

Ukraine's Denuclearization— A Matter of Security?

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In light of the recent Russian invasion of Ukraine and the looming threat of a nuclear war, this paper aims to revisit the reason that Ukraine gave up its nuclear weapons in 1994, which at the time was the world's third-largest nuclear arsenal. In contrast to the argument of liberal scholars who consider international norms a crucial factor in Ukraine's decision to denuclearize, this paper presents an alternative interpretation of the events and seeks to explain Ukraine's decision from a realist perspective. This approach, which is based on the theoretical framework of Scott Sagan's Security Model, analyzes Ukraine's decision based on the hypothesis that giving up its inherited nuclear weapons boosted Ukraine's security. Contrary to the common view of realist scholars who argue that Ukraine should have kept its nuclear weapons as a deterrent, this paper argues that Ukraine's inherited nuclear weapons did not provide credible deterrence and that the security threat from Russia at that time could have easily escalated if Ukraine had kept the weapons. Moreover, the findings suggest that the security assurances from the Budapest Memorandum enhanced Ukraine's security by allowing Kyiv to forge security cooperation with Western powers and NATO.

Introduction

On February 24, 2022, Russia invaded Ukraine in an effort to bring Ukraine's territory under its control. This marked the beginning of the largest armed conflict in Europe since World War II, leading to mass displacement of Ukrainians and an ongoing humanitarian crisis. Moreover, on September 30, 2022, Russia annexed four oblasts (administrative divisions) of Ukraine that it had partially captured during the invasion. This annexation was condemned by the vast majority of

143 states in a UN General Assembly resolution on October 12, 2022.¹ Eight years prior, Russia also defied Ukraine's sovereignty by illegally annexing the Crimean peninsula.² Considering Ukraine's inability to deter Russia from launching such attacks, it is striking that Ukraine used to have the world's third-largest nuclear arsenal.³ In this regard, realist scholars like John Mearsheimer have argued that the Russian attacks would not have occurred if Ukraine had kept its nuclear weapons.⁴

Given these developments, questions regarding Ukraine's decision to give up its nuclear weapons in 1994 have resurfaced. To explain the reasoning behind the decision, this research adopts the theoretical framework of Sagan's Security Model. It aims to analyze Ukraine's decision based on the hypothesis that denuclearization boosted Ukraine's security. Sagan argues that Ukraine's decision is "puzzling" from a security perspective, referring to realist arguments that Russia's expansive behavior and the ongoing conflict over Crimea seriously threatened Ukraine's independence and that nuclear weapons were the only rational response.⁵ In fact, the common view of realist scholars is that Ukraine should have kept its nuclear weapons for deterrence.⁶ However, this paper aims to present an alternative interpretation of the events and to prove that it is possible to explain Ukraine's decision using the Security Model.

The first part of this paper includes a brief historical background and a review of the related literature. The succeeding part introduces the theoretical framework based on Sagan's Security Model, which will then be applied to the Ukrainian case in the subsequent analysis. Ukraine's decision to give up its nuclear weapons will be evaluated based on three factors derived from the theoretical model: credibility of deterrence, security threat reduction, and security through cooperation. Finally, the conclusion offers an answer to the question of why Ukraine gave up its nuclear weapons, given the arguments posited in the paper.

Historical Background

After the collapse of the Soviet Union in 1991, Russia, Ukraine, Kazakhstan, and Belarus had Soviet strategic nuclear weapons located on their territory.⁷ Russia quickly reached bilateral agreements with Kazakhstan and Belarus on the dismantlement or elimination of the strategic nuclear weapons system. However, negotiations with Ukraine turned out to be more difficult, as Ukraine wanted to reach certain security goals before abandoning its nuclear arsenal.⁸ In total, Ukraine had a nuclear

legacy of 176 intercontinental ballistic missiles (ICBMs), 44 strategic bombers, about 2,200 nuclear warheads to arm these strategic delivery vehicles, and more than 2,600 tactical nuclear weapons.⁹ Ukraine's denuclearization process can be divided into two different phases. In the first phase, bilateral discussions between Russia and Ukraine took place but ended unsuccessfully due to Ukraine's security concerns. However, Ukraine signed the Lisbon Protocol on May 23, 1992, agreeing to take on the same obligations as the former Soviet Union under the Strategic Arms Reduction Treaty (START I).¹⁰ These obligations include preventing nuclear proliferation, refraining from building strategic missile defense systems, reducing potentially threatening conventional weapons, and reducing long-range missiles and bombers for nuclear weapons.¹¹

