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The coercive use of nuclear weapons: A case study of the Ukraine invasion by Russia

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Abstract

The invasion of Ukraine by Russia has brought a new perspective within the role of nuclear weapons within international politics. Within the literature, deterrence and compellence are the two main ways of conducting diplomacy through nuclear weapons. During the war between Ukraine and Russia, it became clear that Russia used both forms. Through Russia's nuclear threats, Russia is trying to compel Ukraine to surrender, and Western countries to halt their assistance. In this thesis, I try to examine this Russian approach, and how successful the two methods are. Based on existing theories, I argue that the deterrence side proved to be successful during the war, but that the compellence produced little success.

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Introduction

Academics and decision-makers have struggled to comprehend the political effects of nuclear weapons for years. With the arrival of nuclear weapons, study of international politics has changed enormously (Gavin, 2012). The ability of nuclear weapons to deter aggression has received the majority of attention in discussions on nuclear weapons (Beardsley & Asal, 2009). However, preventing external hostility is only one part of the subject. It's also conceivable that nuclear weapons may be used for compellence. To put it another way, having nuclear weapons may enable certain states to use their power to compel political changes, by using nuclear weapons as a coercive tool (Horowitz & Reiter, 2001). For instance, nuclear powers could try to force others to give up land, remove military facilities, make restitution, or even change their political policies. The objective while using this strategy is to threaten the use of nuclear weapons, so that the adversary will submit in order to escape the risk of being attacked by those nuclear weapons (Kroenig, 2013).

These two ways of using nuclear weapons within foreign policy can both be seen back during the conflict between Ukraine and Russia. From the beginning, Russia's invasion of Ukraine was centred on nuclear weapons (Bollfrass & Herzog, 2022). The Kremlin's plan appears to have discouraged direct Western military engagement to support the Ukrainian state and its people because of its nuclear weapons. The nuclear strategy Russia is using during this conflict consisted of deterring external parties from the conflict, while also compelling Ukraine to surrender parts of their national interest (Arndt & Horovitz, 2022). Russia's nuclear threats were supposedly made to pressure Ukraine into obedience and to stop receiving aid from Western nations. Much has been written about the use of nuclear weapons as a deterrence tool or a compellence tool, but this is the first instance of a state waging an expansionist battle while threatening to use nuclear weapons (Bollfrass & Herzog, 2022). It is therefore relevant to learn more about this new approach of applying nuclear weapons as a tool of coercion in armed conflict.

In this thesis I will examine and analyse the role of nuclear weapons during the Ukraine-Russia war. This brings me to the research question of this thesis: *To what extent were nuclear weapons used as a means of successful coercion during the Russian invasion of Ukraine?* With 'coercion' I use the definition of Schelling (1966), meaning that coercion

refers to both deterrence and compellence. I will answer this question by first providing a review of the existing literature on the subject. As I said, there is a tremendous amount of literature on deterrence and compellence, but less on the two together, and the role that nuclear weapons play (Sperandei, 2006, p. 253). To gather a wide range of information on the subject, I will start by summarising the most influential works about nuclear weapons and coercive diplomacy.. In order to make it more focused for my research, I will then narrow it down further toward the end of my literature review. Once I have identified the literature gap, I outline the theoretical framework, where I elaborate on the theories I will use to answer my research question. Here I elaborate on several concepts related to these theories. I then describe the case selection for my thesis and show why this particular case is an excellent opportunity to learn more about the role of nuclear weapons within the dual mechanism of deterrence and compellence. Here I will also discuss Russian doctrine which is also an important factor within the thesis. Then I will describe my methodology, where I indicate how the concepts will be operationalized, and in which way I will answer my research question. From this, the results of the research will then follow, from which I will draw my conclusion.

Literature review

As I mentioned earlier, nuclear weapons have completely changed international relations thinking (Gavin, 2012). This has created a new movement within the literature that has tried to contain foreign policy thinking about a world with nuclear weapons. Moreover, they not only changed the way of thinking but also the political nature of war. This is because the power to kill is now placed with only one or a few people, the human factor has been removed from the conflict after a nuclear attack is authorised, and by reducing the time leaders have to evaluate alternative options (Schelling, 1966). Moreover, nuclear weapons changed the relationship between winners and losers. In the past, only winners had the ability to harm their opponents after their victory. In the nuclear age, both winners and losers could suffer in a conflict. Schelling (1966). The bottom line is that even the most powerful states can no longer assure themselves of a successful defence because of the power of nuclear weapons (Kissinger, 1957). All of these variables create an environment where using coercion, intimidation, and deterrence to further your objectives takes precedence over fighting full-scale battles. The tools of conflict lean more toward retaliation than acquisition. This means that military policy has evolved into a form of violent diplomacy (Schelling, 1966). Reflecting these thoughts, a major objective of nuclear period studies has been to consider the use of atomic weapons for coercion and deterrence (Powell, 1990).

