Chapter 1

Endings

The Second World War ended suddenly. On 6 August 1945, an atomic bomb exploded over Hiroshima, Japan; on 8 August, the Soviet Union declared war on the Japanese Empire and began early the following morning a staggeringly successful steamroller advance across Manchuria; and on 9 August, a second atomic bomb destroyed much of the Japanese city of Nagasaki. As the story is usually (and frequently) told, this triumvirate of shocks so stunned the Japanese imperial inner circle, and especially Emperor Hirohito, that he unprecedentedly intervened in war-planning deliberations and moved for conditional surrender on 10 August. (The momentous meeting took place on 9 August; the Nagasaki blast occurred in the middle of it.) Back in Washington, U.S. President Harry S. Truman and his cabinet considered the offer, and Secretary of State James Byrnes penned a response insisting that the Japanese surrender be "unconditional"—Allied war terms since the late President Franklin Roosevelt had enunciated them at the Casablanca Conference in 1943. On 14 August, the Japanese acceded, and the emperor broke his traditional silence and announced the surrender over the radio the following day. The first (and to date only) nuclear war was over.[1] Sudden indeed.

The end of the war clearly came suddenly for Japan. This is a book about how it was equally sudden for the Allies as well, and in particular for the Americans. Coming to grips with the suddenness of the war's end forces a complete reassessment of how, when, and why the atomic bomb was dropped—the very issues that have engaged so many Americans for the last sixty years. For the generations who have grown up with the truism that "the bomb ended the war," thinking in terms of suddenness

may seem hard to swallow.[2] Millions of Americans have been taught the history of the atomic bomb as if it were self-evident, from the beginning, that nuclear weapons would *by their very nature* compel the Japanese to surrender. Echoing this common perception, Manhattan Project veteran Edward Teller wrote that "Hiroshima changed the course of history."[3] We are so familiar with such announcements of the transformation of the world through the nuclear blasts at Hiroshima and (although far less often invoked) Nagasaki that the claim seems to us natural, beyond question. We think of nuclear weapons as transformative because, quite simply, they *are* such, and always were. It was, supposedly, obvious to all concerned in summer 1945 that these weapons were "special," "epoch-making," and "revolutionary," not just to the Japanese who suffered the consequences of atomic bombing, but also to the Americans involved in the decision to conduct it.[4]

Yet there is something glaringly amiss with this standard picture. No one in 1945 possessed the ability to foretell the future (not surprisingly). The principal American politicians, military figures, and scientists expressed much skepticism at the time over whether the bomb would in fact "work." Even the definition of what it meant for the bomb to "work" changed dramatically over the course of a few days. At first, "work" meant to explode. After Hiroshima, "work" meant shortening the war by a few months (say, before the scheduled November invasion of the southern Japanese island of Kyushu). Only *after* 14 August did "work" mean "end the war." The war was not over until the Japanese government decided that it was; the Allies could engage in various gambits to achieve this goal, but only the Japanese possessed the power to make any of those gambits "work." It is by looking backward into World War II, and not forward into the Cold War, that we can really begin to evaluate what was unique to these weapons, and what belonged to a longer process of gradual escalation.

Almost nobody before 14 August thought that two bombs would be sufficient: if the first bomb did not cause surrender, the American decision makers reasoned, then many would be required, at the very least a third bomb before the end of August, and likely several others before the scheduled invasion.[5] In examining attitudes toward the bomb before the detonation over Hiroshima, and then after Nagasaki but *before* surrender—five days in August—the historical evidence shows that a sizable group of decision makers did not believe the bomb would have

the power to end the war immediately. On the contrary, the sudden surrender of the Japanese caught Washington rather off-guard, unprepared for demobilization or the economic shocks of peace. A dramatic consequence such as surrender demands an extraordinary cause, and American scientists, politicians, and journalists found that cause in the first postwar days by retrospectively emphasizing the atomic bomb to the exclusion of all other factors. Only the nuclear was "special" enough.[6]

