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# Interpreting Atomic Bomb History

## *A Reply to Fuller's "An Economic Case against the Atomic Bombing of Japan"*

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BARTON J. BERNSTEIN

While defeat in a war is a military event, the recognition of the defeat is a political act. The timing of the political recognition . . . is only partly determined by the actual situation.

—United States Strategic Bombing Survey (USSBS),  
*The Effects of Strategic Bombing on Japan's War Economy* (1946a, 57)

**S**eventy-eight years after the 1945 atomic bombings, Edward Fuller (2023) has offered a new interpretation to contend that the bombing was unnecessary. His is a worthy purpose, and a difficult task. He assembles considerable economic

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**Barton J. Bernstein**, professor emeritus of history at Stanford University, was Mellon Professor of Interdisciplinary Studies; chair of the American Studies Program; and cochair of the International Relations Program and of the International Policy Studies Program. He is on the board of advisors for the Center on Peace and Liberty at the Independent Institute.

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and military data, arrayed in multiple charts, to establish the great superiority of the U.S. to Japan in World War II, and especially in the war's last year and a half.

Lamentably, however, some of Fuller's key data—on Japan's oil and aviation gas supplies, on that nation's combat aircraft, and on Japan's wartime casualties and deaths—seem questionable. Fuller's treatment of ethical issues also seems rather perfunctory, and inadequate.

Even more serious, there is a fundamental conceptual problem in Fuller's essay involving relevant evidence, causal connections, and conclusions. Because Fuller's analysis is explicitly structured in one way, but somewhat unfolds in another, those problems warrant brief discussion in this section in order to introduce the difficulties in his article. Further development on this set of problems, with more explanation, occurs in later sections, as well.

While initially noting that a major U.S. official, Adm. William D. Leahy, chairman of the wartime Joint Chiefs of Staff (JCS), stated that the atomic bombing had been unnecessary, Fuller soon concludes on page 2 that "statements from government officials cannot establish whether the atomic bombing was unnecessary" (2023, 88). To do so, Fuller indicates, is a logical fallacy. He contends that "any [such] argument that the bombing was unnecessary must be based on the facts of the war," and that such statements by officials can only "be crucial in the search for essential facts"—by which he generally means economic evidence.

In that contention, Fuller puts forth a troublingly flawed conception of the appropriate research and evidence to reach warranted conclusions. Indeed, economic facts, in the absence of how Japanese government officials understood the situation in August 1945 or thereafter, cannot logically or evidentially—in rigorous and in unalloyed fashion—establish how long the war, without the atomic bombing, would have continued.

Yet, Fuller's essay later, in various ways, does not fully pursue, but instead departs sometimes from, what he earlier contends he is going to do. Thus, in somewhat undercutting his earlier claims, he moves, in assembling evidence and analysis starting mostly on page 104, beyond what can be characterized, in my phrasing, as his "economic facts can prove the A-bomb unnecessary" argument.

The "economic facts can prove the A-bomb unnecessary" framework, as presented by Fuller in his early pages, is somewhat undercut (but without his acknowledgment) by what his essay, toward its later pages, does: It often uses statements, in nearly all cases by American military men and other U.S. officials, to conclude that the atomic bombing was "unnecessary."

By "unnecessary," Fuller apparently means—as generally defined, near the end of his essay—the great *likelihood* of Japan surrendering before the U.S. invasion that was scheduled to begin in November 1945, though he seems briefly to acknowledge, on page 112, some possibility of a later surrender. Troublingly, Fuller does not address whether there is reason to worry about the pre-November difference of, say, August 15 versus October 31 for a Japanese surrender, and the resulting

casualties—for the U.S., for Japan, and for many noncombatants on the Asian continent—in such an eleven-week period. Estimates run about a hundred thousand dead each week (Newman 2004, 138).

