. This culminates in the conclusion that during the Cold War, nuclear war was a probable event, and was therefore most feared.

That explains why they were very careful with their nuclear rhetoric at the time. This could possibly be because Nixon and Brezhnev had lived through the nuclear war waged on Japan.

It is the timing of the occurrence of the nuclear war which impacted them. The timespan between the occurrence of the nuclear war and those two leaders rising to office was not too far apart. On the other hand, the post-Cold War period's more explicit form of nuclear signaling seems to imply the opposite: nuclear war is believed to be more and more improbable and unthinkable (Pinfari 2023). As a result, making blatant nuclear threats does not incur much of a risk. Perhaps this is the reason why Trump could not stop North Korea's nuclear program or belligerent behavior, and why Putin could not get NATO to abandon Ukraine. After all, it is the risk entailed in the nuclear alert that gives it its credibility (Sagan & Jeremi 2003, 153). Therefore, since the potential of risk in the post-Cold War period is possibly disregarded, nuclear signaling does not seem to be working well in favor of those who raise the nuclear alerts simply because the only nuclear war that occurred happened far too long ago for them to consider its possibility. It has perhaps become more of a distant memory to them in comparison to the Cold War leaders who had quite a strong memory of what had happened in 1945.

5.6 Areas of further research

The thesis also posed another question: Given that the first three nuclear alert crises have been averted, and the fourth crisis remaining on alert, to what extent is the successful aversion of those nuclear crises sufficient in supporting the idea that nuclear signaling is an effective means of creating desired outcomes in a crisis in relation to the ongoing 2022 Russian nuclear alert?

It is clear that nuclear signaling did not always produce desired outcomes in the crises. Despite the fact that I earlier argued that statesmen today see less of a risk of an eruption of nuclear war as a result of nuclear signaling, it is ardently argued by several scholars that raising a nuclear alert only for the political purposes of deterrence is not without great risk. For instance, it is argued that if there is an imbalance of power between two parties, and if the stronger party wrongly assumes that the weaker party lacks resistance, there could be a risk of nuclear war (Goodwin 1982, 70).

Misunderstandings could also lead to catastrophes. Those who worked for the US government understood how easy it was for nuclear war to break out during the Cold War as it was clear that the Americans and the Soviets had very little understanding of each other (Kojm 1983, 14; 17). Surely, since 1945, the world has not yet seen another nuclear war. However, assumptions such as these just mentioned raise doubts on the strength of the nuclear deterrence theory and whether it can in fact stand the test of time.

Is it possible to prove the nuclear deterrence can fail? In light of the ongoing nuclear alert crisis, this question has become ever so intriguing. Yet, it is quite difficult to say. One can make assumptions, but the lack of proof of another nuclear war makes such assumptions unverified. Nonetheless, there could perhaps be other ways of exploring the possibility of the failure of nuclear deterrence without the occurrence of nuclear war. Further research could investigate, for instance, whether any statesmen involved in a nuclear incident had real intentions of using nuclear weapons, even more so than their intention to mitigate the crisis.

Additionally, further research could be conducted to explore the future of the nuclear alert and its effects. While it may not have worked to achieve the ultimate goals of those who

raised the alerts, investigation of disadvantageous political rather than military effects of raising a nuclear alert could be further explored. More investigation could also be carried out to analyze the impacts of the ubiquity of nuclear alert crises on the nuclear taboo.

Could it be possible that the nuclear alert crises could erode the integrity of the nuclear taboo in the future and result in a nuclear war? In an online webinar hosted by the Vienna Center for Disarmament and Non-Proliferation on March 23, 2023, Nina Tannenwald was featured to talk about the risk of use of nuclear weapons. In a short Q&A session, I got the opportunity to ask her whether she believed that nuclear signaling during nuclear alert crises for political purposes, such as the ongoing nuclear crisis, could eventually erode the fabric of the nuclear taboo, and she responded by saying she did believe that that was a possibility (Tannenwald 2023). Perhaps the temporal evolution of the nuclear alert, going from demonstrating strong signs of the nuclear taboo to the eventual use of the word 'nuclear' more openly and making more explicit nuclear threats can be the one the first signs of the beginning of the erosion of the nuclear taboo.