Thomas Schelling was a leading figure in approaching these two theories, and he provided arguably the first and most thorough analysis of the two main forms of coercive diplomacy. Schelling (1966) concentrated primarily on the characteristics that set the two concepts apart, as his most important publications amply demonstrate. This approach would show to be quite durable in the years to come. Schelling (1966) made a distinction between "a threat designed to make an adversary do something" and "a threat intended to dissuade him from commencing something,". Singer (1963) makes the distinction between "persuasion" and "dissuasion", concerning deterrence and compellence. The main differences were noted in the timing of who needs to make the first move and in whose initiative is put to a test, which are mostly identical to the differences between statics and dynamics (Schelling, 1966).

Perhaps the most important subject of nuclear weapons within foreign policy is the fact of deterrence. Nuclear optimists, such as Christopher Waltz, believe that once states have a

secure second strike capability, they will be able to prevent conflict (Waltz, 2008). This means, according to them, that nuclear expansion should be welcomed because it promotes stability (Waltz, 2012). For this stability to be successful, there are three assumptions to be made (Sagan & Waltz, 1995). First, during the transition to a secure second strike capability, there cannot be a preventative war for nuclear proliferation to be stabilised. Second, there needs to be a second strike capacity on both sides. This means that both the attacker and the defence would be completely wiped out in the event of a full-scale nuclear attack on a nuclear-armed defender with second-strike capabilities. Within the literature, this is referred to as "Mutual Assured Destruction" (Jarvis, 2002). Thirdly, nuclear arsenals must not be vulnerable to illegal or unintentional use. Worth mentioning is that all these ideas are based on the fact that these actors are all rational. Major criticism has resulted from this, with Zagare and Kilgour (2000) pointing out that much of this "classical deterrence" literature uses irrational conceptions to clarify how rational agents pose greater risk of escalation in order to convince an opponent to back down. Critics also argue that some decision-makers, notably military leaders, won't consider the consequences in the same manner as civilian authorities, which means that the cost-benefit analysis of rational thinkers is not well developed within the literature (Sagan & Suri, 2003). Research by Lieber and Press (2017) and Long and Green (2015), among others, reveals that nuclear powers, particularly the Soviet Union and the United States, tried to avoid mutually assured destruction. Therefore, stalemate may not always be the case when both sides possess nuclear weapons. Despite the fact that Ukraine doesn't have nuclear weapons, this is important for this thesis. Because while trying to compel Ukraine, Russia also is attempting to deter NATO members from acting. Some of these NATO members do possess nuclear weapons.

Next to the deterrence component, there is the compellence component of coercion. The compellence viewpoint starts with a clear-cut fact: nuclear weapons are horrifyingly destructive. Countries must decide if they might win a war at a reasonable cost before determining whether to give in or hold their ground in a crisis (Sechser & Fuhrmann, 2013). Beardsley and Asal (2009) argue that nuclear weapons provide leverage to reach a state's goals. They can be useful as a compellence tool, and that is an important factor why states acquire nuclear weapons. Merrill and Peleg (1984) argue that when the compeller has exclusive access to nuclear weapons, he effectively has the power to impose conditions on the compeller. Beardsley and Asal (2009) contend that the use of nuclear weapons raises the target's anticipated costs of war and increases the challenger's chances of success in crisis

negotiations. Although coercion can be effective, nuclear weapons, according to Sechser and Fuhrmann (2017), are not a useful tool for coercion. According to their nuclear skeptic theory, nuclear weapons typically do not help states in regaining control of disputed territory or other areas. Additionally, the credibility is lacking because it would be extremely expensive for the coercer to carry out a nuclear coercive threat.

Even though there is a lot of literature about the role of nuclear weapons in foreign policy, the relationship between the two most well-known types of threat, one intended to deter an adversary from doing something and the other intended to persuade an adversary to do something, remains largely unexplored after decades of research into the threat of the use of force as a distinctive practice in international politics. Furthermore, the use of nuclear weapons as a tool to invade another state is something never seen before (Bollfrass & Herzog, 2022). Analysing the connection between compellability and deterrence and what role nuclear weapons play between the two components is therefore crucial.

