

2020

## WHY NUCLEAR DISARMAMENT IS A UTOPIA

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### Recommended Citation

CHAVEZ, YOVANI EDGAR (2020) "WHY NUCLEAR DISARMAMENT IS A UTOPIA," *International Journal of Security Studies*: Vol. 2 : Iss. 1 , Article 6.

Available at: <https://digitalcommons.northgeorgia.edu/ijoss/vol2/iss1/6>

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## WHY NUCLEAR DISARMAMENT IS A UTOPIA

### Introduction

Centuries ago, ancient literature told the legend of the ring of Gyges, a ring capable of making its owner invisible to act with no consequences and be able to seduce both just and unjust men to commit injustice.<sup>1</sup> It was so powerful that it transformed a mere shepherd into a mighty king. In the same way, governments around the world have been seduced to develop their own nuclear-weapon ring of Gyges to obtain maximum power and guarantee survival.

Because the international community has tried to prevent wars to no avail, it is imperative for states to develop mechanisms to protect themselves. In that regard, nuclear weapons are the best guarantee of survival. During World War II, the international community saw how the United States used nuclear weapons to defeat Japan. After that event, the number of states with nuclear weapons has gradually escalated. As a result, the world has tried to prevent the use of nuclear weapons through extensive legal frameworks, sanctions, and counter operations. It is almost impossible to stop revisionist states from acquiring their own nuclear weapons to defend themselves. Likewise, nuclear-armed states will continue enhancing their triad, dyad or monad nuclear platforms.<sup>2</sup> Consequently, there is no permanent peace and no single state can blindly trust in the intentions of other states.

### The right of self-defense within an anarchical international system

There will not be enduring peace because the international system is mainly anarchical. As a result, states need to defend themselves. Many realist theorists emphasize that the international system is anarchical because there is no central government to rule all the nations of the world.<sup>3</sup> From that perspective, anarchical does not mean chaos. It means that there is not an absolute ruler among states to judge and determine what it is just or unjust. In other words, there is not an emergency telephone number to use if other states attack. Even if there were a central government, many states would not tolerate that kind of rule. Consequently, wars will be always inevitable.

To some degree, international organizations can prevent states from abusing the present international system; nonetheless, international organizations cannot prevent wars among states because international organizations are far from perfect. Moreover, international organizations can have their own particular perspectives, which can be different from what states consider to be right. For instance, during the Korean War, China rejected a 1951 United Nations cease-fire resolution because Mao wanted to cross the thirty-eighth parallel first before negotiating for a cease-fire.<sup>4</sup> Similarly, while China, France, and Russia considered that the Security Council Resolution 1441 (2002) did not authorize military actions against Iraq in 2003, the United States and Britain considered that military actions were necessary to enforce compliance with the Security Council Resolutions 678 (1990), 687 (1991), and 1441 (2002), which prohibited weapons of mass destruction in Iraq and demanded the restoration of peace in that state.<sup>5</sup>

On the other hand, even if the international organizations agreed on attacking or defending a particular state, Article 51 of the United Nations Charter allows the individual or collective right of self-defense among states in case of armed attacks.<sup>6</sup> As a result, states do not necessary need the permission of an international organization to defend themselves. As a result, it is possible that states will perform military operations to neutralize enemy nuclear projects. For example, in 1980 Iran conducted Operation Scorched Sword to destroy the Osirak nuclear reactor in Iraq.<sup>7</sup> Likewise, in 1981 Israel conducted a preemptive strike against the same site to

disrupt Iraqi plans to acquire nuclear weapons under the guise of nuclear energy research for peaceful purposes.<sup>8</sup> Later, in 2007, Israel conducted another attack against a Syrian nuclear reactor.<sup>9</sup>

Although there is disagreement about what an armed attack is, states can defend themselves before being attacked when it comes to nuclear weapons. However, concepts such as grey zone operations and hybrid warfare are continually changing what the international community perceives as armed attacks.<sup>10</sup> For instance, Russia and China use economic and political warfare, information campaigns, and a combination of conventional and unconventional military tactics, which make military operations ineffective.<sup>11</sup>

### **The power of technology**

Technology has the power of enabling preeminence against potential nuclear-armed states. Primarily, cyberwarfare can provide the needed platform to avoid detection and enhance plausible deniability to disrupt enemies' nuclear-weapon programs. For instance, although no state has officially recognized the 2010 Stuxnet as its own creation, many scholars around the world still study how this computer malware ruined the Iranian program to develop enriched uranium.<sup>12</sup> Later in 2015, North Korean hackers accessed data in a nuclear facility in South Korea.<sup>13</sup> Similarly, in 2018 the Department of Homeland Security and the Federal Bureau of Investigation alerted of Russian cyber-attacks against nuclear facilities in the United States.<sup>14</sup> Although there is not real evidence of those cyber activities, high-tech countries will use cyberwarfare to perform sophisticated defensive and offensive cyber operations in years to come.