In the second phase, the US joined the negotiations in August 1993 and helped the parties reach an agreement on Ukraine's denuclearization by promoting nuclear non-proliferation and providing security assurances and economic benefits.¹² The trilateral negotiations resulted in a declaration signed by Ukrainian President Kravchuk, Russian President Yeltsin, and US President Clinton in Moscow on January 14, 1994. Finally, the Budapest Memorandum was signed on December 5, 1994, providing security assurances to Ukraine.¹³ On the same day, Ukraine joined the Nuclear Non-Proliferation Treaty (NPT) as a non-nuclear weapon state and the START I Treaty entered into force. By May 31, 1996, Ukraine had transferred the last of the nuclear warheads on its territory to Russia for elimination and has not developed nuclear weapons on its own since.¹⁴

Literature Review

Because of the special case of Ukraine being "born nuclear," several scholars have conducted research on Ukraine's decision to denuclearize, and most of them have focused on the idea of norms, Western integration, and the image of Ukraine. A well-known analysis is provided by Scott Sagan, who developed three models to understand why states build and give up nuclear weapons. He came up with the "Security Model," "Domestic Politics Model," and "Norms Model." For the Ukrainian case, Sagan applied the Norms Model. This is because he believed that international norms, like those set forth in the NPT, and the image of a good international citizen who is capable of integrating into the Western economic and security system were most important factors in Ukraine's decision.¹⁵ He argues that the strength of the NPT has led to new or

potential nuclear states—such as Iraq, Iran, and North Korea—being viewed as “rogue states,” and that there is “hardly a nuclear club whose new members would receive international prestige.”¹⁶ Ukrainian researcher Alina Shymanska agrees with Sagan and states that by joining the NPT, Ukraine could “show the world its commitment to democracy and peace.”¹⁷ Moreover, Lesya Gak, who worked in the Ukrainian Ministry of Foreign Affairs in, argues that Western integration was seen by the Ukrainian leadership as the best way to strengthen Ukraine’s independence.¹⁸

However, the majority of realist scholars argue that Ukraine made the wrong decision to denuclearize. One of the founders of Neorealism, Kenneth Waltz, believes that with more nuclear-armed states, war is less likely to erupt due to deterrence and a more stable balance of power. He argues that in the anarchic international environment, self-help is the main principle of action and states should provide for their own security by acquiring nuclear weapons.¹⁹ Neorealist scholar Mearsheimer elaborates that Ukraine’s nuclear weapons would have been the only reliable deterrence to Russian aggression. He argued back in 1993 that “Ukraine cannot defend itself against a nuclear-armed Russia with conventional weapons, and no state (...) is going to extend to it a meaningful security guarantee.”²⁰ He even stated that the “West foolishly made Ukraine give up its nuclear weapons.”²¹ Moreover, realist scholar Barry Posen contended in 1993 that the balance of power between Ukraine and Russia would be more stable if Ukraine kept nuclear weapons on its territory to prevent aggression from Russian nationalists.²² Ted G. Carpenter, senior fellow for defense and foreign policy studies at the Cato Institute, argued in light of the Crimea annexation in 2014 that it is highly improbable that Russia would have adopted such a risky course against a nuclear-armed country and that the disarmed Ukraine was made “vulnerable to coercion by its much stronger neighbor.”²³

Sagan follows the realist line of reasoning to contend that his Security Model is inappropriate to explain Ukraine’s denuclearization. According to him, Russia’s expansionist behavior, the ongoing tensions over Crimea, and the treatment of Russian minorities in Ukraine presented a substantial security threat to Ukraine that makes their decision to denuclearize “puzzling from the realist perspective.”^{24 25} In contrast, this paper utilizes his Security Model to provide an alternative to the Norms Model’s explanation and examine Ukraine’s denuclearization from a realist, security perspective. Before applying it to the Ukrainian case, a brief

discussion of Sagan's Security Model is presented in the following section.

