



## Myth, Hiroshima and Fear: How We Overestimated the Usefulness of the Bomb\*

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### Abstract

*Recent evidence from World War II and the Cold War shows that nuclear weapons are far less useful as military and political tools than has been believed. Far from giving a madman the power to conquer the world, nuclear weapons are clumsy, dangerous technology with very few real uses — even if you have a monopoly.*

No one does his best thinking when gripped by fear. This is why audiences often call urgently to people on movie screens: “No! Get out of the cabin! Now!” We know that people who are terrified make elementary mistakes of judgment.

It is hard to remember now how overpowering the fear of the Cold War was. Both sides were infected with deep suspicion and a sense that the other side was aggressive and threatening. The fact that these culturally different and unfamiliar peoples, with very different ideologies, had the power to obliterate each other made the tension even more acute. It should not be surprising, therefore, to discover that many of the ideas that gained currency during the Cold War have turned out, in retrospect, to be less than sound.

The most important “fact” about nuclear weapons is that they carry an enormously powerful emotional freight. People fear them. Henry L. Stimson, the retired American Secretary of War who made the first semi-official pronouncement on nuclear weapons in February 1947 said that the most important characteristic of nuclear weapons was that they were “psychological weapons.” Stimson knew that you could create the same kind of devastation and death using conventional bombers (if you used enough of them), but nuclear weapons, he believed, had a special fear factor. The United States bombed 68 cities in Japan in the summer of 1945. Many of them suffered as much damage as Hiroshima, but the Japanese had not suddenly surrendered after any of those conventional bombings. Even the bombing of Tokyo, which had led off the summer of city bombing in March, with an attack that left more people dead than any other attack (including Hiroshima) and destroyed more square miles than any other attack (something like the area of Washington, DC) had not forced Japan to surrender.<sup>1</sup>

So, Stimson concluded, nuclear weapons were special. And soon everyone else concluded they were special, too. After all, the Japanese said they surrendered because of the bomb.

\* Some of the arguments presented here are made in greater depth in the author’s forthcoming book: Ward Wilson, *Five Myths About Nuclear Weapons* (New York: Houghton Mifflin Harcourt, 2012), to be published on January 15, 2013.

The Emperor, in his surrender radio broadcast to Japan, talked about “a new and most cruel bomb” that the Americans had which had forced them to surrender. So, it was natural for Americans to believe that their new bomb was something special. And since America was alone astride the world after World War II — Europe was in a shambles, the Soviet Union was torn up, China was reeling, U.S. GDP represented more than 50 percent of the world’s GDP — the notion that nuclear weapons were the new currency of power spread easily outward to other countries from the United States. Russia built its own nuclear weapon in 1949. Great Britain followed not long after. And then France, and China and Israel. It was soon an accepted fact that nuclear weapons were the standard by which nations were judged. After all, only states with nuclear weapons got to sit on the UN Security Council.

And then came the Cold War: a period of tense confrontation in which every day seemed likely to provoke the crisis that would lead to the final war. Children practiced hiding under their desks. Communities found the deepest basements and stocked them with supplies to serve as bomb shelters in the event of war. In the United States there were periodic tests of the emergency broadcast system — emergency communications that would be used to warn that you had half an hour before the nuclear weapons started falling. You’d be watching a football game on a sunny fall afternoon and the TV would interrupt the game to test the emergency broadcast system and remind you that at even the most innocent of moments nuclear war might be only minutes away.

It was a time of immense fear. Those who did not live through it may find it difficult to believe and peculiar to imagine. But that fear had real practical political consequences. It made distrust seem the safest course. It made worst-case analysis seem prudent. It fueled mistrust and put tempers on edge. Is it any wonder that some of the doctrines developed during this period seem out of tune today? They have the misperceptions created by fear embedded in their logic. They are based on assessments of human nature made while standing under the Sword of Damocles.

The result of this process is described by Phillip Green in *Deadly Logic: The Theory of Nuclear Deterrence*. He talks about studying nuclear deterrence at length and being left with “a feeling of strangeness.”

Almost all the works one encountered in this field seemed invested with a tremendously authoritative air, an air that one associated with scholarly work in the most well-established and systematically researched disciplines; and somehow all this authority produced policy proposals and arguments that one felt absolutely no urge to agree with. Some were at best questionable; . . . Still others seemed absurd . . .<sup>2</sup>

And it turns out that Cold War doctrines about nuclear weapons — the doctrines that still justify nuclear-armed states today — are based on a series of mistakes of fact, errors of judgment, and plain myths.