Secondly, ever-increasing developments in hypersonic weapons can help states enhance their nuclear-weapon platforms, which can potentially neutralize the effectiveness of nuclear deterrence theory. As of 2021, nuclear-weapon states such as the United States, China, and Russia have been developing hypersonic weapons. It could be argued that nuclear-armed hypersonic weapons cannot really affect nuclear deterrence theory; however, hypersonic technology can indeed revolutionize modern warfare.<sup>15</sup> For instance, hypersonic weapons, which can surpass speeds of Mach 5, are sought-after technologies because they can neutralize Anti-Access/Area Denial platforms, reduce enemy reaction time, and avoid tracking.<sup>16</sup>

Thirdly, while there is no standard definition of tactical nuclear weapons, they can be defined as small nuclear weapons for limited strike based on their low yield and short range.<sup>17</sup> Nuclear-armed states have many variations of tactical nuclear weapons. It is worth noting, states like China, France, Israel, India, and North Korea allegedly possess nuclear weapons which can be considered tactical, based on American and Russian military concepts.<sup>18</sup> Tactical nuclear weapons are important for nuclear-armed states because they provide a new set of considerations regarding modern warfare. For instance, according to the 2018 Nuclear Posture Review, Russia developed a tactic known as "escalate to de-escalate." In theory, Russia could first escalate a military conflict with the use of tactical nuclear weapons against a NATO ally; and later, de-escalate the attack to obtain favorable conditions for Russia.<sup>19</sup> In other words, the fear of more powerful nuclear attacks will set the conditions for the surrender of Europe to Russian objectives.

Nevertheless, if Russia employed tactical nuclear weapons in the battlefield against a NATO ally, would the United States counterattack with a massive nuclear strike on Russian soil or conduct a limited strike on disputed territories or send military ground forces that could be annihilated with Russian nuclear weapons?<sup>20</sup> As a result, tactical nuclear weapons are a potential game changer. It is not surprising that nuclear-armed states possess different platforms for

tactical nuclear weapons. For instance, military platforms such as the McDonnell Douglas F-15E Strike Eagle, the General Dynamics F-16 Fighting Falcon A/B/C/D, and the Panavia Tornado IDS are capable of carrying tactical nuclear weapons like the B61-3 that has a yield ranging from 0,3 to 170 kilotons.<sup>21</sup> Similarly, the U.S. Air Force is working on the Long Range Standoff Weapon program to upgrade its air-launched cruise missile used by the Boeing B-52 Stratofortress.<sup>22</sup> Likewise Russia, which already has different variations of tactical nuclear weapons such as guided bombs, air-to-surface missiles, and air-to-air missiles is also improving the Sukhoi Su-57 as a future platform for tactical nuclear weapons.<sup>23</sup>

Moreover, developments in ballistic and cruise missile submarines provide more advantages for modern warfare. In that regard, many theorists believe that submarines with nuclear weapons are the best platform to guarantee stealth and survival in potential nuclear wars.<sup>24</sup> In consequence, the United States has deployed nuclear submarines with tactical nuclear weapons to deter Russian nuclear weapon operations.<sup>25</sup> Not surprisingly, Russia is developing the Status-6 Oceanic Multipurpose System or Poseidon, which is a drone submarine armed with tactical nuclear weapons that not only can destroy naval bases, ports, and coastal cities, but also cause radioactive contamination.<sup>26</sup> It could be argued that there has been a substantial reduction of tactical nuclear arms; however, nuclear-armed states will continually enhance this kind of nuclear weapon.<sup>27</sup>

Fourthly, there is a significant relationship among nuclear weapons, missile delivery systems and satellite networks that makes nuclear-armed states very formidable adversaries. As of 2021, the United States, Russia, and China are the only nuclear-weapon states that have developed Anti-Satellite Weapons (ASAT), which have the potential to disrupt and delay early warning satellite systems, counter future nuclear weapon platforms in space, and degrade anti-ballistic missile infrastructures.<sup>28</sup> While this may be true for now, in decades to come, more nuclear-armed states will try to develop similar capabilities to enhance their nuclear weapon platforms. For instance, not only is India working on the Global Satellite (GSAT) to enhance its military communication, but also its Radar Imaging Satellite (RISAT), CARTOSAT, Hyperspectral Imaging Satellite (HySIS), and RESOURCESAT to improve its ISR capabilities in order to deter China as a hostile nuclear-armed state.<sup>29</sup> Because of these benefits, nuclear-armed states need to improve satellite technology if they want to succeed against another nuclear-armed states.