The use of the atomic bombs against Japanese cities in the final days of World War II still generates enormous interest and controversy, primarily because of concerns over the moral justification of these actions.[7] As usually presented, the debate about whether the atomic bombings were justified conflates two separate issues: military justification and moral justification. As the story here unfolds, it will become very clear that the issue of military justification is moot. Because so many military planners and influential politicians considered the atomic bomb to be, at least in some degree, an "ordinary" weapon—certainly special, even unique, in some senses, but decidedly not in the senses we appreciate today—dropping one or several of them merited no more justification than the inception of firebombing campaigns, napalm, or other local decisions made largely in the field: that is, little to no justification. The issue of military justification of the atomic bombings simply did not appear as a live question for Truman or his advisers.

Of course, the reason this topic generates vehemence from both critics and defenders of the atomic bombings stems directly from the other question: moral justification. Any assessment of morality in wartime, in terms of both the goals of the war and the means (strategies or weapons) used to achieve it, depends on political values, religious beliefs, moral judgments, and—crucially—*context*. World War II was the most brutal conflict the world has ever seen, swallowing in its maw approximately fifty-five million lives. The litany of clear-cut crimes against humanity even only in the Pacific theater, thus excluding the Holocaust and setting aside for the moment the status of the atomic bombings, is staggering: the rape of Nanjing, the torture and slaughter of prisoners of war, the Bataan death march, the forced prostitution of Korean "comfort women," the aggressive firebombing of civilian populations, and so on. By the time the Americans began to consider the potential utility of the atomic bomb, they had already for years experienced increasing brutality, bloodshed, mayhem, and dehumanization, and experienced

them routinely. This context should be central in any attempt to frame the question of the morality of atomic bombing, let alone in any answer.

Without context, the Little Boy and Fat Man bombs that destroyed Hiroshima and Nagasaki, respectively, were only combinations of fissionable material, electrical components, conventional explosives, and metal. All the social and physical infrastructure of political decisions, military calculations, long-distance bombers, and the late stages of a seemingly eternal war provided the tools for contemporaries to think about the atomic bombs. The bombs might be considered special or unique for a variety of intellectually valid reasons: the introduction of the mechanism of nuclear fission into warfare; the scale of the design of the bomb; radioactivity; American monopoly on the weapon; the fact that an equivalent destruction to an atomic bombing created through conventional raids, and the number of planes needed to cause it, was so much greater; and so on. In each instance, the line between a *quantitatively* different bomb (a bigger blast) and a *qualitatively* different bomb (a revolution in warfare) is a matter of judgment; it is a claim about when a change in degree turns into a change in kind. The American scientists, politicians, and soldiers who participated in the atomic bombings made assessments of the atomic bombs as unique and special weapons, but they did not make the same kinds of assessments we make today. To understand the differences, the history needs to be recast from an entirely different angle.

To accomplish this, I reorient the story of the atomic bomb drops in time, in place, and in emphasis. A brief inspection of the chronology of relevant events demonstrates how skewed the common American understanding of the timeline has become. The story of the atomic bomb is usually told in three parts. The first part ranges from the discovery of uranium fission in December 1938 to the detonation of a plutonium implosion device at the Trinity test in the New Mexico desert on 16 July 1945. This is the story of the Manhattan Project, usually the preserve of historians of science, and it highlights the work of scientists and engineers in developing a functional atomic bomb.[8] These scientists—and their epicenter of bomb-design operations, Los Alamos—typically vanish from view after Trinity, as if their work was now accomplished (it was not: they continued to make more bombs), and the story shifts to President Truman and the Potsdam Conference of the Big Three

(Truman, Churchill/Atlee, and Stalin) that took place in late July 1945, immediately after the nuclear test. We are now in the province of diplomatic historians, and the story stresses Truman's decision making about the atomic bomb and how the bomb fit or failed to fit into both the Allied end-of-war strategy for Japan and the emergent Cold War in Europe. After the issuance of the Potsdam Declaration calling for the unconditional surrender of Japan's armed forces, this story stops. This timeline compresses months of deliberations dating from before Truman assumed office in April 1945 and extending after the American delegation returned from Potsdam into a small period of time and a single "decision."