The first and most important mistake is the original one. How could nuclear weapons accomplish in three days what conventional bombing had failed to do in five months? It turns out they couldn’t. It turns out that Japan surrendered because the Russians declared war on August 9<sup>th</sup> (the same day the United States bombed Nagasaki). Japan’s leaders knew that while they might be able to fight one last ditch defense on the beaches of southern Japan, and they might be able to inflict such severe losses that the Americans might offer better

surrender terms, that once you add a second great power to the mix, attacking from the north, the game was up. Stalin's assessment was that he would have troops in Hokkaido (the northernmost island of Japan proper) in 10 to 14 days. And that was a pretty realistic assessment. Japan's leaders thought about the prospect of surrendering to the United States or of being quickly overrun by communist troops and they chose to surrender to the U.S.

They said that they were surrendering because of the Bomb, however, because it made the perfect explanation for having lost. If you had just led your country into a disastrous war and were trying to maintain the legitimacy of your regime, what would you rather say: "We made mistakes. We had horrible lapses of strategic misjudgment. The Army and Navy consistently failed to work closely together. We blew it."? Or would you rather say, "The enemy made an unbelievable scientific breakthrough, they invented a miracle weapon, and that's why we surrendered. It wasn't our fault."?

The difficulty is that the Americans believed the Japanese. After all, they wanted to believe them. They wanted this weapon (that only they had) to be a miracle weapon. They wanted the 2 billion dollars (in 1942 dollars) that they had spent on developing it to have been worth it. They wanted the added prestige and increased influence that they imagined would go with possessing "miracle" weapons.

And once the Cold War broke out, suggesting that the Japanese had actually surrendered because the Russians had forced them to it would have been seen as unpatriotic in the United States. And because of the United States' preeminent position in the world, it was easy for others to accept this view of nuclear weapons and the world.

All the ideas about nuclear weapons include this notion that they carry a special horror and they are easy to believe: nuclear war would be horrible. But the idea actually has two parts. First, that a nuclear attack would be horrible to contemplate (no argument there). But secondly, and more importantly, that that sense of horror can motivate governments to make radically different decisions from the ones they would make if confronted only with conventional weapons (like surrender in a war.) It is this second half of the fundamental idea about nuclear weapons that is unproved. And on which so much of nuclear weapons theory depends.

Consider nuclear deterrence.<sup>3</sup> It is often considered to be a relatively robust and powerful force. After all, despite a series of high-stakes crises during the Cold War, nuclear deterrence restrained leaders in every instance. At least, that is the story that proponents of nuclear weapons usually tell. And, as with Hiroshima, on the surface this story has a certain plausibility. We did live through the Cold War without a nuclear war. But when one examines the facts closely, the reality appears to be significantly different.

The most important piece of evidence in the debate about nuclear deterrence has always been the Cuban Missile Crisis. The most dangerous of all the Cold War Crises, it is also arguably the closest the world has come to nuclear war. It has traditionally been given a leading role in the proof that nuclear deterrence works effectively. I still remember sitting in the office of a distinguished international policy scholar at Harvard voicing doubts about nuclear deterrence, and having him say, "But surely, Ward, the Cuban Missile Crisis proves that nuclear deterrence works? After all, the Soviets put the missiles in, there was a risk of war, and then they took them out." What could be clearer than that?

Nuclear deterrence is sometimes described as operating this way: a leader is faced suddenly with the danger of nuclear war, he/she thinks about the consequences of nuclear war, and then pulls back. This is a sensible way to imagine the process. But if this is the way that nuclear deterrence works, then it is clear that it failed conspicuously during the Cuban Missile Crisis. After all, Kennedy was confronted with a crisis when he found out the Russians were putting nuclear missiles in Cuba. Kennedy was aware that the crisis might lead to nuclear war. (He himself said the crisis had between a one third and fifty-fifty chance of leading to war afterward.) In the week of secret deliberations that preceded the United States announcing that they were blockading Cuba, the possibility of nuclear war was mentioned 60 times. So, the danger of nuclear war was clear to Kennedy. Yet, he did not pull back. He did not confront the danger and then withdraw. He saw the nuclear danger and went full speed ahead.

And Kennedy was right to say that the danger of war was quite high. In his recent book, *One Minute to Midnight*, Michael Dobbs recounts at least three situations that came within minutes of leading to nuclear weapons being used. A Russian sub-captain wanting to fire nuclear torpedoes, U.S. fighters armed only with nuclear tipped missiles preparing to tangle with Soviet fighters over Alaska in order to save a lost U-2 spy plane.<sup>4</sup> And so on. How can we say with confidence that nuclear deterrence works reliably when Kennedy so clearly ignored a real danger of nuclear war?