Fifthly, electromagnetic pulse (EMP) has also revolutionized modern nuclear warfare because of the effects related to High-Altitude Electromagnetic Pulse (HEMP). High-Altitude Electromagnetic Pulse can be caused when a nuclear weapon is detonated at high altitude, which generates nuclear energy consisting of gamma rays and Compton electrons.<sup>30</sup> In 1962, the United States conducted the experiment known as Starfish Prime, which was a nuclear explosion in space. This experiment contributed a greater understanding of the effects of electromagnetic pulses, because Starfish Prime caused disruption of satellites, radar, navigation systems, and electronic components.<sup>31</sup> Therefore, nuclear weapons can cause a new variety of indirect and direct effects on enemy defensive platforms. According to the Electromagnetic Pulse Commission, nuclear-armed states such as North Korea, the United Kingdom, France, India, Israel, and Pakistan will work on EMP.<sup>32</sup> As a consequence, nuclear weapons will affect enemy defensive satellite infrastructure and electronic military systems in decades to come.

## Low Social Capital Among States

Social capital is a variable that has to do with the level of trust and commitment to shared objective among organizations, people or networks.<sup>33</sup> When it comes to social capital among nations, historical records have highlighted that states should not totally trust other states regarding nuclear weapons. In that regard, it is easy to criticize the use of nuclear weapons during World War II; nonetheless, given those circumstances, any dominant state involved in that war would probably have taken the same path to develop its own nuclear weapons and use them when necessary. If nuclear weapons represent the maximum guarantee of power and success for a nation, who would not want that kind of power? It is not surprising that despite being a key ally for the United States during World War II, the Soviet Union used a network of spies to steal nuclear weapon secrets from the Manhattan Project.<sup>34</sup>

Moreover, even allies can disagree when it comes to nuclear weapons. For instance, the United States and the United Kingdom initially cooperated to develop nuclear weapons. Nonetheless, the McMahon Act of 1946 banned any official cooperation between the United States and the United Kingdom. As a result, the United Kingdom had to conduct its own first nuclear test in Monte Bello in 1952.<sup>35</sup> Similarly, despite being a NATO member, France did not receive the expected help from the United States and the United Kingdom to develop nuclear weapons during the 1950s.<sup>36</sup> After that, other states such as China, India, and Pakistan have similarly developed their nuclear platforms, in spite of international concern.

Consequently, it is not a matter of just or unjust use of nuclear weapons. It is a matter of guaranteeing the survival of a nation at any cost when facing another nuclear-armed state or trying to survive a future war. For example, the U.S. military seriously considered targeting enemy forces with nuclear weapons during the Korean War and the Vietnam War.<sup>37</sup> It is not surprising that when humanity realized the colossal power of Little Boy and Fat Man during World War II, many desired to have their own platform for nuclear weapons.

As of today, there is an estimated nine states with nuclear weapons capabilities.<sup>38</sup> While this may be true, it is probable that in decades to come more states will develop their own nuclear weapons through the employment of covert and overt mechanisms. It worth noting that warfare theorists believe that states with nuclear power for civil purposes can use that platform and knowledge to gradually weaponize it.<sup>39</sup> Although it is difficult to establish a scientific model to predict how and when a state will develop nuclear weapons capabilities, the pattern shows a tendency to increase in the long term.

In fact, no state can totally trust another state. For instance, in 1941, Germany conducted a surprise conventional attack against the Soviet Union despite both having a non-aggression pact.<sup>40</sup> Likewise, in 1944, Japan attacked Pearl Harbor without properly declaring war against the United States.<sup>41</sup> Later in 1962, the Soviet Union covertly placed nuclear warheads in Cuba to counter American nuclear weapons in Turkey.<sup>42</sup> It could be argued that those deceitful acts were something from the past. Rather, history has highlighted that states can eventually pay painful consequences, if they put their trust in the intentions of other states. For instance, in the 1990s, Ukraine gave up thousands of nuclear weapons on behalf of enduring peace.<sup>43</sup> The international community believed that there will be an eternal peace between Russia and Ukraine. Nonetheless, in 2004, Russia secretly annexed the Peninsula of Crimea, which surprised the international community due to the nature of that hybrid operation. Nowadays, after the annexation of Crimea, many scholars still wonder if Russia would have dared to seize Crimea if Ukraine had had nuclear weapons as a deterrent.<sup>44</sup>