Theoretical framework

Deterrence

Any use of threats, whether verbal or tacit, or moderate use of force meant to deter an actor from acting is considered deterrence. That means that the goal of deterrence is to maintain the status quo (Morgan, 1977). In other words, deterrence means the avoidance or inhibition of action brought on by fear of the results. A credible threat of unacceptably harsh retaliation induces the mental state of deterrence. It presupposes and demands rational decisions, which makes it part of classical realism (Waltz, 2008). Schelling (1966) points out that deterrence involves as he calls it 'setting the stage'. This can be done through an announcement, taking on the responsibility, and then waiting. Additionally, the deterrent threat only modifies the outcomes if the intended action is actually carried out. Timing of deterrence is also ambiguous. As long as no other players cross the drawn red line, a player may wait for as long as they like. Deterrence differs from compellence, which is an effort to persuade an actor (like a state) to take a certain action, so that the status quo will be changed (Schelling, 1966). Deterrence and compellence are both part of coercion, which is the central point of this thesis. Within the theory, deterrence is seen as an easier variant than compellence within coercion because deterrence requires less effort (Schaub, 2004). After all, deterrence preserves the status quo and does not require anyone to change their course, whereas compellence requires action. This also ensures that there is a degree of reputational loss if a state is successfully forced to change its course, which means that forcing a state to do something through compellence is more difficult than deterring a state from doing something (Art & Greenhill, 2018). Also, deterrence differs significantly from coercion in that the state issuing the demand already has the object at the core of the threat. In contrast, the person who issues a coercive demand has typically gone without the thing in question for a while. This distinction is important because people tend to value things they already own more highly than those they do not yet possess (Sechser & Fuhrmann, 2013).

So within the case of this thesis, this would mean that according to this theory, the deterrence part will bring more results than the compellence part. Russia's use of nuclear weapons as a threat then leads to successful deterrence against the US who might have intervened in a different case. Three key conditions for reliable nuclear deterrence exist within the rational deterrence framework,; 1) There cannot be a preventive war while one country has nuclear

weapons and the other is developing, but has not yet achieved, a nuclear capability; 2) Both countries must develop "second-strike" invulnerability to the point where their forces could retaliate if the other side attacked first; and 3) The nuclear arsenals must not be vulnerable to accidental or unauthorised use (Sagan & Waltz, 1995).

Compellence

A lot of deterrence theorists like Schelling (1966) and Waltz (1990), argue that opponents of nuclear powers will exercise restraint because the potential costs of a nuclear attack are so high (Beardsley & Asal, 2009). The awareness of opponents of nuclear-armed states that a conflict can escalate into a situation where the costs outweigh the costs if the will of the nuclear power is obeyed gives room for other ways of coercion besides deterrence, namely compellence. Compellence is used as a word by Schelling, among others, mainly because of the lack of a better word (Schelling, 1966). Typically, compellence behaviour entails starting an action that will only become harmless if the target opponent reacts. The player who makes the compelling threat is responsible for taking the initial action. There must be a timetable because this threat must be taken seriously. The destination of a compellent advance must be projected, and this destination may be ambiguous in terms of intent and velocity. Assurances play a crucial role in the definition of a compellent threat since when one is provided, it just conveys the overall direction of compliance.

Nuclear weapons can be used as a tool of compellence, argue Beardsley and Asal (2009). They contend that the use of nuclear weapons raises the target's anticipated costs of war and increases the challenger's chances of success in crisis negotiations. But there is a consensus within the literature that due to the challenges in persuading actors to change their behaviour, compellence has been described as more difficult to implement successfully than deterrence, with or without nuclear weapons (Schaub, 2004). Most scholars even argue that, although compellence is possible and used many times successfully, nuclear weapons are not an appropriate tool of compellence (Sechser and Fuhrmann, 2017). Due to the military redundancy of nuclear weapons, the high costs of compellence, and a balance of stakes that favours the target, nuclear sceptics argue that threats to use nuclear weapons to change other states their behaviour is not plausible. The nuclear sceptic theory indicates that while nuclear weapons defences are an excellent means of deterrence, offensive use of nuclear weapons as a means of compellence is far less effective. There are three reasons for this. First, nuclear weapons often do not assist states in regaining control of disputed land or other things.

Second, it would be extremely expensive for the coercer to carry out a coercive threat. Third, the stakes are almost never that high, because the nuclear power is on the offensive, meaning that there is no danger of losing national interest, because they only try to gain something by attacking (Sechser & Fuhrmann, 2017). These costs could be worthwhile to bear if a state's fundamental interests were at stake. That is the difference with deterrence, because with a deterrence case, the costs are worth it because otherwise fundamental national interest is at stake. Therefore, the threat of using nuclear weapons is way more convincing, and therefore much more useful. Coercive nuclear threats will frequently lack credibility even though nuclear weapons clearly have the potential to punish an adversary (Sechser & Fuhrmann, 2017).

This credibility issue can be resolved by a strategy known as "brinkmanship." Schelling (1966) argues that a government can make outlandish threats seem plausible by using a "threat that leaves something to chance." This means that a government brings potentially dangerous situations to the verge of armed confrontation. According to this theory, brinkmanship operates by increasing the likelihood that negative outcomes would occur as a result of uncontrollable circumstances. One instance of brinkmanship is warning nuclear troops. The idea is that the outcome of a dispute is difficult to predict, which means that the opponent is forced to back down and make compromises rather than take the chance of an escalation of the dispute. However, this point that makes brinkmanship strong is simultaneously the concept's weakness, according to nuclear sceptic theory. This is because leaders always want to be in control. Leaving a situation to chance, where there is a chance that nuclear weapons may have to be used, is therefore not desirable for nuclear powers. Moreover, it is difficult to signal with nuclear weapons. Often, these signals are not picked up, which reduces the effectiveness of the tactic (Sechser & Fuhrmann, 2017).