5.6 Conclusion

Nuclear signaling has been used in both periods: the Cold War and the post-Cold War. Two essential core 'nuclear bluff' tools were used to signal resolve and credibility of the threat: the first being an increase in readiness measures or nuclear testing, and subsequently a speech made afterwards. While these two main tools were constant throughout the crises, several things changed over the years with nuclear signaling, and in some cases with different leaders in charge.

The Cold War period seemed to have been a more reserved period in terms of nuclear signaling. Beginning with 1969, the nuclear alert raised was a secret one and intended to be quite shy by not being threatening to the Soviets and not being discernible to the public to avoid audience domestic costs (Burr & Kimball 2015, 267). Despite the nuclear readiness measures by the US, the plan had failed to intimidate the Soviets and the North Vietnamese to acquiesce to what the US was demanding (Burr & Kimball 2015, 309).

In 1973, Nixon and Kissinger had initially followed the same footsteps they carried out in the previous nuclear alert. First, they raised the nuclear alert to DEFCON 3 (Sagan 1985, 125). However, the nuclear alert alone had not worked. Nonetheless, Nixon and Kissinger did not want a public nuclear confrontation (Sagan 1985, 128), knowing that the nuclear alert they raised was a bluff and merely a signal to change the Soviets' mind about taking unliteral action in the Middle East (Blechman & Hart 1982, 141). In any case, the news got ahold of information of the alert and the domestic audience was now involved whether Nixon liked that or not (Sagan 1985, 128). After that, Kissinger made a public speech where he hinted at the possibility of nuclear war. It is argued that after this speech, the crisis ended (Blechman & Hart 1982, 143). Concern for domestic audience, however, was a thing of the Cold War period and was not carried through the post-Cold War period. Perhaps this was a result of learning that involving an audience was an essential aspect to the nuclear bluff and is indispensable to the credibility of the nuclear threat.

The post-Cold War period showed much less reservation to waving the nuclear stick around as a form of crisis bargaining. The lesson carried on from 1973 was that involving a domestic audience, and even an international one was essential. In 2017, Kim and Trump engaged in seriously belligerent nuclear rhetoric on a world stage. Another important thing they learned

from Nixon is the madman theory. They each imitated Nixon's madman behavior, and even made references to their own 'nuclear button', which Kim might have possibly picked up from Nixon's famous quote (Van 2019, 169; Sagan & Jeremi 2003, 165). However, they took the madman theory to an even higher level to, quite frankly, a point of absurdity. Furthermore, Kim added his own element of theatrics to make his nuclear signaling all the more dramatic. Trump's threats did not work with Kim, however. Kim continued to act provocatively until he was ready to arrive at the negotiating table.

In 2022-2023, Putin dropped the madman act from the nuclear bluff toolbox that he had seen Kim and Trump use. He wants to be taken seriously and not for a madman. He decided to add his own new elements to the nuclear bluff. He implemented his own yoyo signaling where he would constantly increase and decrease tension to gain leverage in negotiations. And to be most dramatic, he decided to suspend Russia's participation from the New START Treaty (Kremlin RU 2023) as a way of pressuring NATO to agree to his demands.

Each successive leader learned something from the previous nuclear alert. They implemented what they thought had worked, and tweaked their behavior to improve in areas where they thought the previous nuclear alert had failed. They subsequently added their own new elements to the nuclear bluff learning process making the nuclear alert uniquely their own. In contrast to the Cold War period, the post-Cold War period is much less reserved when it comes to using the term 'nuclear'. The nuclear taboo is about the tradition of non-use since 1945, but it also means having a more reserved attitude towards blatantly waving a nuclear stick around which would be considered dangerous behavior (Tannenwald 2005, 5; 8).

So how successful is the nuclear alert, and is it worth the risks? To date [April 22, 2023], nuclear war has not erupted as a result of nuclear signaling, though the tension is very high. Not all nuclear alert crises resulted in the success that was hoped for as mentioned earlier. However, in regards to the Russian nuclear signaling, it can be argued that Russia's nuclear signaling may have prevented NATO from going into direct war with Russia so far, even though the nuclear signaling did not produce other outcomes Putin had hoped for, which is the West abandoning Ukraine and lifting the economic sanctions they applied on Russia. For Putin, nuclear signaling may have been well-worth the risk. Whether Russia's nuclear deterrence and signaling will continue to work, however, is uncertain. After all, "The belief that nuclear deterrence can prevent nuclear war under all circumstances should be seen as exactly that: a belief, not a fact" (Sagan 1993, 262).

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