### **Partial compliance of legal framework**

The 1968 Non-Proliferation of Nuclear Weapons Treaty (NPT) has the commitment of five nuclear-weapon states to not transfer knowledge or technology related to nuclear weapons to non-nuclear-weapon states. They also agreed to nuclear disarmament and peaceful use of nuclear power.<sup>45</sup> In spite of the creation of the this treaty, India in 1974 and Pakistan in 1998 successfully tested nuclear weapons.<sup>46</sup> Similarly, Israel allegedly conducted a nuclear test in 1979, which is known as the Vela Incident.<sup>47</sup> Later, North Korea used Article X of the NPT to abandon this treaty in 2003.<sup>48</sup> Until now, North Korea has conducted six nuclear tests.<sup>49</sup> Lately, Iran is trying to do the same by covertly developing nuclear weapons, which made the United States abandon the Joint Comprehensive Plan Of Action (JCPOA) in 2018.<sup>50</sup> As a result, the Non-Proliferation of Nuclear Weapons Treaty has not successfully restricted access to technology and knowledge related to nuclear weapons. To make matters more complicated, no single nuclear-weapon state has totally complied with Article VI of the 1968 Non-Proliferation Treaty of Nuclear Weapons to abandon the current nuclear arms race and get rid of nuclear weapons.<sup>51</sup> Although the Non-Proliferation Treaty of Nuclear Weapons highlights the commitment to disarmament as one of its three main components, it is understandable that no single nuclear-weapon state will guarantee its survival based on mere paperwork.

Secondly, the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT) stipulates the prohibition of nuclear testing.<sup>52</sup> Nevertheless, nuclear-weapon states have not fully accepted this treaty. For instance, while nuclear-weapon states like United Kingdom, France, and Russia have signed and ratified the treaty, the United States and China have not ratified it. Likewise, Israel as a state with presumable nuclear weapon capabilities has imitated this posture by not ratifying this treaty. Additionally, despite being a nuclear-armed states, Pakistan, India and North Korea have never signed or ratified the Comprehensive Nuclear-Test-Ban Treaty.<sup>53</sup> Consequently, banning of future nuclear testing is still far from being accomplished.

Thirdly, the 2017 Treaty of Prohibition of Nuclear Weapons (TPNW) is a legally binding document, which entered into force on January 22, 2021 to prohibit nuclear weapons in the world.<sup>54</sup> In other words, this treaty has the objective of making the world free of nuclear weapons. As of 2021, 50 states have signed and ratified this treaty. Nonetheless, the five nuclear-weapon states recognized by the Non-Proliferation Treaty of Nuclear Weapons and NATO members have rejected this treaty.<sup>55</sup> It is obvious that states with or under a nuclear weapon umbrella will not surrender their power and jeopardize survival based on mere good intentions.

This issue will be an important precedent for international systems as they relate to nuclear weapons. If the United States, Russia, China, France, and the United Kingdom, as members of the Non-Proliferation Treaty of Nuclear Weapons, claim that they do not have to comply with the 2017 Treaty of Prohibition of Nuclear Weapons because they have never signed it, it is probable that this conduct will validate the posture of Israel, Pakistan, and India that have never signed the 1968 Non-Proliferation of Nuclear Weapons Treaty. Moreover, this behavior will also validate the posture of India, Pakistan, and North Korea related to the 1996 Comprehensive Nuclear-Test-Ban Treaty because they will not have to comply with it based on the fact that they have never signed this treaty, either. Needless to say, North Korea will reaffirm its decision to abandon this treaty in 2003.

Fourthly, the 1987 Intermediate-range Nuclear Forces (INF) Treaty proposed the elimination of ground-based ballistic and cruise missiles able to carry nuclear weapons from 500

to 5,500 kilometers.<sup>56</sup> This treaty was signed between the United States and the Soviet Union. Nonetheless, the United States in 2019 withdrew from the INF because of reiterated violations by Russia.<sup>57</sup> As of 2021, NATO and the United States have rejected Russian offers to stop the deployment of its 9M729 missile system, which can jeopardize NATO security.<sup>58</sup> Despite some considerations, the 1987 Intermediate-range Nuclear Forces Treaty did not consider air or sea-based missile platforms, which opened the door to ever-increasing developments in missile delivery platforms for nuclear weapons.

On the other hand, there is an increasing disagreement among nuclear-weapon states in terms of how long the 2011 New START (Strategic Arms Reduction Treaty) should be extended because this treaty can affect their security and their nuclear-weapon platforms.<sup>59</sup> Although this treaty intends to reduce American and Russian strategic nuclear warheads until 2026, Russia and the United States have conflicting arguments about the inclusion of tactical nuclear weapons and the unwillingness of China to participate in that treaty.