Hypothesis

From these theories, there is an expectation on what effect nuclear weapons have on the behaviour of countries within the conflict. The deterrence theory expects countries to conduct a cost-benefit analysis, from which they conclude that not acting against a nuclear power is more beneficial, as the consequences will otherwise be too great. In my case study, the hypothesis then is that Western countries will be deterred from proactively helping Ukraine because of Russia's coercive diplomacy using nuclear weapons as a deterrent. It can also be inferred from the theories that compellence is a legitimate way of conducting international

politics, and can be successful. However, nuclear weapons are not an effective tool for compellence, according to theory. Nuclear sceptic theory shows that the cost of using nuclear weapons is too great, compared to the benefits to be gained from offensive coercive diplomacy, making nuclear weapons ineffective as a means of coercion. Brinkmanship is not an alternative for this either, as leaders like to maintain control. Moreover, signalling with nuclear weapons is often overlooked by the other side. From this follows my second hypothesis that the use of nuclear weapons within the compellence side of Russian coercive diplomacy is not effective, and that Ukraine does not give in in response to Russian nuclear compellence.

Methodology

Case selection

Although the two words refer to conceptually distinct uses of threats, Huth and Russett (1990) contend that both sorts of policies may have been present in a single historical occurrence. Therefore, a single case does not have to be classified as a deterrence or compellence case; rather, it can be used to test theoretical hypotheses about both types of policies.

From the Russian perspective, ‘deterrence’ does not have a sufficient translation in Russian. The idea of deterrence in western military strategy lacks an exact Russian equivalent for a number of reasons rooted in strategic culture, history, military doctrine, and (probably most significantly) language. In reality, the Russian word for deterrence, ‘*sderzhivanie*’, is much more broad than the English word deterrence. Strategic ‘*sderzhivanie*’ includes coercive statecraft, deterrence, compellence, and intra-war deterrence. All of these are coercive measures taken to stop hostile behaviour that is currently or potentially threatening. Within western literature, there is a clear distinction between the two main concepts within this thesis, compellence and deterrence. But the Russian term ‘*sderzhivanie*’ captures both of these terms into one concept. In other words, from the standpoint of Western strategy, strategic ‘*sderzhivanie*’ is a conceptual mess. However, it appears to be the guiding principle of Russian strategy at the moment (Wilner, 2013). Currently, Russia is using compellence and deterrence simultaneously in Ukraine. Because both ideas are a part of Russian doctrine, it is interesting and pertinent to research and analyse them in the context of this Russian strategy (Charap, 2020). By researching the role of nuclear weapons within this Russian doctrine during the war in Ukraine, this thesis in addition to a deeper understanding of the operation of nuclear weapons within coercive diplomacy also contributes to an awareness of the difference in language and concepts between the West and Russia, which could prevent the destabilising effects mentioned above. Because of this mix of deterrence and compellence by Russia, it is also not desirable to examine only one of the two parts. It is much more useful to examine them both and see whether deterrence is indeed more successful than compellence, as theory suggests (Schaub, 2004).

I deliberately did not conduct a comparative case study for this thesis. To see what the role of nuclear weapons is within Russia's coercive diplomacy, it could be argued that a comp case study would be appropriate. It could then look at two situations where a state with nuclear weapons invades a country without nuclear weapons, and where a state without nuclear weapons invades a state without nuclear weapons. Then I could look at how the response would be different to the two events. However, I deliberately chose not to conduct such a study because the independent variable (nuclear weapons) is very difficult to isolate, which also makes it impossible to examine purely its effect. The time period, government leaders, geography, economic interests and many more factors can influence the decision to respond to an invasion or not. Thus, to focus only on Russia's invasion of Ukraine, I do not attempt to provide a proof of the degree of success of nuclear weapons as a coercion tool, but present a deeper analysis into how nuclear weapons can be used as a coercion tool, and what results it produces.

Because of the particular Russian doctrine where compellence and deterrence are mixed together within their doctrine, this is an excellent case study to examine the role of nuclear weapons within a case where the two concepts work interchangeably. However, this does involve a very recent event. This could possibly make it difficult to use this as a case, due to little material that can be used. However, this turns out not to be the case and this event is actually a very good opportunity to explore the workings of nuclear weapons within coercive diplomacy, as it involves a large-scale invasion initiated by a super nuclear power. Indeed, there have been many moments during the invasion where Russia has used its nuclear arsenal as a coercive tool, and the response to this should be examined. Also, as mentioned earlier, it is important to get a better understanding as soon as possible of how Russia executes its strategy, using compellence and deterrence interchangeably, and what role nuclear weapons play within it. This will help prevent possible destabilising events. In terms of theoretical framework, a huge amount has already been written on these topics, so the recent case is supported by a broad and deep-rooted theoretical framework within the literature.

