

The Dawn of a New World:

The Long-Term Influence of the Atomic Bombs

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On August 6th, 1945, the world changed forever. "A Dreadful Atomic Bomb is Dropped and Brings the Entire World to Dawn" [translated] was the headline in newspapers across Japan. In other countries, headlines read: "The Atomic Bombs -- Marking the Beginning of the End of the Japanese Empire." The Little Boy and the Fat Man were the most significant, unforgettable, and dreadful bombs of all time and not just because of the hundreds of thousands of deaths they caused or that they waged the war instantaneously. However, what makes the atomic bomb "dreadful" is the long-term impacts. They not only include causing casualties that are way beyond the scientists' imaginations but also include the indirect impact on the economy and the influence on the international relationship by leading the two most powerful countries at that era into the Cold War."

The United States declared war on Japan on December 8th, 1941, one day after the Pearl Harbor attack. In the past two decades, after experiencing the biggest war in history, and one of the most significant economic depressions, and still having a few turmoils in the nation, the United States' intention was never to enter the war. However, Japan's attack on Pearl Harbor, which killed more than two thousand and four hundred American citizens, had left president Franklin Roosevelt with no other choice but to declare war on Japan. About four years later, as the Allied powers defeated Germany in Europe, and with all the other major Axis powers to either have surrendered or been defeated already, the war was expected to end. However, Japan vowed to fight to the bitter end on the Pacific side despite its pessimistic situation ("Bombing of Hiroshima and Nagasaki"). As Japan showed no sign of surrendering, President Harry Truman, trying to end the war as fast as possible, decided to drop atomic bombs--the Little Boy and the Fat Man.

The Little Boy was dropped on August 6th around 8:15 am. Despite causing tremendous amounts of deaths and destruction, the Japanese military was still unwilling to surrender. They believed that fighting with the United States on the Pacific side would grant them better terms in negotiating for peace. Besides, according to the Japanese government's data, the Japanese government and military were willing to take up to an additional 28 million civilians and soldiers deaths in defending their homeland ("Was the U.S. Justified in Dropping Atomic Bombs"); in other words, the deaths caused by the Little Boy were insignificant from their point of view. The Fat Man was dropped three days after the Little Boy. The United States chose Nagasaki as the location of dropping for its basin terrain landscape as it minimized the spread of the radiation effects, which showed that the purpose of the second bomb was never meant to cause more casualties but to end the war immediately by conveying that the first atomic bomb was not an isolated weapon (Compton). Two days after the second bomb was dropped, Emperor Hirohito spoke to the entire nation via radio broadcast, tried to comfort his citizens, and ordered the military to stop the war.

After the dropping of the Little Boy and the Fat Man, the most direct and noticeable impact was the loss of lives and the destruction in the city of Hiroshima and Nagasaki. Compared to the United States, which lost about four hundred and ten thousand soldiers and civilians throughout the entire war, the Little Boy alone caused about a hundred and fifty thousand deaths immediately (not considering the deaths caused by radiation effects or other diseases into account). On the other side, the Fat Man also caused about a hundred and twenty thousand deaths instantly. Moreover, at the end of 1945, according to the Japanese medical apartment's data, recorded deaths caused by radiation effects and related diseases were more than a hundred and fifty thousand cases. In other words, the number of deaths caused by the Little

Boy and the Fat Man in the year 1945 had already surpassed the total deaths of Americans in the entire WWII. Other than civilians' deaths, the Little Boy and the Fat Man also destroyed a significant amount of land in both Hiroshima and Nagasaki. The Little boy, equivalent to fifteen kilotons of TNT, razed forty-three square miles. Despite containing five more kilotons of TNT than the Little Boy, the Fat Man destroyed around thirty square miles due to the basin terrain landscape of Nagasaki (“Bombing of Hiroshima and Nagasaki”).

