The Nuclear Bomb: A Necessary Evil

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If humanity had a time machine, would we stop the nuclear bomb from ever being created? Perhaps someone could erase all knowledge of humankind's most lethal and destructive weapon. Maybe this way, humanity would not live in an unceasing shadow of violence, fear, and total annihilation. The only problem is that time machines do not exist. Today, governments face the overwhelming task of adapting to a world equipped with the knowledge of nuclear weapons. Many question the role of nuclear arms and argue that these weapons should be swiftly and permanently abolished. While this response appears simple, many factors make the issue of atomic weapons more complex and difficult to manage. There are strong arguments on both sides, but ultimately, not banning nuclear weapons proves as a more comprehensive and logical solution to the threats that these weapons present in the 21st century. Nuclear weapons should not be banned for two reasons: primarily, complete disarmament efforts would be ineffective and hazardous, and secondly, these weapons sustain the global power balance, thus maintaining peace.

SEE

In the early hours of the morning, an American B-29 bomber glides across the skyline of Hiroshima, Japan. It is August of 1945, and the balmy rays of sunlight have just begun to stream through the city. It is just like any other day: early risers soak in the calmness of the morning while children rush to school and adults prepare for work. Nobody could have guessed what

would happen next. Suddenly, a bright flash of light accompanied by an incinerating heat shatters the calm facade of the morning. Buildings crumble, a mushroom cloud materializes in the air, and terror pervades the city streets. Death does not discriminate between babies, soldiers, women, men, or children. A survivor recounts that his "beloved city of Hiroshima suddenly became desolation, with heaps of ash and rubble, skeletons and blackened corpses" (Greenpeace International). This was the first time that a nuclear weapon had been used in combat, and it was not the last, as three days later, the United States dropped another nuclear bomb on the city of Nagasaki. Although no other nuclear bombs have been used in combat since World War II, many are still terrified of the threat that these weapons pose to human life and the global maintenance of peace. This sentiment was especially evident in the Cold War, as people in both the Soviet Union and the United States feared that a bomb could be dropped at any second due to the tension that existed between the two superpowers. Many wonder why a bomb was never utilized in the Cold War, and this is due to a principle commonly referred to as MAD, or Mutually Assured Destruction. Mutually Assured Destruction means that if one country were to drop a nuclear bomb on another country, the affected country would simply retaliate by dropping a bomb on the offending country. As a result, both regions would be left in shambles physically, economically, and administratively. This principle prevents the frequent and unnecessary use of nuclear arms.

Nuclear bombs obliterate everything within a certain radius, including trees, plants, and wildlife. This is only the beginning, however, as atomic weapons leave nuclear fallout, which can make its way into soils and waterways for years to come. Nuclear fallout is comprised of small radioactive particles that emit harmful gamma rays capable of altering and destroying the cells of all living organisms. These radioactive particles are the sources of deadly cancers, which

can eventually kill people who manage to survive the initial blast. Additionally, these particles migrate into the atmosphere, creating radioactive "hotspots" that can be observed thousands of miles away from the initial site. Radioactive particles can last for days and, in some cases, years. These high radiation levels are attributed to less than 100 pounds of Uranium-235, which has been concentrated into its purest form. The bomb releases massive amounts of energy by shooting a neutron at the highly unstable and fissionable sample of U-235, causing a chain reaction and an enormous explosion.

Although this destructive technology is available to several powerful countries, there have been several efforts towards non-proliferation. The Non-Proliferation movement first gained traction during the Cold War, as citizens and policymakers alike sought to limit the spread of nuclear technology, materials, and knowledge. Those in favor of Non-Proliferation seek to reduce the amount of nuclear weapons globally and prevent entities without prior access to these weapons from attaining them. Several groups and treaties have been involved with Non-Proliferation efforts, for example, the United Nations has aimed to eliminate nuclear weapons since 1946 (United Nations). Since then, Non-Proliferation efforts have only increased, as more and more countries have begun to adopt nuclear technology. Currently, nine countries are confirmed to have nuclear weapons. As this knowledge spreads, many fear the devastating effects of a terrorist group's possession and usage of nuclear weapons. After 9/11, it was presumed that the violent terrorist group "Al-Qaeda" had access to nuclear bombs and planned to use these weapons to inflict mass destruction and brutality upon Americans. While no nuclear weapons were ever used in a terrorist attack on the United States, the widespread paranoia about an imminent attack served as a reminder of the danger of nuclear weapons and the need for global Non-Proliferation efforts. More recently, the UN has adopted "The Pact for the Future,"

which "contains the first multilateral recommitment to nuclear disarmament in over a decade" (United Nations). This pact, adopted in 2024, strives for the eventual elimination of all nuclear arms and works to uphold peace by reducing the threat of nuclear war. The United States was one of 193 countries to sign this pact. Through agreements such as "The Pact for the Future," it is hoped that countries will continue the reduction of their nuclear arsenals until the threat of nuclear war is virtually inconceivable.