If, as Fuller loosely suggests—on page 112—the war might have reached into 1946, what about all the deaths on the continent of Asian noncombatants (including mostly non-Japanese) after November 1? Those numbers from mid-August into even early 1946, by employing a reasonable estimate, could run near 2 million (Newman 2004, 138).

In explaining Japan's surrender, Fuller significantly relies on a study of Japanese decision-making, and high-level Japanese fears of revolution, without his acknowledging that the study on which he relies rests basically on what Japanese officials thought, and said—often, their “statements.” Yet, earlier in Fuller's essay, he dismisses such reliance—on statements by government officials—as constituting a logical fallacy.

These large interpretive matters involving Fuller's stated framework, the actual unfolding of his arguments and process in his essay, the conception of “unnecessary,” and the likely timing in Fuller's analysis of a Japanese surrender, without the atomic bombing, are troubling. They occur in Fuller's sourcing, in his claims and uses of evidence, and in his quoting and summarizing materials.

This extended critique is conceived in intellectual respect to examine and to assess Fuller's challenging essay, and its set of interpretations, that economic factors were *crucial and central*. Fuller goes often somewhat beyond the established literature. Some previous publications—significantly some USSBS studies, and in varying passing ways the interpretive books by Herbert Feis, Gar Alperovitz, and Richard Frank—have dealt with economic factors in looking at A-bomb/end-of-the-war issues; but none of those studies does that as energetically as Fuller's illuminating yet flawed essay.

What follows is conceived to further understand Fuller's essay, to advance and to refine analysis, and to suggest ways of thinking about A-bomb/end-of-the-war history.

Such assessment and analysis will ideally open a helpful dialogue with Fuller, and will be intellectually useful to general readers. Such analysis and assessment is conceived to promote further A-bomb/end-of-the-war scholarship on the evidence, on the nature of interpretations, and on the various ethical questions involving the use of the bomb and other actions. That includes the strangling blockade and the massive conventional bombings, and the resulting costs in hunger, perhaps producing wide Japanese starvation.

Modifying surrender terms and awaiting Soviet entry into the war, amid the blockade and bombing, might well have produced a surrender before November 1 (Bernstein 1995b). But this “Reply to Fuller” essay, while acknowledging those possible results, is not conceived, for reasons partly because of space, to deal in any depth with those important possibilities.

Those are not possibilities that Fuller considered and addressed in his essay. Had he chosen to deal explicitly with those possibilities, the present essay, even at the “price” of requiring greater length and detail, would address those significant possibilities in some depth (Bernstein 1995c, 252–55).

## Thinking about Decision-Making and Surrender

Some of the earlier published writings on war termination and nation-state surrender involving various nations, like Fuller’s present essay, encounter serious difficulties. They do not carefully distinguish between a situation that should, for rational nation-state leaders facing painful facts and expecting worse events, produce a decision to recognize near-defeat and surrender, versus the situation, often occurring in history, where actual nation-state leaders greatly minimize or deny the facts, thus delaying the recognition of defeat and thereby delaying a surrender.

Often, what analysts fail to recognize is that nation-state leaders, even if engaging in some psychological self-deception, may well not be basically—in view of their own *values*—acting irrationally. For them, their maintaining leadership, and their avoiding ignominy and punishment for defeat and surrender, can be essential, or near-essential, values. By rational standards, they are maximizing their own interest and their sense of their own welfare.

Such values can be stronger for such leaders than the values and concerns that might lead to the leaders’ concern, in humanity and compassion, for their nation’s rank-and-file citizens or for the nation’s troops as both the noncombatant citizenry and the military face deprivation, destruction, and perhaps disaster.

For an analyst, at a distance in time, to assemble the economic data (as Fuller does) that seem to dictate defeat is not an adequate process, or compelling evidence, that the nation-state leadership in the war would in fact act, on the basis of that data, to move toward surrender.

What must be underscored is: Surrender is a *political* act, and it involves decisions. Surrender is for nation-state leaders usually neither easy nor often truly timely. Political acts are the result of the admixture of many influences and perceptions, and an analyst’s parsing out those influences requires attention to evidence, including what leaders at the time of the nation moving to defeat and surrender said.