As the bombs created intense bursts, high-energy gamma rays swept outward from the hypocenters (the location where the bombs exploded). Right after the bombings, people who were near the hypocenters "absorbed some of the highest doses of radiation ever delivered to human before and since" (Popkin). Within the next decade, citizens in Hiroshima and Nagasaki kept on suffering from the atomic bombs' long-term effects. Data from the Japanese medical system also showed that, at the five-year mark, the rate of developing leukemia, cancer which starts in blood-forming tissue, highly increased among the survivors; at the ten-year mark, more survivors began to suffer from thyroid, breast, and lung cancers at excessive rates. Moreover, the radiation effects also affected pregnant women exposed to the bombings by increasing the rates of miscarriage and deaths among their infants. Otherwise, children who luckily survived were more likely to have intellectual disabilities, impaired growth, and an increased rate of developing cancer (“Hiroshima and Nagasaki Bombings”). Even in 2010, over sixty years after the dropping of the atomic bombs, there were still construction workers getting sick because of exposure to the remaining bomb debris near the hypocenter. As a result, the long term effects of the bombs had killed more than two hundred thousand people after 1945 (Popkin).

The long term effects of the atomic bombs were not only shown by the deaths and the diseases. The economic system in Japan also reflected it. Other than developing fisheries on the

coasts, Japan is also a country with advanced agriculture around the 1940s. After experiencing the atomic bombs, the soil was affected by the high-energy radiation. Most of the areas near Hiroshima and Nagasaki, such as Higashihiroshima and Isahaya, could not grow any crops. For other cities such as Akiota and Kitahiroshima, the harvested crops were tested to be detrimental towards human bodies. On the other hand, the rebuilding process on the devastated parts of the city in Hiroshima and Nagasaki had cost the Japanese government a tremendous amount of national funds, which further struggled Japan's economy. According to the Japanese government's data, starting from the winter of 1945, the Japanese government constantly spent money on rebuilding for the war until the late 1970s. Other than spending the money from the national bank, the Japanese government was left with no other choice but to tax harder on the citizens who lived in other states simultaneously, which caused not only the Gross Domestic Product and the income per capita of the entire country to decrease but also, on the blind side, caused conflicts and discriminations towards the survivors and other Hiroshima and Nagasaki citizens within the nation (Cochrane).

Ultimately, the most inconspicuous but significant impact that the atomic bombs had brought was leading the two most influential countries at that era into a competition on nuclear developments and military allegiance -- also known as the "Cold War." Before July 1945, the United States had been hardly relying on war supplements from the Soviet Union to enter and advance in WWII against Japan. However, when President Truman acknowledged that the scientists of the Manhattan Project had successfully detonated the first nuclear bomb in a remote corner located in the New Mexico desert, President Truman realized that the United States no longer needed to rely on the Soviet Union's assistance in to fighting the Japanese (Pruitt). Despite receiving information from secret agents about the United States' developing nuclear

weapons as early as 1941, the Soviet Union, specifically Stalin, did not take it seriously. On August 6th and 9th, when the Little Boy and the Fat Man were dropped, the Soviet Union, especially Stalin, suddenly realized how far behind their nuclear development was.

Moreover, in late 1946, the United States presented the Baruch Plan during the United Nations Atomic Energy Commission (UNAEC). The plan "called for the Soviet Union to share every detail of their atomic energy program and open their facilities to international inspectors" (Pruitt). Although the United States promised to share any information with the Soviet Union, President Truman's introduction of the Baruch plan kick-started the Cold War, for it did not seem like a proposal of cooperation from Stalin's perspective but rather a threat to the Soviet Union instead. Gregg Herken, the author of *The Winning Weapon: The Atomic Bomb in the Cold War and Brotherhood of the Bomb*, stated: "The Baruch Plan would have required the Soviets to basically surrender their sovereignty for them to have any share in atomic energy. Stalin was the last person to want to do that" (Pruitt).

The two atomic bombs had shown all human beings how greatly nuclear devices could impact a nation and its citizens. Murayama Tomiichi, one of the previous Japanese Prime ministers, once stated in his speech: "The atomic bomb had brought even more severe impact to the survivors and the entire nation, and the process of rebuilding and recovering from the bombs had also been a lot more difficult than we thought." [translated] Right after, he also shared his thoughts on the nuclear development competition between the United States and the Soviet Union: "Yesterday only matters if we can remember it today, and start making changes tomorrow" [translated] (Nagai). The two atomic bombs, other than caused casualties and started the Cold War, also taught us an invaluable lesson that nuclear weapons should never be used against human beings. More importantly, countries' leaders should understand what is best for

their citizens instead of prioritizing their achievements in the office upon the safety of their citizens and their right to live in a peaceful world (Nagai).