Research design and variables

In addition to comparative and analytical content focusing on nuclear deterrence, compellability, and coercive diplomacy within the Russian doctrine, the study compiles analytical research based on document analysis. This paper's technique made use of primary and secondary literature and analytically existent data from a variety of sources. There has

been extensive usage of books, book chapters, journal articles, internet sources, and the results of empirical study. The use of nuclear weapons has been threatened by a number of leading Russian figures, including president Vladimir Putin and foreign minister Sergey Lavrov. These expressions have all been reported and analysed, looking at which concepts best place these threats within. To ensure that these broad concepts can be examined, they are operationalized. This involves turning the abstract concepts into measurable observations. This makes it possible to methodically collect and analyse the qualitative data. For this thesis, I look at deterrence use of nuclear weapons and the compellence use of nuclear weapons. Nuclear weapons as a threat is my independent variable here. As the dependent variable, I follow the course of Sechser and Fuhrmann (2017). The variable "compellence success" is employed as the dependent variable to shed light on the research question. Based on the defending state's compliance, this variable is used. So if the defensive state decides to comply, the case for compelling action is deemed successful. To comply is operationalised as a desired change to the status quo. For each form of compellence, I will therefore look at what the purpose of the compellence threat was and whether that purpose was achieved, thus changing the status quo. For the deterrence side of this thesis, the variable is similar. The variable 'deterrence success' shows the success of deterrence. When the status quo is maintained, it means the deterrence is successful. A successful deterrent threat is operationalised as the desired preservation of the status quo. So per threats as deterrents, I will also look at which status quo is trying to be preserved and whether it has succeeded.

One of the independent variables used by Sechser and Fuhrmann (2017) is also useful for my thesis, namely the 'nuclear challenger' variable. In my case study, Russia has nuclear weapons and Ukraine does not. So there is asymmetry between the two. The US does have nuclear weapons, so there is symmetry between the US and Russia. While nuclear symmetry increases stability, nuclear symmetry tends to result in instability (Bueno de Mesquita and Riker, 1982). This matches my hypothesis coming from my theoretical framework.

Operationalization

The use of nuclear weapons as a form of compellence is operationalised as any form of naming nuclear weapons within a context of interstate conflict between Ukraine and Russia. This means that any threat of nuclear weapons linked to forcing Ukraine to do or not do something is a form of compellence in my thesis. Mobilising any form of nuclear weapons

(long- and short-range missiles) is also seen as a form of compellence. Indeed, as has been described, this can be a way of brinkmanship.

The use of nuclear weapons as a form of deterrence is operationalised as any form of naming nuclear weapons within a context of international deterrence, as well as mobilising nuclear weapons. This means that nuclear weapons are mentioned in Kremlin statements threatening the use of nuclear weapons against countries that will interfere with Russia's national interest.

In this figure (figure 1), a simple version of how nuclear deterrence works is outlined by Pellikaan (2019). Here you can see the possible outcomes of nuclear deterrence. In the case study of this thesis, Russia is the defender and the US is the aggressor. When Russia successfully deters, the status quo is maintained. When Russia does not successfully deter, it leads to a change in the status quo, through US offensive action on Russia. It is important to note here that this offensive action does *not* need to be nuclear in nature. It is any aggressive form that changes the status quo between Russia and the US, that shows the effectiveness of the nuclear weapons as a deterrent. To this, Russia can then choose to respond back or not. Not responding leads to a detrimental course of events for Russia alone, while responding is detrimental to both sides, which can result in an ever-expanding conflict with ever greater consequences. The three demands of nuclear deterrence (Waltz & Sagan, 1995) are all met between Western countries and Russia because there is no war between them, there is mutually assured destruction, and their nuclear arsenals are not susceptible to errors or outside interference.

Deterrence Game

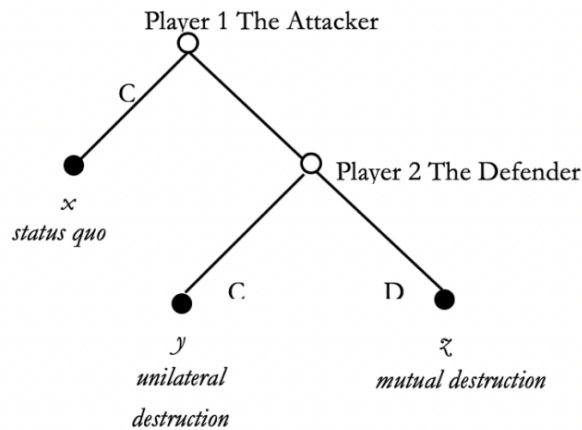


Figure 1: Deterrence Game Model
(Pellikaan, 2019)

In this figure (figure 2) from Sechser and Fuhrmann (2017), the workings of coercion are once again simplified. In this illustration, Russia is the coercer and Ukraine is the target. It's important to remember that this involves using nuclear weapons as a form of coercion. In light of the fact that the threat of using nuclear weapons as leverage has been made, this also implies that if Ukraine refuses to comply, Russia will use its nuclear weapons to enforce the coercion.