It is not, as Fuller may be implicitly assuming, that the decision to surrender is the result of an automatic and unmediated transmission of evidence—of, say, Japan’s economic inferiority and comparative weakness in armaments, and of the U.S.’s overwhelming superiority in resources and armaments—to rather mechanically produce such action: surrender. The decision to surrender is far more complicated.

Fuller’s analytical framework, as he lays it out in his early pages and as he assembles powerful data in much of his essay, seems to assume otherwise. What he does

not do systematically is to engage, as is *necessary*, with the complicated historical evidence, in detail and in depth, of *Japanese* decision-making.

Unwisely, in not looking substantially into Japanese decision-making, Fuller basically ignores, among other relevant published studies on Japanese decision-making in 1945 and the Japanese leadership's moving toward surrender, at least five major books that deal with that complicated subject: Richard Frank's *Downfall* volume; Tsuyoshi Hasegawa's two relevant books (*Racing the Enemy* and *The End of the Pacific War*); Noriko Kawamura's *Emperor Hirohito and the Pacific War*; and Robert J. C. Butow's pioneering volume, *Japan's Decision to Surrender*. Of those five books, Fuller cites only one—Frank's *Downfall*—but Fuller does not use it to study Japanese decision-making.

In looking very briefly at Japanese decision-making, Fuller does, however, rely, in his pages 112–13, on a source (Adm. Mitsumasa Yonai's August 12, 1945, words) drawn from a major book—Herbert Bix's volume on Emperor Hirohito—to quote Navy Minister Yonai's stated postwar conclusion: the A-bomb and Soviet entry were “gifts from the gods,” because that way “we don't have to say we quit the war because of domestic circumstances.” That statement helps underscore the influence, for Yonai and for some others, of the importance of the ruling elite's fears of the unraveling “domestic situation” (Fuller 2023, 113).

But Yonai's statement, contrary to Fuller's apparent understanding, can be interpreted as partly emphasizing the importance of the atomic bombing: that it helped to publicly justify a surrender that might not otherwise have occurred at that time. Thus, for an analyst like the Japanese historian Sadao Asada, who also relied upon a similar statement, such evidence seemed to help establish that the atomic bombing was important, and probably necessary, in producing a mid-August 1945 surrender (Asada 2007, 52–54).

Adding to troubling problems, Fuller substantially relies (pages 112–13) on Jeremy Yellen's essay, but significantly simplifies Yellen's analysis. Fuller ignores that Yellen concluded that the Japanese ruling elite's fear of revolution was a factor—but *not* the only factor—in Japan's surrender (Yellen 2013, 205 and *passim*).

Fuller's stated conclusions, in offering a brief interpretation of Japan's surrender, also ignore the impact of Soviet entry into the war, disregard the impact of the atomic bomb, and fail to pay any attention to the issues and challenges within the Japanese government between its offer of conditional surrender on August 10 and its acceptance within a few days of the troubling, rather ambiguous American terms.

Curiously, however, by relying even briefly on Yellen's analysis, which often seems to rest in important parts on what Japanese government leaders said, Fuller does what he indicates, early in his essay, is illogical—relying for evidence on government leaders' statements.

Indeed, to do so is *not illogical*. In the case of Japan's surrender, as undoubtedly in the case of explaining many other surrenders by a nation-state's leader, or leaders,

the powerful evidence, though not necessarily the only evidence, is the statements by the nation-state leader or leaders, and often by their associates, too.

Without examining what a nation-state leaders—including, in this case, Japan's—said directly, or indirectly, about why they are (or were) acting, it is often otherwise unclear what evidence seems useful in helping to explain the various leaders', and thus the government's, chosen actions and decisions. To ignore such evidence is to imperil any analysis of the leadership's move toward surrender.