Immediately after Potsdam, the traditional story of the atomic bomb flashes to the Pacific theater of World War II for four days: 6–9 August 1945. In these days, atomic bombs were dropped on Hiroshima and Nagasaki, and the Soviet Union entered the Pacific War. As soon as those three events happen, the story almost immediately moves to Tokyo and the Japanese cabinet's deliberations about surrender. Four years of fighting and the months-long punishing firebombing campaign are eclipsed in a story that is largely about diplomacy before the bombs explode, and Japanese government deliberations afterwards. Almost without exception, the story ends on 15 August 1945, with the emperor's announcement of surrender. This typical history not only enhances certain features of the historical record at the expense of others—minimizing both the brutality of warfighting in the Pacific and the attempts of the Japanese government to seek a negotiated surrender—but also sharply reduces the amount of already-scarce evidence useful for understanding the dramatic speed in which World War II ended. By placing the bulk of the account *after* most histories of the "Hiroshima decision" conclude, this book shifts the focus in time in unfamiliar ways.

The reorientation in place is similarly broad. The story of the atomic bombs' use reprises a canonical list of places: Los Alamos, Alamogordo, Washington, Potsdam, Tokyo, Hiroshima, and Nagasaki. *None* of these places ever knowingly confronted a combat-ready atomic bomb. The only site where the atomic bomb was evident as a military weapon was the island of Tinian, nestled in the Marianas. The 509th Composite Group, which was assigned the task of delivering the atomic bombs, and the Los Alamos assembly team named Project Alberta were stationed here. Since Tinian was the only site where the military, scientific, and

diplomatic strands of the story of the atomic bomb converged, it demands very close attention. By focusing on how the soldiers and scientists there perceived the weapon they were charged with delivering, we can see the military features of the atomic bomb in relief, with its geopolitical implications, its moral valences, and its scientific aspects in the background. In particular, since Tinian was the home base for most of the B-29s involved in the extensive firebombing campaign against Japan that began in earnest in March 1945, the atomic bomb in situ partakes of the history of conventional firebombing on every level. Finally, nowhere more than on Tinian was the potential third atomic bombing a reality, since Project Alberta and the 509th remained in a state of readiness for assembling that additional bomb until the instruments of surrender were signed on 2 September—that is, over *two weeks* after surrender had supposedly already catapulted the bombs into the category of "unusable" weapons.

The change of emphasis presented in the pages that follow may appear the most dramatic. The history as usually presented focuses on both what Truman intended to accomplish by authorizing the atomic bombings and what role those bombings played in ending the war. Consider, for a moment, what would have happened if Japan had not surrendered on 14 August. Would the atomic bomb's role in the conflict seem the same to us today?[9] It is impossible to answer such questions directly, since the war did in fact end on 14 August; yet, we can now, for the first time—by concentrating on the events and the almost ignored archival documents of the presurrender, postatomic period lasting from 6 to 14 August—tell the story of how the atomic bomb was thought about and treated *before* anyone could claim that the bomb had ended the war, simply because the war was not yet over. These changes of time, place, and emphasis reveal an utterly surprising history of the atomic bomb's role in World War II.

That history usually appears either as a breathless story peaking at Hiroshima or surrender, or as a romanticized tale of Great Men Making Epochal Decisions. Here the narrative is framed instead as *military* history: an account based on archival documents that looks at how the bomb was conceived of as a tactical weapon, not as a geopolitical strategic gambit. From this point of view, many in the field perceived the atomic bomb as a quantitatively different firebomb (it was much more explosive, more efficient, and required fewer B-29 bombers to deliver),

but not as a qualitative change in warfare, however epochal Truman and his advisers at times considered it to be. Military men in particular considered the decision to drop the bomb as a given from the moment development shaded into a deliverable weapon. By December 1944—months before Roosevelt's death in his fourth term of office—crews had already been assigned to deliver the bombs. The history of the atomic bomb is studded with special procedures of use, special committees, and special moral deliberations by the commander-in-chief. For some of the participants, particularly those close to the scientists, the bomb was indeed intrinsically "special" because the source of its explosive power—the fission of uranium or plutonium—was unprecedented. The bomb was, to these individuals, *atomic.* For those who emphasized the atomic bomb as a *bomb,* however, what mattered was whether it would destroy enemy personnel and infrastructure, period. Debates over other "special" aspects of the bomb—such as radiological aftereffects—were rather muted until after surrender had "demonstrated" that the bomb was Special, even Unique.