Sagan's Security Model

Sagan's Security Model adheres to the neorealist perspective and therefore adopts the common security threat argument that in an anarchic international world, states must provide their own security.²⁶ This is reflected by strong states developing their own nuclear weapons and weaker states forging an alliance with a nuclear power. The latter is always tied to the question of the credibility of the extended deterrence guarantees, since the nuclear power would also fear retaliation if it were to respond to an attack on its ally.²⁷ Sagan argues that nuclear weapons can serve either as a deterrent against strong conventional military threats or as a means of coercion. However, he suggests that response to new nuclear threats is the most prevalent and plausible explanation for nuclear proliferation.²⁸ According to Sagan's Security Model, states denuclearize if they face a significant reduction in security threats or forge an alliance with a nuclear weapon state that offers extended deterrence, as illustrated by Figure 1.²⁹

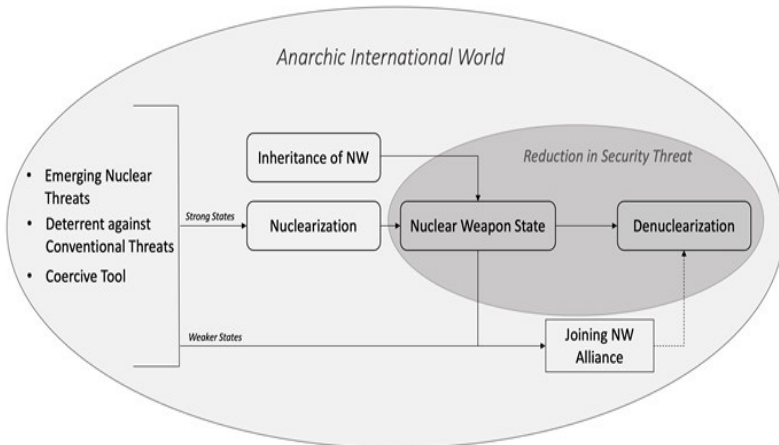


Figure 1: Sagan's Security Model

Sagan, who outlines the implications of each his models for the US nonproliferation policy in his article, recommends, based on the Security Model, that the US upholds its nuclear commitments to its allies. These should include a form of “first-use policy,” a commitment to also use nuclear weapons first against the common enemy and not only as a second strike in retaliation to an attack.³⁰ Moreover, he argues that it could be helpful, at least in the short-term, to enhance the security of potential proliferators through confidence-building measures or “negative security assurances”—the commitment that nuclear states will not use their weapons against non-nuclear states.³¹ However, the prerequisite of the Security Model implies that Ukraine would have been successful in terms of deterrence before its denuclearization. Therefore, it must first be examined whether or not the inherited weapons were a credible deterrent.

Analysis of Ukraine’s Denuclearization

Credibility of Deterrence

After inheriting Soviet nuclear weapons in 1991, Ukraine was faced with the fact that the strategic nuclear missiles were of little military value. The weapons that might have provided Ukraine with some real security against Russia were shorter-range tactical nuclear weapons.³² However, even before the Soviet Union collapsed, the Soviet military began to withdraw these tactical nuclear weapons from non-Russian republics and all tactical weapons were withdrawn from Ukraine by May 1992.³³ The missiles on Ukrainian territory were designed to strike the US rather than Russia and while they could have been modified to fulfill Ukraine’s security needs to deter Russia, this would have been a major challenge given the high economic costs.³⁴ Moreover, there was a lack of operational control and technical expertise. The inherited weapons were formally under the control of the Commonwealth of Independent States (CIS), the regional intergovernmental organization formed after the dissolution of the Soviet Union, which was de facto under the operational control of Russia.³⁵ German political scientist Andreas Umland points out that the launch codes of most of the nuclear weapons remained in Moscow,³⁶ while US scholar William C. Martel argues that Ukrainian government officials were aware of the technical challenges associated with establishing operational control.³⁷ Moreover, Ukraine’s Foreign Minister Anatoliy Zlenko pointed out that in 1992, because of technology

and control systems, Ukraine could not inherit nuclear forces that were not linked to the nuclear forces of Russia: “by being a nuclear power we would not have full independence.”³⁸ Thus, if Ukraine had decided to keep the Soviet nuclear weapons, their locations, capabilities, and vulnerabilities would have been known by Russia.³⁹ Furthermore, even if Ukraine had succeeded in bringing the weapons under control, it did not have the technical know-how or the necessary facilities to maintain the systems. Former senior Soviet defense official Vitaly Katayev has well documented that the Soviet nuclear components of the missiles were in fragile condition. Most of them needed to be replaced and were close to the limit of their operational lifetime. The inherited warheads had already reached a lifetime of eight of the generally permissible 12 years.⁴⁰ Overall, it would have likely taken some time before Ukraine had developed an operational nuclear capability. Through all these constraints in trying to build a survivable deterrent force, Ukraine would have gone through an initial period of substantial nuclear vulnerability and US political scientist Stephen E. Miller argues that this would have potentially raised “a preventive war temptation for Russia.”⁴¹ Furthermore, Ukraine could not have kept the nuclear weapons without damaging its relations with the US and other Western states. Both the US and the EU made the development of good relations with Ukraine conditional on its willingness to give up its inherited nuclear weapons.⁴² Based on this analysis, it can be determined that Ukraine had no credible deterrence against Russia before denuclearization. Moreover, keeping the nuclear weapons would have increased the security threat during the initial period of vulnerability, without the backing of a possible ally.