That is certainly the case with Japan. The analytical process requires studying the available statements, and the reported and inferred thinking, by key government members. That definitely includes the Big Six: War Minister Korechika Anami, Navy Chief Soemu Toyoda, Army Chief Yoshijiro Umezumi, Prime Minister Kantaro Suzuki, Foreign Minister Shigenori Togo, and Navy Minister Mitsumasa Yonai.

But at the core of necessary analysis, in the case of Japan, is understanding, perhaps heavily through such sources, the crucial surrender decision by Emperor Hirohito himself. He was the keystone in the arch that led to Japan's surrender in mid-August 1945. It is hard to believe that the surrender decisions in August could have occurred without Hirohito's approval, and without his expressed commitment (Bernstein 1977, 20–23).

Quite plausibly, in seeking to understand Hirohito and the Big Six, an analyst might also want, in understanding and explaining Japan's surrender, to rely on the perceptions, judgments, and reports by close associates of the top-level Japanese nation-state leaders. Such associates might well include, among others, Marquis Koichi Kido, Lord Keeper of the Privy Seal; Prince Fumimaro Konoye; Gen. Torashiro Kawabe, vice chief of the Army General Staff; and Kiichiro Hiranuma, president of the Privy Council.

The historian must gather evidence, weigh it, and interpret it. Those are not automatic, or mechanical, actions. They require a mixture of intellectual caution and boldness, and of judiciousness and sensitivity. Thus, historians will, and do, often disagree, because the evidence is seldom clear-cut and unalloyed.

All that focuses, necessarily, on Japan, its leaders, their words and records, and thus offering, from such sources, the evidence on what they thought and said, and why, and when they acted, and why.

But to rely instead heavily or exclusively, as a number of analysts have done, on statements by U.S. leaders—Admiral Leahy and others—to explain Japanese decision-making, how Japanese leaders assessed the situation, why and how they chose surrender, and when they did, is a very dubious, and in substance, a deeply flawed process.

Although Admiral Leahy did not know Japanese, he was undoubtedly privy to high-level, decoded intercepts (Magic) of otherwise secret Japanese message traffic, and he had some knowledge, and interpretive views, of Japanese decisions. But Leahy, in 1945 and also afterward, was far short of being an authority. Thus, his stated judgments, while perhaps quote worthy, are of severely limited evidential value in interpreting the decisions by *Japan's* wartime leaders.

Leahy's statements are more appropriately used for other purposes. They are important evidence to help understand what top-level American leaders thought, and why, and how they understood Japan's actions, and how they interpreted the role of the atomic bombing in Japan's surrender.

Such postwar statements, by Leahy and other U.S. military officers, cannot determine whether the atomic bombings were necessary, or not. Such statements can only indicate what American leaders afterward thought and said. Those statements may help to suggest, but they don't rigorously establish, what such U.S. leaders actually thought in the *pre*-Hiroshima period.

The significant gap between *pre*-Hiroshima and *post*-Hiroshima statements in 1945, or even more distant postwar statements, must be kept in mind. It is very risky to project backward from the immediate post-Hiroshima period, or from the longer postwar period, statements made at that time about the A-bomb and the invasion to conclude that those statements are reliable evidence of *pre*-Hiroshima beliefs and judgments.

### Eleven “Senior” Air Force Officers: Mixed Evidence

Fuller unwisely contends that “every senior U.S. Army Air Force officer [apparently meaning major general to five-star general] thought the atomic bombing was unnecessary” (2023, 107). In fact, however, that statement is somewhat incorrect, and the evidence on this subject is sometimes very complicated and requires attention, in crucial cases, to pre-surrender and post-surrender thinking and careful attention to when, and even how often, the officers presented their dissenting A-bomb conclusions.