A remarkable fact about this post-Hiroshima, presurrender period is how distant surrender seemed to those directly concerned with the actual dropping of these weapons. One can observe this most clearly in the preparations for a combat drop of a third bomb. Discussion of target and timing for the Third Shot—most likely Tokyo on 19 August—proceeded actively both before and after Nagasaki. Such preparations continued even between surrender and the beginning of the American Occupation of Japan on 2 September, a transitional period when Allied forces feared that a militarist coup might restart hostilities. The Third Shot was a reality in progress until unconditional surrender—seen as the two bombs' success—began the rapid and mostly unconscious process of expunging it from historical memory. This military option of more atomic strikes, mentioned in numerous cables, briefings, shipping manifests, and diplomatic and scientific correspondence, dropped out of sight by the end of August 1945, and today most Americans believe the reason the United States dropped *two* bombs on Japan is that the government knew in advance that two would suffice. The days up to surrender prove this supposed military omniscience to be nonexistent.

The world we live in today is, in many crucial respects relating to nuclear weapons, still best thought of as a "postsurrender" world. As the title of a monumental recent work on the history of modern Europe

since 1945 elegantly puts it, the most important fact to understand about Europe today is that it is still "postwar": World War II generated such a colossal transformation of the conditions of European existence that removing that fact from view even for an instant obscures the manifest realities of today.[10] Similarly, the world today is still living "postwar" concerning our attitudes toward atomic bombs: many of the central categories and concepts we use to think about matters nuclear were formed in the immediate wake not of the bombings, but of Japanese surrender.

We now live in an epoch that can be fairly characterized as the Atomic Age, a world in which nuclear weapons are unassailably "special." Yet there is a history to how they came to be regarded this way; it was not always the case. An obvious way to see how uniqueness was conferred retrospectively is to consider perhaps the most unusual feature of atomic bombs, one which has set them apart from all other weapons: they have only been used in wrath once. Of course, no one could know in August 1945 that the destruction of Hiroshima and Nagasaki would be the last use of nuclear weapons, and the uniqueness of that singular moment in history only became apparent in the years without nuclear warfare that followed World War II. So what does this mean? One could interpret the onetime existence of a now-extinct perspective on nuclear weapons as more powerful in degree, if not distinct in kind, as an invitation to reopen the question of the utility of nuclear weapons. Political debates today about tactical nuclear weapons, bunker-busting warheads, and resumption of nuclear testing would seem to assent to this reasoning. On the other hand, if the revulsion toward nuclear bombing had little originally to do with the "nuclearity" of the weapon, but simply involved the number of civilians killed in a short period of time, then the implications here raise questions about the tactic of city bombing in general, a call to return to pre–World War II norms of the contested morality of air warfare. Both are possible interpretations, and it is not for me to say which would be a more plausible or faithful extension of the concerns of the historical actors, or whether their concerns in the past should be in any way controlling factors for us now.