Annotated Bibliography

“[Bombing of Hiroshima and Nagasaki.](#)” *History.com*, A&E Television Networks, 18 Nov. 2009. Accessed 11 Jan. 2021

This source portrays a clear picture of the entire story, from the bombing to the surrendering. It also provides brief estimations on deaths and the impacts of the bombs. Moreover, it provides introductory information to the Manhattan project, which is the scientific experiment that the U.S. had on developing the atomic bomb.

Cochrane, Hal. “[The Consequences of Nuclear War: An Economic and Social Perspective.](#)” *The Medical Implications of Nuclear War.*, U.S. National Library of Medicine, 1 Jan. 1986. Accessed: 13 Jan. 2021

This source provides a broad picture on how the atomic bombs had impacted Japan on the economic system side. It highly contributes to my argument about the hidden impact from the bomb. Also, it provides statistical status about the impact which can further strengthen my argument in my body paragraph by serving as evidence.

Compton, Karl T. “[If the Atomic Bomb Had Not Been Used.](#)” *The Atlantic*, Atlantic Media Company, 19 Feb. 2018. Accessed 26 Oct. 2020.

This source briefly talks about the entire story of the bombing, and it provides a lot of information on the United States’ perspective. It also talks about surveys and estimations researched by the United States government which is a helpful numeric source for my persuasive essay. Most importantly, it provides a Japanese Army officer’s thoughts about the war and the bombing which will contribute to my understanding of the big picture.

“[Hiroshima and Nagasaki Bombings.](#)” *ICAN*, 2015. Accessed 12 Jan. 2021

This source focuses on the effects that the bombs had brought to Japan, especially on the citizens. It provides reports and investigations on citizens to show the first-hand information on the dropping and the effect of the atomic bombs. It also talks about the Treaty on the Prohibition of Nuclear Weapons, which is one of the positive influences that the atomic bombs had brought.

Jordan, B. R. “[Long-Term Health Effects of Hiroshima and Nagasaki Atomic Bombs Not as Dire as Perceived.](#)” *ScienceDaily*, ScienceDaily, 11 Aug. 2016. Accessed 12 Jan. 2021

This source mainly talks about the method behind the radiation effects. It provides various illnesses that the survivors might have and the details about those diseases. It also provides an estimation of deaths on the Japanese citizens from the moment when the bombs were dropped all the way to a decade later, which is extremely helpful for my essay when I talk about the numbers of deaths.

Nagai, Takashi. *The Day When the Atomic Bomb Was Dropped*. Shang-Chih, 2011.

This book provides a completely different point of view towards the atomic bomb. It portrays a clear image of the entire story of the bombing in a citizen's perspective. More importantly, instead of using plenty of statistical or visual evidence, this book provides many quotes from speeches, television shows, and government data.

Popkin, Gabriel. "[Seventy Years Later, Atomic Bombs Still Influence Health Research](#)." *Inside Science*, 5 Aug. 2015. Accessed 11 Jan. 2021

This source focuses on the ration effects of the bombs, especially on cancer. It provides the scientific method behind the illnesses and also numbers of deaths which they estimated. Most importantly, it talks about the experiment and researches done by both Japanese and the United States' scientists, and I am going to use these statistics and compare them to one another.

Pruitt, Sarah. "[The Hiroshima Bombing Didn't Just End WWII-It Kick-Started the Cold War](#)." *History.com*, A&E Television Networks, 19 Dec. 2018.

This source mainly talks about the indirect effects that the bombs had brought to the United States and the Soviet Union. It gives various reasons and stories on why the Cold War would occur. Moreover, it provides Stalin's perspectives on different periods of time which is helpful for my essay on discussing the Soviet Union's reactions to the atomic bombs.

"[Was the US Justified in Dropping Atomic Bombs on Hiroshima and Nagasaki during the Second World War?](#)" *HistoryExtra*, 8 July 2020. Accessed 26 Oct. 2020.

This source provides many different perspectives and stories told by historians. The evidence includes photos and different perspectives from various parts of Japan, such as the government, the military, the civilian leaders, and the citizens themselves. Moreover, it analyzes whether the bombings are necessary from different reasons that led might to the bombing.