The United States Government allocates billions of dollars each year to nuclear technology. For example, in 2023, the United States spent "\$91.4 billion on their nuclear weapons [which amounts to] a total of \$2,898 per second" (ICAN). Considering the overall fearful and negative attitude many American citizens possess toward atomic weapons, it may be shocking that much of the money citizens pay to the government is allocated toward nuclear research and the production of weapons. For this reason, the existence of nuclear weapons is a complex and demanding issue.

JUDGE

Firstly, nuclear weapons should not be banned, as complete non-proliferation would be ineffective, unsafe, and impossible. Humanity made its decision that day in the New Mexico desert when the first atomic bomb was tested. This event marked an irreversible moment in history that would perpetually alter foreign policy, scientific research, and ideas about global conflict. Although many argue that nuclear bombs should be abolished due to their destructive capabilities, they fail to recognize the permanent nature of these weapons. Nuclear weapons cannot necessarily be "uninvented". Even if all nuclear weapons were destroyed, the historical and scientific knowledge of nuclear energy and nuclear weapons would not disappear. If all of the bombs were dismantled, the science behind them would still exist, posing a continuous threat

of rearmament and violence. In other words, the past cannot be erased. Instead, administrations must work to uphold peace and safety. A world completely void of nuclear weapons would surely be more peaceful, but as long as atomic knowledge exists, sizable arsenals of nuclear weapons must be maintained for global security purposes.

Another reason why nuclear weapons cannot be banned is that it is unlikely that all global entities would unanimously agree to abolish these weapons. Is it rational to hold the belief that a defiant country such as North Korea would agree to a ban on nuclear weapons? What about terrorist organizations? Would these establishments really stand with the United States, Britain, and China in saying "No" to all nuclear weapons? It is unrealistic to expect every country and independent organization to agree on an issue that greatly dictates global power and security. Even if these weapons were legislatively banned, some terrorist organizations would continue to hide and possess weapons of mass destruction. This is why it is essential that countries such as the US maintain nuclear arsenals to protect their borders from the possibility of a terrorist attack.

Complete disarmament could also result in countries being more vulnerable and could promote more violent conflict. The loss of nuclear weapons could lead countries to engage each other directly in violent conflict instead of utilizing nuclear weapons to deter conflict. This would only lead to more killing and violence, which is strictly against Catholic teaching. Since the advent of the nuclear bomb, "Wartime fatalities as a percentage of population have declined significantly" (Ice, et al). Before the nuclear era, about one to two percent of the population succumbed to wartime-related deaths. After the nuclear era, however, the amount of military casualties experienced a sharp decline to about .1% to .4% of the population. For this reason, the Catholic Church should support the preservation of some nuclear arsenals, as they prevent direct violence between nations and protect many people's lives. This is consistent with Church

teaching on the sanctity and value of life.

Imagine turning on the news one day to see that a "World War III" has broken out. In this reality, not a single country possesses nuclear weapons, but the technology, designs, and research still exist. Realistically, one can presume that countries will quickly rearm themselves with nuclear technology in the face of a great power conflict. This is why complete non-proliferation proves obsolete. As long as the science and knowledge of nuclear weapons exist, there will always be a threat of rearmament. If all of the weapons are dismantled and a global war were to break out, countries would restock arsenals at a dangerous, unstable, and accelerated rate.

Lastly, many argue that the government unnecessarily squanders billions of dollars per year on the scientific research of nuclear weapons. While the US government does invest a large amount of money in atomic research, the nation must stay updated on the latest technology with respect to other global powers. The superior nuclear technology of the United States is what allows the strategic deterrence of violence to persist. If a superpower largely falls behind the others, the security of the entire nation is put at risk. Additionally, the pursuit of science cannot be halted. It is a human instinct to better understand the outside world and to improve existing conditions. Therefore, how can research and experimentation ever be viewed as a waste of money, time, and resources? The Catholic Church recognizes that not all entities intend to use their knowledge and technology for honorable purposes, and instead believe that humans should use their knowledge as a way of fostering world peace. The Church states that "science and technology are a wonderful product of a God-given human creativity", and should be used to protect human dignity (The Challenge of Peace). There are several strong arguments for the abolition of nuclear weapons, but these arguments rely on the idea that complete non-proliferation is an achievable and realistic goal, which it is not.

If it has already been established that the banning of nuclear weapons is impractical, then what possible benefits do these weapons serve concerning the global power balance? The Catholic Church takes a very black-and-white approach concerning nuclear weapons, as Church teaching strictly opposes anything with the potential to take away the human right to life. In the words of Pope Francis, nuclear weapons are a "crime... against the dignity of human beings" (United States Conference of Catholic Bishops). While the Church is accurate in its assumption that nuclear weapons are harmful to human life, the Church fails to recognize how these weapons actually protect the lives of individuals. Realistically, the Church may favor gradual disarmament, but not complete abolition, of weapons in order to maintain peace and protect human lives.