The Cuban Missile Crisis is not the only instance of nuclear deterrence failing. Again and again, if you revisit these crises, you find instances of leaders ignoring the danger of nuclear war and plunging ahead, intensifying a crisis. The Egyptians and Syrians attacking the Israelis despite the Israeli monopoly on nuclear weapons in 1973. Stalin ignoring the U.S. monopoly on nuclear weapons in order to blockade Berlin in 1948. During the Korean War, despite the fact that shifting of B-29s to England had supposedly kept the Berlin Crisis from escalating, a similar shift of B-29s to bases in the Pacific failed to keep China from entering the conflict.<sup>5</sup> And so on. None of these failures of nuclear deterrence led to nuclear war, thankfully. But they are real failures nonetheless.

We know that ordinary deterrence — deterring children from misbehaving, deterring criminals, and so on — fails pretty regularly. Even the most severe penalties, like the death penalty, consistently fail to deter some percentage of the time. (After all, murders are still committed in the United States where the death penalty is employed.) The advocates of nuclear deterrence have always claimed that it is an exceptional form of deterrence, that the special psychological power of nuclear weapons gives nuclear deterrence a unique capability to effectively deter. Yet, these Cold War failures put the lie to this complacent confidence that nuclear deterrence will surely work even though other forms fail.

Of course, the same phenomenon of fear operated on nuclear deterrence that operated on nuclear weapons ideas in general. People desperately wanted to believe that nuclear deterrence worked because they were so afraid of nuclear war. They had a vested interest in interpreting Cold War crises as supporting the reliability of nuclear deterrence. But decisions made under extreme duress are rarely sound judgment.

The problem with nuclear deterrence is that the consequences of nuclear war are so extraordinarily terrible that failure is unacceptable. Nuclear deterrence must be so reliable that the

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chances of it failing are vanishingly small. Otherwise, when we rely on nuclear deterrence, we are simply guaranteeing that one day we will face the catastrophe of nuclear war.

Nuclear weapons are inherently clumsy. Even when you try to use them selectively or “surgically” it is almost impossible to avoid killing innocent civilians in large numbers. In a famous study by Frank von Hippel and Sidney Drell in 1976, the two physicists looked closely at a surgical attack scenario in which the Soviet Union struck only U.S. missile silos, submarine bases and airfields that held nuclear armed bombers. The results of this carefully limited attack were appalling. Assuming March winds, something like 20 million American civilians would have died, mostly from radiation.<sup>6</sup>

It is perhaps telling that the U.S. military has increasingly used smart bombs and drones in its wars and battles, but has never yet found a situation that required the use of nuclear weapons in nearly seventy years. Most military targets are building-sized or smaller. Why would you want to use a weapon that forces you to destroy a third of the city in order to destroy one building? It seems far more likely that nuclear weapons are messy, blundering, outmoded weapons than that they are magical weapons with the power to coerce enemies in almost any circumstances. There is no question that nuclear weapons are dangerous. Any use carries with it the possibility of escalation to a catastrophic all-out war. But there is a serious question as to whether nuclear weapons are particularly useful. Why would you ever keep technology that is very dangerous but not very useful?

*“A clear-eyed, unbiased reexamination of nuclear weapons is long overdue.”*

We rely on nuclear deterrence out of habit and because doctrines and ideas developed during the Cold War got locked in place by fear. But now we have emerged from the Cold War. It makes sense to reexamine the ideas of that time and critically reevaluate evidence, doctrines and judgments made during that time. It seems clear in retrospect that we exaggerated the political power of nuclear weapons as a result of Hiroshima, and we exaggerated the reliability of nuclear deterrence by twisting the evidence of Cold War crises. A clear-eyed, unbiased reexamination of nuclear weapons is long overdue.

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## Notes

1. For more on the Hiroshima argument see Ward H. Wilson, “The Winning Weapon? Rethinking Nuclear Weapons in Light of Hiroshima,” *International Security* 31, no. 4, (2007): 162-179.
2. Phillip Green, *Deadly Logic: The Theory of Nuclear Deterrence* (Columbus: Ohio State University Press, 1966), iv.
3. For a more in depth discussion on problems with nuclear deterrence, see Ward H. Wilson, “The Myth of Nuclear Deterrence,” *Nonproliferation Review* 15, no. 3 (2008): 421-439.
4. Michael Dobbs, *One minute to Midnight: Kennedy, Khrushchev, and Castro on the Brink of Nuclear War* (New York: Alfred A. Knopf, 2008).
5. For more on Cold War crisis failures of nuclear deterrence, see, forthcoming, Ward H. Wilson, *Five Myths About Nuclear Deterrence* (New York: Houghton Mifflin Harcourt, 2013).
6. Sidney Drell and Frank von Hippel, “Limited Nuclear War,” *Scientific American* 235, no. 5(1976): 27-37.