### **Miscalculated state narratives**

In today's world, nuclear weapons can protect what states believe is important based on their narratives. Throughout history, nations have experienced different events that have shaped how they perceive the environment and how they react. Considering how Russia has faced successive invasions from the Mongols in 1237, the Polish-Lithuanian Commonwealth in 1569, the Swedish Army in 1700, the Napoleonic Army in 1812, and the Nazi Germany in 1941, it is easy to understand why Russia needs to intervene when it perceives its security is in danger.<sup>60</sup> A case in point is how Russia intervened in South Ossetia in 2008 and annexed the peninsula of Crimea in 2014 before Georgia and Ukraine could join NATO through the Membership Action Plan. NATO expansion is perceived by Russia as a form of encroachment.<sup>61</sup>

Similarly, by the 1800s, the United States embraced the ideology known as Manifest Destiny, which contributed to its expansion in territories controlled by Mexico, Spain, and Britain.<sup>62</sup> Later, Manifest Destiny set the stage for the Monroe Doctrine and the Roosevelt Corollary, which rejected any intervention by European monarchies in the Americas and provided justification for the annexation of Hawaii based on national security considerations.<sup>63</sup>

On the other hand, China's narrative highlights the period known as the century of humiliation, when hegemonic powers like the British Empire, France, Czarist Russia, the Imperial Japanese, and different international coalitions dominated China.<sup>64</sup> Consequently, China's narrative will provide the logic to develop nuclear weapons to deter future invasions. It is not surprising that China is covertly militarizing the South China Sea despite international concerns and accusations from many countries.<sup>65</sup> In fact, China is actually developing a massive anti-access/area of denial in the South China Sea to deter what China perceives as external aggressions.<sup>66</sup>

Like Russia's narrative, China's narrative justifies the development of nuclear deterrence to protect the state and its interests. In the same way, Israel will not allow another Holocaust. Along these lines, it is alleged that Israel maintains a nuclear ambiguity, which does not confirm or deny the possession of nuclear weapons.<sup>67</sup> Similarly, it is clear that the United States will never allow another Pearl Harbor or another September 11 attack. This is why it is important to analyze the history and narratives of countries to understand why nuclear-armed states will continually enhance their nuclear weapons platforms to guarantee their protection and survival.

## **Flawed nuclear deterrence theory**

It could be argued that nuclear deterrence theory can prevent wars against states with nuclear weapons capabilities. However, nuclear weapons cannot deter states from fighting conventional or irregular wars. For instance, during the Cuban Missile Crisis of 1962, the United States and the Soviet Union were on the brink of starting World War III. Although this event did not end in war, the potential fight among nuclear-weapon states could have been fatal. Similarly, in 1999, despite having nuclear weapons, India and Pakistan fought each other because of security concerns in the Kashmir Valley.<sup>68</sup> As of today, military tensions are still present. For instance, in 2020, Chinese and Indian military forces clashed in the Galwan Valley region, which highlights worrying security concerns due to the fact that China and India are states with a combined estimate of 430 nuclear warheads.<sup>69</sup>

Although states with nuclear weapons like India and China have affirmed their compromise with a no-first-use policy. This policy has the goal of preventing the use of nuclear weapons as a first choice. Nonetheless, many states with nuclear weapons have refused to adhere to any policy that could affect their decision-making process to attack other states if necessary. For instance, the United States maintains a flexible policy regarding the use of nuclear weapons for national security reasons.<sup>70</sup> Nevertheless, no-first-use policy is mere paperwork, because no state will trust in other states' decision-making process to use nuclear weapons.

## **Conclusion**

In summary, nuclear disarmament is a utopia because there is no such a thing as enduring peace or total trust in another state. Because of the anarchical international system, there is no central authority to control the decision-making process of states. Moreover, international organizations cannot deter powerful states from attacking other nations because any state could find reasons to protect its integrity and guarantee its survival. Many states have not totally complied with the current legal framework because they need to rely on cutting-edge technology to enhance nuclear weapons. Similarly, low social capital and miscalculated state narratives increase mistrust among states. As a result, nuclear disarmament is a utopia because powerful states would like to keep their own nuclear-weapon ring of Gyges. If that legendary ring had the power to transform a mere shepherd into a mighty king, it is possible that a nuclear-weapon ring could take a state from being defenseless to being able to protect itself. Therefore, why would a nuclear-armed nation be seduced into living in a mindset that still believes in nuclear disarmament?

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