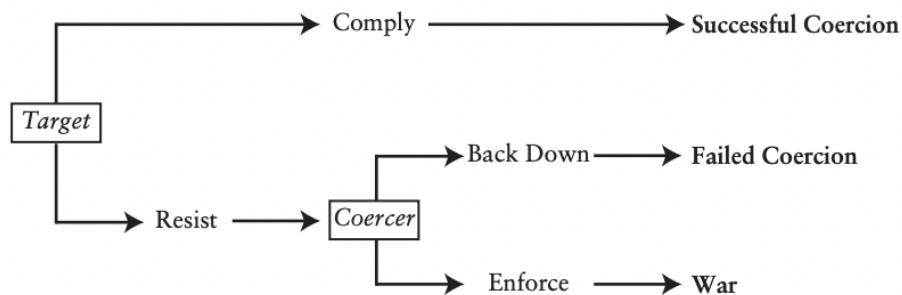


Figure 2.1 A simple framework of coercion.

Due to the Ukraine situation, strategic theorists and practitioners will have the possibility to investigate how the two forms of coercion might interact and what might be their possible constraints. In conclusion, because of the strategic scope and operational reach of the conflict

in Ukraine, additional facts will be revealed that will support the idea of this mixed use of deterrence and compellence. More understanding of the relationship between compellence and deterrence should be supported by these findings. In my results, I'll examine and analyse the impact of nuclear weapons in that relationship with the use of the crisis in Ukraine as my case.

Results

Due to the Ukraine situation, strategic theorists and practitioners will have the possibility to investigate how the two forms of coercion might interact and what might be their possible constraints. In conclusion, because of the strategic scope and operational reach of the conflict in Ukraine, additional facts will be revealed that will support the idea of strategic coercion. More understanding of the relationship between compellence and deterrence should be supported by these findings. In my results, I'll examine and analyse the impact of nuclear weapons in that relationship with the use of the crisis in Ukraine as my case.

Before showing the results, it is important to note that a nuclear attack on the US or other western countries or the Ukraine would also be consistent with Russian doctrine, nuclear practice, and policy (Blank, 2022). Russian doctrine suggests that Moscow has a preference for using nuclear weapons first. Russia could perform a “demonstration of readiness and determination to employ nonstrategic nuclear weapons (also known as tactical nuclear weapons-TNW).” A fist-strike stance and a lowered or widened threshold for first-strike nuclear use, such as against conventional strikes that risk governmental stability, are both clearly defined in Moscow's 2020 rules for nuclear use (Blank, 2022). Due to the decreased threshold for first nuclear use, it is quite likely that Russia will use nuclear weapons if necessary. For this thesis, it is important to note that the use of nuclear weapons is a possibility within Russian doctrine. Otherwise, deterrence and compellence will fail no matter what, because the key element of credibility misses, which is essential for successful deterrence or compellence (Schelling, 1966).

First, I will list important moments that Russia has threatened nuclear weapons between the period February and October. I will describe for each point what exactly happened and distinguish the type of threat (compellence or deterrence), if possible. Finally, I will analyse what the effect of the threat was, by looking at what has happened after the threat: did it change the status-quo or not?. In my conclusion, I will synthesise these results into a coherent narrative and indicate the effect of the threats. Here I will then check my hypotheses and look back at my theoretical framework.

Nuclear threats used by Russia during the Ukrainian war in 2022:

1. Moscow's officials frequently warned that any conflict between NATO and Russian forces would raise the possibility of nuclear war from February through September 2022. Because of this, most Russian nuclear narratives over the past seven months have been designed to dissuade democratic decision-makers and the Western electorate from even considering a direct military involvement in Ukraine. This all started when president Putin ordered Russia's nuclear forces to enter a "special mode of combat duty," or a state of high alert, on February 28, a few days after the start of the Russian invasion. Putin stated that "Senior officials of the leading Nato countries also allow aggressive statements against our country, therefore I order the minister of defence and the chief of the general staff to transfer the deterrence forces of the Russian army to a special mode of combat duty," (Blank, 2022). He also said that "Western countries aren't only taking unfriendly actions against our country in the economic sphere, but top officials from leading NATO members made aggressive statements regarding our country." Furthermore, Putin has warned other nations to stay out of his invasion of Ukraine because doing so could have "consequences they have never seen" (Blank, 2022). In an effort to thwart a western involvement in Ukraine, he has stationed anti-air missiles and other cutting-edge missile systems in Belarus and sent his fleet to the Black Sea. Russia conducted military exercises involving nuclear submarines in the Barents Sea and mobile intercontinental ballistic missile launchers in Siberia (Reuters, 2022).
2. Russian policymakers repeated their categorical warnings whenever Western politicians just hinted that armed intervention would eventually become a possibility. For instance, UK Foreign Secretary Liz Truss stated on February 27 that in order to safeguard other nations from being endangered, the West needed to stop Russia in Ukraine, a situation that would result in a "war with NATO." Russian officials reacted quickly, though it's unclear if they did so in response only to British assertions or also to other Western signals. Putin reportedly objected to supposed "aggressive" Western remarks by ordering a "high combat alert" for Russia's strategic troops. At least twice, this deterrence dynamic recurred. In March, Ukrainian President Volodymyr Zelenskyy pleaded with Western nations to impose a no-fly zone over Ukraine, which might have necessitated NATO forces engaging Russian assets directly. Putin issued an urgent warning of "tremendous" and "disastrous" international repercussions.

