## Should we apologize for Hiroshima?

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After the Group of Seven Shima region of Japan, Presi-He will be the first sitting U.S. president to make such a stop. He said recently in an interthe atomic bomb on that city. However, it's not that he didn't want to apologize. The Japanese government insisted that

his series of apology tours. visit to Japan and secretly 2011. The cable reported that destructive power. Japan's vice foreign minister, but he did make world headlines when he became the first bow to the emperor of Japan.

But does the United States have anything to apologize Manhattan Project. for? Not when you take the development and use of the launch their own secret profirst atomic bombs into his- gram, Uranprojekt, to develop torical context of the events a nuclear weapon. Fortunately, that led the United States to their effort did not go as well. undertake the Manhattan Many of the most competent Project, and then the decision scientists, engineers and that President Truman made mathematicians had left Gerto use the weapons.

clear that the Third Reich in purging Jewish scientists was on a course of expansion- from Academe. In addition, ism that could ultimately lead the Allies had been successto a World War. Earlier that ful in launching a black ops year, the Nazis had occupied action that further slowed the Sudetenland, a region of their efforts. By the end of the Czechoslovakia, with the pretext of aiding German nationals living there. Then in March of 1938, under the threat from achieving success of invasion, the Anschluss What would have hap-(Annexation) of Austria to pened, however, if the Nazis Nazi Germany was enacted.

scientists in several countries were working on physics likely, been very different. It experiments, using neutrons is easy to imagine scenarios to bombard uranium. They were trying to understand onstrate the potential for such author of "Operation Blinding the interaction of the neutrons" a weapon on a Western city, Light," which is a historical with the uranium atoms. Two say in England. This could novel that dealt with reasons German chemists, Otto Hahn have convinced the Allies that for the Manhattan Project and Fritz Strassmann, used they had no choice but to sura new technique to analyze render to the Third Reich or weapons.

result. They found that the interaction resulted in the economic summit meeting, to presence of barium atoms civilized world. be held this week in the Ise- along with the release of Meanwhile, t high-energy neutrons. Now, dent Obama will be visiting barium is another element the city of Hiroshima, and will whose atomic number is 56 be accompanied by Japanese compared to 92 for uranium. the Pacific. The Marines Prime Minister Shinzo Abe. Hahn and Strassmann were fought bloody battles from not theoretical physicists, so they needed help in explaining what was happening. view with the Japanese press They turned to Lise Meitner that he will not apologize for and her nephew, Otto Hirsch, the United States dropping two former German scientists who had escaped to Denmark under threat from the Nazis. the Japanese were finally The two nuclear physicists were intrigued and set to work to understand the results. We know this because They came up with a nuclear in September 2009, during  $\,$  model that fit the experiment. They concluded that the ura-Obama was preparing for a nium atoms were being split into two pieces, creating the raised the idea of making an barium, along with the release apology to the Japanese for of a huge amount of energy. Hiroshima and Nagasaki. The When they published the Japanese response was con- results in a physics journal, tained in a secret cable sent to the scientific world suddenly Secretary of State Hillary Clin-realized that this phenomenon ton, dated Sept. 9, 2009 that had the potential to make a a bloody slaughter with high was released by WikiLeaks in weapon with unimaginable casualties on both sides.

In the United States, physi-Mîtoji Yabunaka, told John cists saw that potential and to make a decision. Either drop Roos, the U.S. ambassador to worried the Nazis would atomic bombs on Hiroshima Japan, "the idea of President develop a bomb first. These Obama visiting Hiroshima scientists included Albert to apologize for the atomic Einstein, who was living in many people say that it was a bombing during World War the United States and was a mistake to drop the bombs on II is a 'nonstarter.'" The Japa- professor at Princeton Univer- those two cities, killing about nese were concerned about sity. It was Einstein's Theory the internal political ramifica- of Relativity that helped to to Truman and his advisors at tions of such an apology. So, explain the great amount the time, it was a "no-brainer" Obama didn't visit Hiroshima of energy that was released - 36 million people, military on that November 2009 trip, from the fission of the ura- and civilian, had already died nium atom. He signed a secret letter to President Roosevelt U.S. president to make a full urging him to undertake the and 253,000 wounded. The development of the bomb. The result was the super-secret

The Nazis did indeed also many starting in 1933, con-In the fall of 1938, it was cerned with the Nazi interest war in 1945, the Nazi nuclear ongoing, but they were far

What would have hapwere successful before the and circumstances. During that same period, United States? The outcome of the war would have, most where the Nazis would dem-

the results and found an risk massive destruction. So, astonishing and unexpected the United States' preemptive development of a nuclear weapon literally saved the

Meanwhile, the Allies were also waging a war with the Japanese. In 1943, the enemy was being forced back across atoll to island across the whole region. It was a difficult and deadly war with highly trained Japanese soldiers dug in across the islands and willing to fight to the death.

By the summer of 1945, cornered in and around their homeland. But they showed no sign of capitulating. So, the Allies planned to invade their islands with large-scale forces that they called Opera-tion Downfall. Seven hundred thousand Allied troops were being readied to land on Kyushu, the southernmost of the big four Japanese islands. This would have been an operation even larger than D-Day. And the U.S. military expected

It was in this context that President Harry Truman had and Nagasaki or authorize Operation Downfall. Today, 200,000 Japanese civilians. But in the war in the Pacific. The U.S. had lost 111,000 troops Japanese had demonstrated their willingness to die rather than surrender, and Truman didn't want to take the risk of another 500,000 casualties (both Allies and Japanese) as was estimated at the time. So, he issued the order for the Enola Gay to embark on her deadly mission

Polls of the American people taken at the time showed overwhelming support for Truman's decision. And all of those hundreds of thousands of families who might have lost their sons in the invasion thanked Truman for his courage. As the years went by, and the memories faded of the horrific battles weapons program was still fought in the Pacific, more people showed disapproval in later polls, but the majority still approves the decision as the necessary action for the time

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