Security Threat Reduction

Besides the potential increased security threat resulting from keeping the nuclear weapons, it is also important to examine if there was a significant reduction in security threats at the time Ukraine agreed to denuclearize. If we look into the negotiation rounds, it is apparent that Ukraine’s utmost concern was its security—and not its image, as Sagan’s Norms Model suggests. In the failed bilateral negotiations with Russia, the problem was Moscow’s unwillingness to provide legitimate security guarantees for Ukraine.⁴³ International security scholar David S. Yost reports that Ukraine aimed for an international mechanism,

ideally a binding treaty that would enable Ukraine to enforce the agreed rules with Russia in the future.⁴⁴ On the other hand, Russia insisted on a formulation that would have guaranteed Ukraine's borders solely within the framework of the CIS which was unacceptable to Ukraine.⁴⁵

By the late 1990s, Ukraine and other CIS states had grown weary and suspicious of Russia acting as a hegemonic power within the CIS and began to challenge the power imbalance in the region.⁴⁶ It was at this point in the negotiations when the US joined the discussions and aimed to influence the Russian Foreign Ministry to agree to a formulation acceptable to the Ukrainians. Throughout the negotiations, the US offered Ukraine "security assurances" rather than "security guarantees", which would entail military commitment in case of attack—a commitment similar to what the US extends to members of the NATO alliance.⁴⁷

In the final version of the signed Budapest Memorandum, the US, the UK, and Russia committed to respecting Ukraine's independence, sovereignty, and existing borders, in conformity with the principles of the Helsinki Final Act, implemented by the Conference on Security and Co-operation in Europe (CSCE⁴⁸) in 1975.⁴⁹ Moreover, the three states agreed to "refrain from threat or use of force against the territorial integrity or political independence of Ukraine,"⁵⁰ and to use none of their weapons against Ukraine except in self-defense or in accordance with the UN Charter. The signatory states agreed to "refrain from economic coercion designed to subordinate the exercise by Ukraine of the rights inherent in its sovereignty, in accordance with the principles of the CSCE Final Act."⁵¹ Additionally, the positive and negative security assurances provided to all non-nuclear weapon states parties to the NPT were restated.⁵² It is important to note that the Budapest Memorandum is not legally binding; rather, it is a political commitment.⁵³ Given the Russian annexation of Crimea in 2014 and the Russian invasion, which began on February 24, 2022, many argue that the Budapest Memorandum has failed, since it is apparent that Russia undermined the assurances of the memorandum. However, while Ukraine does not enjoy the guarantee of military support extended to a NATO member, the US and the UK's military expertise and financial support has turned the country into a modern fighting force, as will be elaborated in the next section, which deals with another element of Sagan's Security Model—that states denuclearize if they join an alliance with a nuclear-weapon state.

Security through Cooperation

At first glance, it seems that the prospect of joining an alliance with a nuclear-weapon state was not a huge factor in Ukraine's decision to denuclearize, since it did not join NATO or any other military alliance before it made the decision to give up its inherited nuclear weapons. However, from a security perspective, the prospect of closer ties with the US and the West post-denuclearization clearly played a crucial role in the decision. While Sagan argues that the international norms and the image of a good international citizen were important factors for closer ties with the West, it is more likely that security was the driving factor for both sides. The independence of Ukraine transformed Europe's geopolitics and Ukraine's reintegration into Russia or a Russian-dominated security system would have had a significant impact on Europe.⁵⁴ Therefore, Ukraine's effort to regulate its relations with Russia was welcomed by the Western powers. US political scientist F. Stephen Larrabee argues that the core of "Kyiv's Westpolitik has been an effort to develop close ties to the United States"⁵⁵ because the US was deemed powerful enough to counter Russia's political and military weight. Ukraine's denuclearization process was tightly linked to the emergence of an independent conventional defense apparatus and the emergence of extensive US-Ukraine military and defense contacts that improved Ukraine's security.