Poland demanded a NATO peacekeeping presence in Ukraine a few weeks later. Putin alleged the West was seeking to "cancel" Russia and undermine its territorial integrity shortly after. Following suit, four more remarks, including one from Lavrov, warned against a direct confrontation between Russian and NATO forces because it might result in a nuclear escalation (Arndt & Horovitz, 2022).

3. In noticeable reply to US secretary of state Antony Blinken's meeting with Zelenskyy in Kyiv on April 23, Russian foreign minister Sergey Lavrov said on April 24 that maintaining support for Ukraine could raise tensions, which might then result in a situation in which Russia uses its entire arsenal of weapons in World War III (Reuters, 2022).
4. After the deployment of armed tanks by Germany to Ukraine, Putin stated that Russia would take decisive action only with its unique arsenal of nuclear weapons in response to any military provocation coming from outside the Ukrainian border (Wolfgang, 2022).
5. Putin warned on September 21 that Russia "would use all the tools at our disposal" to defend the country's territory. He also announced a partial mobilisation of conscripts at the time. At the same time, Putin has used constitutional referendums in the Donbas, Kherson and Zaporizhzhia to try to legitimise Russia's claims on Ukrainian territory, and the threat of nuclear weapons to consolidate such territorial annexations. (Arndt & Horovitz, 2022).

From these results, a few things stand out. First, nuclear weapons are indeed being used to deter other countries from helping Ukraine. The aim here is to preserve the status quo, which means not providing substantial military aid to Ukraine so that Russia will have less trouble invading Ukraine. This is a form of deterrence, as indicated in Figure 1. After all, a party is deterred from doing something, which does not change the status quo. In this case, an attempt is being made to deter western countries from intervening in Ukraine so that Russia will have an easier time. The status quo is being attempted to remain unchanged. Also, deterrence threats can be divided into two parts. The first part lays the groundwork for deterrence, drawing a red line through Russia, as it were. Here, direct military intervention is deterred. This was mainly evident in the first days of the invasion. Later, it is increasingly attempted to go a step further, by blocking aid to Ukraine and sanctions towards Russia through deterrence as well. This is the second part of Russia's deterrence.

Russia is also trying to force Ukraine to give up certain pieces of land. This is being done in a peculiar way. Russia attacks some territories, then a referendum is held to create certain legitimacy for a claim to those regions. Once this artificial legitimacy is created, Russia tries to bring these regions under the nuclear umbrella, in other words it tries to force Ukraine to give up the territories, because otherwise they will be attacked with nuclear weapons. This is a form of compulsion, as shown in the figure 2.1. After all, a country is forced to concede something, changing the status quo. In this case, an attempt is being made to get Ukraine to give up territories, thus changing the status quo.

After Russia's nuclear threats, it was clear for the West that a direct military intervention was not warranted. Western policymakers mirrored Russia's red line, categorically excluding the possibility of a direct military confrontation. For instance, mere hours after Putin's threat, US President Joe Biden stressed that American forces would "not be engaged in the conflict with Russia in Ukraine," and during the first month after the full-scale invasion, Western representatives reiterated this position almost every other day (Clara & Liviu) . Echoing Russian rhetoric, they repeatedly explained this non-intervention stance by citing escalation risks. Tellingly, the only context in which Western officials alluded to the possibility of a direct intervention was in case Russia used nuclear weapons – a scenario in which the deterrence threat would have already been executed. A clear dynamic can be seen where every time there was a proposal to intervene harder, a nuclear threat followed from Russia, leading to the withdrawal of the proposal. So the status quo is then maintained. So in this area, deterrence was successful. The second component of Russian deterrence, however, appeared to be less effective. Just as sanctions were put in place against Russia, Western nations continued to help Ukraine financially and to an extent militarily. NATO member states were eager to show that Russia's nuclear blackmail was ineffective, maybe to avoid setting a risky precedent. More than five dozen times throughout the first seven months of the conflict, Western officials confirmed ongoing or increased support for Ukraine. Such declarations were made at least twice a week, but more frequently, and they were especially common after Russian nuclear threats, such as those made in late February or late April (Vajriyati, 2022).