We live with atomic bombs in their "postsurrender" form not just in terms of the debate over the moral justification of the atomic bombings, but in multiple other aspects of nuclear thinking. By this I mean

more than the obvious "nuclear matters" such as the atomic war planning of Dr. Strangelove and the manner in which nuclear weapons were deployed in a balance of terror during the Cold War. In more ubiquitous and therefore striking ways—the escalation of nonnuclear conventional bombings, regional wars, the development of ever more destructive forms of nuclear warheads, the assigning or denial of war guilt or war responsibility—the attribution of transcendent powers to the nuclear weapon have shaped both the culture and the geopolitics of our present world, now over a decade and a half beyond the reach of the Cold War. Part of the reason the atomic bombings continue to generate so much fervent interest is that the postwar world, and the United States in particular, is still living out the consequences of how World War II ended. Since mushroom clouds marked part of that process of surrender, the importance of the special nuclear weapon has been unavoidable. It is time for an open and informed debate about the role of nuclear weapons in today's military and today's international system. If we live in a world concerned with the impact of nuclear proliferation, we should also reflect on why the spread of *these* weapons (and not, say, napalm or cluster bombs) is to be singled out for special attention. It is a question that merits serious consideration, and not the invocation of clichés.

This book draws from several different strands of evidence and argument, partaking at various times to a greater or lesser degree from diplomatic history, history of science, military history, Soviet history, Japanese history, and American history. Instead of separating out all these different threads, I have deliberately interwoven them, hoping to give flesh to the skeleton of old assumptions about the end of World War II with the sinews of historical context. The following six chapters come in pairs, dividing the book, like Gaul, into three parts. The first set fractures and reshapes the question of "time": why were the atomic bombs used *when* they were? To accomplish this, these two chapters chronicle the history of America's end-of-war strategy, first following the demand for "unconditional surrender" and the evolution of a "shock strategy" to compel the Japanese government to accept surrender, and then showing how the atomic bomb came to be integrated into that strategy. The next two chapters scramble the traditional history's sense of "place": *where* were the bombs dropped from, and how did the narrative look from the vantage point of the field? The book thus follows

the path of the U.S. military and the atomic material to the vitally important yet often ignored island of Tinian. The first chapter of this pair chronicles the integration of Tinian into America's Pacific War up to the destruction of Hiroshima, and the second remains on the island from before Nagasaki until the demobilization of the Manhattan Project team in the Marianas in early September 1945. These four chapters together highlight the aspects of the atomic bomb that were perceived as "ordinary weapons" by certain politicians, military planners, and scientists.

The apotheosis of the Atomic Bomb came afterwards. The final two chapters offer an account of how this unusual-yet-ordinary weapon was turned into an extraordinary one with the advent of Japanese surrender, first within the initial postwar year, and then into the height of the Cold War and the development of hydrogen weapons and a bipolar arms race. These chapters force a change in emphasis: *how* the bombs were thought of after the surrender of Japan elevated their role in the war from a tactical military weapon into a transformative force. I conclude with an investigation of the central assumptions of "nuclearism": the belief that nuclear weapons are qualitatively different weapons and thus entail new strategic thinking, new international postures, and new moralities. No one can sanely deny that, at least during the Cold War, the United States and the Soviet Union behaved as if they believed nuclear weapons were cataclysmic weapons that belonged in a different category from the ordinary tools of warfare. As long as politicians and generals treated these weapons as unique, they were indeed such, as they remain today. The Large Firebomb version that had been prevalent in military circles before surrender has all but vanished. It was surrender that selected the Awe-Inspiring Bomb as the proper mode of thinking about these weapons—this designation was not and is not an inevitable corollary of the hardware of the bomb itself.

Atomic weapons haunt the political and military future of the world still, whether in the form of nuclear proliferation, nuclear terrorism, nuclear pollution, or nuclear accident. These lingering reminders have stood for critics and defenders since the end of World War II as an allegory for Dr. Faustus (who traded his soul for knowledge), Dr. Frankenstein (who created his nemesis through science), or—in a perhaps less ominous version—as a genie released from a lamp by modern civilization (in its incarnation as the Manhattan Project). Each generation has

grappled intensely and repeatedly with understanding the implications of nuclearism for its future, but the struggle has always been caught in terms fixed, as if in amber, by the speed and suddenness with which Word War II ended. To break free from the old parameters of discussion, to possibly find new ways of understanding the place of the nuclear in the contemporary world, we must plunge back into a world in which the nuclear did not mean what it now does. That is, we must return to the frantic and confused time that no one yet realized was the final summer of the Second World War.