Of the former Soviet republics, Ukraine had developed the most extensive program of defense contacts. Since signing the Budapest Memorandum in 1994, the US and Ukraine have taken important steps to expand and institutionalize their relations.⁵⁶ Although the memorandum did not include legally binding security guarantees, the US has spent money and expertise on training Ukrainian armed forces. For instance, the US Department of Defense assisted Ukraine in implementing defense and security reforms and promoted the development and implementation of defense policy and strategy.⁵⁷ Among other things, the US has sent Ukrainian officers to US military schools under the International Military Education and Training (IMET) program, which provides advanced training and professional development in military arts and sciences.⁵⁸ Similarly, the EU made the development of relations with Ukraine conditional on its willingness to sign the NPT. The EU's primary concern was nuclear safety, and Ukraine's initial refusal to give up its nuclear weapons slowed the development of ties, which were mostly frozen until 1994.⁵⁹ Security policy expert Gary Espinas from

the US argues that “European stability and prosperity are best served by a Ukraine that is democratic, secure in its borders, and integrated into both European and Euro-Atlantic institutions.”⁶⁰ Similarly, the US believed that Ukraine can contribute to the security of Europe.⁶¹

Since 1994, Ukraine has increasingly favored membership in NATO in the belief that the alliance will strengthen the country’s security and that Ukraine-NATO cooperation has significantly increased.⁶² In 1994, Ukraine signed NATO’s Partnership for Peace (PfP) agreement, which aims to promote reforms, increase stability, and enhance security relationships among NATO and partner countries.⁶³ Ukraine was among the most active participants in the PfP exercises and the first CIS state to join the partnership.⁶⁴ Moreover, NATO and Ukraine agreed on a “distinctive Partnership” in 1997 and established the NATO-Ukraine Council.⁶⁵ A NATO information office opened in Kyiv in May 1997, and a Ukraine liaison officer was deployed at the headquarters of NATO’s Allied Command Operations (SHAPE).⁶⁶

Overall, Ukraine’s security cooperation with NATO, the US, and the EU immediately after it gave up its nuclear weapons shows that security considerations were a driving factor in the decision to denuclearize. Western countries made cooperation conditional on Ukraine’s denuclearization, and the military and defense contacts with them improved Ukraine’s security. In particular, the US, as Russia’s powerful counterpart, was seen as an important partner that provided Ukraine with financial support and military expertise.

Conclusion

The objective of this paper was to explain why Ukraine gave up its nuclear weapons in 1994 based on the hypothesis that enhanced security was the driving factor in Kyiv’s decision. In the first part of the paper, the historical background was outlined, followed by a literature review. The latter part was devoted to introducing Sagan’s Security Model and its application to Ukraine’s decision to denuclearize.

In Sagan’s Security Model, states denuclearize if they are faced with a significant reduction in security threats or join an alliance with an extended deterrence. The analysis shows that the inherited nuclear weapons did not actually provide Ukraine with a credible deterrence. In fact, the security threat of Russia may even have increased if Ukraine had kept the weapons during the initial period of vulnerability, without

being backed by a potential ally. Furthermore, despite not being legally binding, the security assurances included in the Budapest Memorandum increased the security of Ukraine and opened doors to security cooperation with the Western powers and NATO. Moreover, the alternative explanation—that states denuclearize if they join an alliance—also does not fittingly apply to the Ukrainian case. Despite increased military cooperation, these partnerships were not strong enough to build a credible extended deterrence and therefore were not a sufficient reason to give up nuclear weapons under Sagan’s model. For this to be the case, Ukraine would have had to join an alliance that guaranteed extended deterrence and a “first-use policy” such as NATO.

Based on the above analysis, this paper proves the stated hypothesis that Ukraine’s decision to give up its inherited nuclear weapons in 1994 increased the country’s security, and answers the question of how Ukraine arrived at the decision to denuclearize. Since this paper only focuses on the realist security perspective and views states as black boxes, some potentially important dimensions relevant to the decision (e.g., economic factors) were not elaborated upon.

In summary, the analysis provides an alternative interpretation of Ukraine’s decision to denuclearize. By using Scott Sagan’s Security Model, which he himself calls “puzzling” to describe Ukraine’s decision, this analysis shows that the negotiations on the denuclearization were motivated by Ukraine’s security concerns. Given Russia’s annexation of Crimea in 2014 and Russia’s invasion in February 2022, one should be cautious about blaming Ukraine for being naïve by giving up the inherited nuclear weapons in the past. An analysis of past decisions with knowledge of current events should be applied judiciously.

Notes

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