Notably, one key top-level air force officer, who was involved in some of the planning for the A-bomb attacks, never said, before Hiroshima, or even before Japan's mid-August surrender, that the “atomic bombing was unnecessary.” That was Gen. Carl Spaatz, the commander of strategic air forces in the Pacific; the atomic bombing of Hiroshima and Nagasaki, despite his moral uneasiness, was conducted under his formal authority (Spaatz diary, July–August 1945).

Later, however, Spaatz did on a few occasions, in private and in public, question the use of the bomb and say it had been unnecessary (Alperovitz 1995, 337, 343–45).

In contrast, at least four air force lieutenant generals—Nathan Twining, James Doolittle, Barney Giles, and George Stratemeyer—seem never to have questioned the use of the atomic bomb (Frederick Ashworth, Leo Maley III, and Theodore “Dutch” Van Kirk, interviews with the author, various dates).<sup>1</sup>

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1. Ashworth, a naval officer, was the weaponeer on the B-29 that dropped the atomic bomb on Nagasaki; Maley is a historian who taught on the atomic bombings; and Van Kirk was the navigator on *Enola Gay*, which dropped the bomb on Hiroshima.

But three other “senior” air force officers did provide A-bomb dissenting statements. They were Gen. George Kenney, who commanded the air force in the southwest Pacific; Lieutenant Gen. Claire Chennault, who commanded the air force in China; and Maj. Gen. Frederick Anderson, who had been deputy commander of the air force in Europe. It seems likely that only Chennault publicly stated—and that was initially in 1945—that the atomic bombing had been unnecessary. The sources on the other two generals’ statements are from the 1960s (Alperovitz 1995, 335–42). That does not invalidate their thinking, or their memories, but such evidence suggests that this subject, in the postwar years, may have been a rather minor matter for them.

Undoubtedly more important among the A-bomb dissenters were three other men: Gen. Henry Arnold, head of the air force and a wartime member of the JCS; Lieutenant Gen. Ira Eaker, a close associate of Arnold’s; and Maj. Gen. Curtis LeMay, commander of the 21st Bomber Command. In some ways, their record on the A-bomb and related issues is more complicated than Fuller and some other analysts recognize.

Some of those problems—involving Arnold, Eaker, and LeMay—receive consideration in the next section. Suffice it to conclude here that the evidence is that *seven* senior air force officers at some point “thought the [atomic] bombing was unnecessary,” and that there apparently is no such reported evidence involving *four* others. Hence, Fuller’s statement about “*every* senior” air force officer (my emphasis) requires correction.

### **Using Evidence by American Military Men on Support for or Opposition to the Invasion and on the A-bombing: Complicated Problems**

Fuller, in the unfolding of his essay, and contrary to the structure of logic and interpretation stipulated by him early in his essay, rests a good part of his analysis—that the atomic bombing was unnecessary—on statements by a number of U.S. leaders, including often top military leaders. That group notably includes, among others, Adm. William Leahy; Adm. Ernest King, the chief of naval operations; Adm. Chester Nimitz, commander of the Pacific fleet; Gen. Henry Arnold; Adm. William (“Bull”) Halsey, commander of the third fleet; Major Gen. Curtis LeMay, commander of the 21st Bomber Command (which bombed Japan); and Gen. Dwight Eisenhower, commander of European forces.

But this subject, of what they believed, what they said, the nature of the evidence on such matters, what Truman knew before Hiroshima about their analysis, and whether most of them—Leahy, King, Nimitz, Arnold, Halsey, and Eisenhower—also opposed, *before Hiroshima*, the atomic bombing, is quite complicated. Fuller’s use of their various statements—in all cases drawn by Fuller from published studies, and never from any of these men’s pre-Hiroshima 1945 papers—does not recognize,



and thus does not deal with, this complicated subject requiring the search for, and then the assessment of, important relevant evidence.

The “bottom line” is this: There is no good evidence that *any* one of them, before Hiroshima, opposed the use of the bomb on Japan. That important conclusion requires further discussion, sometimes with substantial detail.