So in late September there was a combination of annexation of some Ukrainian territories, as well as Putin's threat that any attack on Russian territory will be met with any means that Russia can use, referring to nuclear weapons, among other things. So clearly the goal was to

force Ukraine to give up these territories. However, this proved unsuccessful. There has been no sign of withdrawal or acceptance from Ukraine after this form of compellence. Indeed, Ukraine even launched offensive attacks against Russia after the compellence threat. Only a few days after Russia's threat of coercion, Ukrainian troops took control of Lyman, Yampil, and broke through Russian lines along the Dnieper river (Reuters, 2022). Later, Kharkiv Oblast came under its jurisdiction as well. In October, there was also an attack on the Crimea Bridge (Kramer & Schwirtz, 2022). Although it might be assumed, it is not definite that Ukrainian soldiers were responsible. Given that the Crimea has been annexed for many years, this would demonstrate even more the futility of the threat of coercion. If the threat of coercion were to be successful, Ukraine would never dare to assault an area that has been ruled by Russia for such a long time. Thus, the goal of taking over the territories of Ukraine through compellence has not succeeded.

Analysis

The deterrence theory describes how countries are deterred by a nuclear power because the cost is too high to enter into a conflict with a country with nuclear weapons (Sagan & Waltz, 1995). If this theory is applied to the case, it is to be expected that countries will not readily intervene in Ukraine when Russia scares them off with nuclear threats. My results showed this to be largely true. Western countries did not dare to intervene militarily, or take actions that could lead to escalation. When proposals did come from Western leaders, they were immediately withdrawn following a nuclear threat in response from Russia. At the same time, deterrence was not completely successful. Support and sanctions were in full force, while this was also attempted to be stopped by Russian nuclear threats. So nuclear blackmail has its limits, so deterrence cannot be applied indefinitely during an invasion. So the theory is partly confirmed by my case and the hypothesis is partly correct.

Compellence is the other side of coercive diplomacy. In compellence, an opponent is forced to do something precisely. So the status quo must change to satisfy compellence. Within my theoretical framework, it was made clear that compellence is a lot harder to achieve because, among other things, it requires a lot more effort (Schaub, 2004). It also emerges from nuclear skeptic theory that nuclear weapons are not a good tool for compellence because the cost of using them is far too high. It is therefore not credible that the weapons will be used. Brinkmanship does not solve this problem either, because of the desire of leaders to maintain control, and not to end up in a situation where they no longer have control over the (potentially very severe) consequences. My results suggest that during the invasion of Ukraine compellence was not successful either. The threat of nuclear weapons to use them to try to take over the annexed territories was not successful by Russia. Ukraine continues to launch attacks and attempts to retake the territories. This also fits the theory of Sechser and Fuhrmann (2013). Therefore my first hypothesis has been tested and found partly correct, my second hypothesis has been tested and found to be correct.

Conclusion & Discussion

The deterrence-compellence relationship is a useful tool for developing and analysing the Russian coercive diplomacy strategy for dealing with crises. This conclusion ought to be considered carefully and seriously as a result. In dealing with interstate conflicts, where systemic misconceptions and misperceptions commonly lurk, a well-focused and coherent deterrence-compellence relation is a desirable tool. In this thesis, I analysed the role of nuclear weapons in the deterrence and compellence strategy of Russia. I examined every threat that emerged during the conflict in Ukraine and categorized them within the theoretical scope of nuclear deterrence as well as nuclear sceptic theory.. My findings demonstrated that during the invasion of Ukraine, nuclear deterrent threats were significantly more effective than nuclear compellence threats. It demonstrates some advantages of using a nuclear deterrence tactic when invading a state. Although it prevented other nations from intervening extensively, it has its limitations. The failure to successfully prevent financial and military assistance indicates that my initial hypothesis is only partially accurate.

A significant new perspective in political science is the discovery that Russia has utilised the threat of the potential use of nuclear weapons to discourage Ukraine from seeking and accepting external support. It increases the likelihood that future non-nuclear-weapon states may face comparable nuclear coercion, which could prompt those governments to develop their own nuclear arsenals in order to defend themselves against nuclear-armed opponents. Before other governments adopt Russia's offensive coercive policy, further research is required on the use of nuclear threats in this context. China might examine the Russia-Ukraine case and draw inspiration from it for a future Taiwan case. Therefore, there is a need for further understanding concerning this topic.

Because of the recent nature of my case, it was sometimes difficult to gather scholarly sources about my case. Fortunately, in terms of theory, I was able to build on a huge base of theory over the years on my topic. The times I used non-scientific sources were mainly about events during the war, without any interpretation of those events. I was able to do further analysis on that based on scientific sources. Content-wise, the point regarding compellence is difficult to substantiate because of the following point. During the war, Western countries also made it very clear that a nuclear attack by Russia on Ukraine is unacceptable and will be answered with unpredictable (?) actions. So it may be that compellence did not fail because of what follows from the nuclear sceptic theory, but is a form of extended nuclear deterrence.

In that case, this strengthens the nuclear deterrence component of my thesis, but it weakens the component of compellence. Further research will give more clarity about this issue.

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