The first reason why the Church should support nuclear weapons is that they maintain the global balance of power between superpower countries and less powerful countries, deterring violent conflict between differing nations. The United States is one of the largest manufacturers and owners of nuclear weapons globally. This country not only possesses a large arsenal of weapons, but also allocates billions of dollars per year on research. The United States' role as a leader in the field of atomic weapons intimidates other countries with less advanced nuclear technology and discourages the possibility of a violent attack. Opposing countries would likely not attack the United States' soil, fearing the possible response of a nuclear bomb. In the US, "[s]trategic deterrence is the foundation of [the] national defense policy" (Dodge). In this sense, nuclear weapons serve as more of a theoretical and strategic concept than an actual reality, urging opposing countries against violence and war through intimidation tactics. Nuclear weapons have the potential to deter all-out war, in turn promoting global peace, a Catholic ideal.

Additionally, nuclear weapons limit the severity of a power struggle between two

superpower countries. In the Cold War, for example, the United States and the Soviet Union both possessed weapons advanced enough to launch a successful nuclear attack on one another. Since both countries were aware of the adversary's advanced technology, neither nation chose to drop a nuclear bomb out of fear that the other would retaliate with a similar action. This illustrates that "war capabilities above a certain point change into war-limiting capabilities" (ICAN). When two countries possess technology capable of total annihilation, they will be less likely to engage with each other directly. If wars between superpower nations are limited, then fewer people will die in violent conflicts, thus leading to a more peaceful and equitable world.

Nuclear weapons also have the potential to end wars. Usually, wars end when one side faces total annihilation. Once again, nuclear weapons can serve as a theoretical concept of intimidation to hasten the termination of great power conflicts and protect lives without actually inflicting any sort of physical damage. Although nuclear weapons have the power to destroy, they are essential in the maintenance of world peace and the global power balance.

ACT

The steps towards world peace relate less to the complete banning of nuclear warheads and more to their restrained usage and proposed security benefits. Actions should strive to limit, not abolish, the production of nuclear weapons. Those supporting the human right to life should argue for gradual disarmament in place of an instantaneous ban, which could risk global security. Proponents can share their ideas with representatives and government personnel to create change. While most officials would likely ignore the input of one person, repeated encouragement from fellow citizens could be enough to spark changes in foreign policy and global security. Additionally, people can submit their ideas to the United Nations website. The United Nations is an establishment that is heavily respected by many countries and has a large

influence over global affairs. If the United Nations recognizes issues related to total disarmament, vital information can be shared with other government administrations. The United Nations also accepts inquiries from those seeking to know more about foreign policy. If individuals strive to lessen the possible effects of atomic weapons on civilians, they can promote the idea of nuclear weapon-free zones (United Nations). Nuclear safe zones establish regions in which nuclear weapons cannot be utilized, produced, or tested. The formation of nuclear weapon-free zones could protect many civilians from the future effects of a nuclear attack by lessening the scope of potential violence and destruction. Legislative changes can also be implemented to enforce the usage of nuclear arms. Nuclear weapons will never go away, but governments can implement more successful methods of protecting civilians and fostering global peace. Ultimately, the most effective form of advocacy is education. Citizens and policymakers alike must understand the complexities of warfare and weapons of mass destruction. At first glance, nuclear bombs simply appear destructive and immoral, but a second look reveals underlying global tensions, security benefits, and harrowing realities of total disarmament. If the purpose and permanence of these weapons are fully acknowledged, people can better advocate for world peace and policy change. Many individuals fail to understand nuclear strategy, which provokes widespread hysteria and misinformed actions. Recognizing the essential role of nuclear weapons in the 21st century helps humanity move a step closer to the ultimate goal of world peace.

In conclusion, nuclear weapons should not be banned because complete disarmament efforts would be ineffective and hazardous, and these weapons sustain the global power balance that promotes world peace. Nuclear weapons can never just "go away," as the knowledge and technology can never be destroyed. These weapons maintain a global balance of power, which is

essential in protecting the lives of civilians. One upset in the power balance sparked by rapid disarmament could be enough to upset this established stability, resulting in chaos, fear, and increased risk of violence. Nuclear weapons also reduce violence between different nations and place a cap on the severity of conflicts. For these reasons, the importance of nuclear weapons with respect to foreign policy, national security, and scientific pursuit is indisputable. The past cannot be undone, but humanity can decide the future. Nuclear weapons have the potential to destroy entire nations, but individuals have the potential to dictate how these weapons are viewed and utilized. In the words of French author Voltaire, "With great power comes great responsibility". In a sense, Nuclear weapons only have as much power as humanity designates to them. What will be done with this great power is another story.

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