In many of these cases, Fuller relies upon postwar quotations assembled by Gar Alperovitz in his *Decision to Use the Atomic Bomb* (1995), without Fuller’s worrying about the use of these military men’s *postwar* statements. Uncritically, Fuller employs those statements as the evidence needed to establish variously that the atomic bombing was unnecessary and that other military means—the blockade, or conventional bombing, or a combination—would have rather soon ended the war.

Fuller is not troubled that most of these men, in interservice rivalry, had good reason to believe, and to say, *after* the war that their own military service would have mostly won the war, and that an invasion of Japan was unnecessary. Of the U.S. military men cited by Fuller as, in his judgment, providing statements that the atomic bombing was unnecessary, probably only one high-level officer—General Eisenhower—was not implicitly or explicitly plumping for his own military service.

Two of the five-star officers—Admiral Leahy and General Arnold—left significantly relevant diaries, but Fuller did not directly use them. There are also relevant manuscript diaries by Secretary of War Henry L. Stimson, Secretary of the Navy James V. Forrestal, and Assistant Secretary of War John J. McCloy, for much of the May–August 1945 period, but Fuller did not use any of them.

It is correct that four five-star officers—Nimitz, Leahy, King, and Arnold—said or implied, *after* the war, that they had concluded, before Hiroshima, that an invasion was unnecessary. Undoubtedly, Admiral Nimitz did believe and say, before Hiroshima, that an invasion was unnecessary, though before Hiroshima he did not make clear when, in his judgment, the war would otherwise end. His pre-Hiroshima conclusion about the invasion being unnecessary never reached President Truman, and Nimitz before Hiroshima gave no advice about the forthcoming atomic bombing of Japan. Only afterward, did he oppose the A-bomb’s use, and condemn it.

Indeed, after the second atomic bombing in August, Nimitz was eager to recommend using more A-bombs. The atomic bomb was for him, at times, a powerful supplement to the blockade, and not (before Japan’s surrender) a disjunctive alternative to the blockade (Frank 1999, 303).

Most likely, both Admirals King and Leahy, probably partly representing a navy perspective, truly believed, before Hiroshima, that the war could be ended without an invasion. But it is important to stress: there is no evidence that they said this to President Truman. And there is no evidence in pre-Hiroshima materials of when the war, without an invasion, in their judgment, would otherwise end. And neither man, before Hiroshima, apparently opposed the use of the A-bomb (Leahy diary, May 25–August 6, 1945; Joint Chiefs of Staff 1945; Forrestal diary, June 18–August 15, 1945).

Admiral King, when meeting with Truman, as well as with Gen. George C. Marshall, the army chief of staff, Admiral Leahy, and the service secretaries, at the special White House session on June 18 to discuss the Kyushu invasion, actually supported that invasion. Neither in that meeting, nor at any other time before the war's end, is there any evidence in the archives, or in any pre-Hiroshima materials, that King opposed the use of the bomb on Japan (Joint Chiefs of Staff 1945; Leahy diary, June 18, 1945; Stimson diary, June 18, 1945; Forrestal diary, June 18–July 1945).

Admiral King's often quoted statement, from his 1952 memoir, refers—as Fuller notes on page 99—to “the [often assumed] dilemma” of the atomic bombing versus the invasion. But for King, and for others in the upper ranks of Washington military officialdom before Hiroshima, there was *no* such dilemma. No one in those upper ranks before Hiroshima opposed the atomic bombing, or the invasion, or thought there was any dilemma.

As quoted by Alperovitz, and used by Fuller, on his page 112, an aide to Admiral King claimed to recall, in 1982, thirty-seven years after the atomic bombing, that King, in 1945, had said in effect, before Hiroshima, why not wait for three or four months, and if Japan did not surrender, then drop the bomb; and in about August 1945, King reportedly stated, the bomb is not necessary (Alperovitz 1995, 329; Dornin [1982] 1987, 17). Such a recollection—thirty-seven years later!—is unsubstantiated by any pre-Hiroshima evidence; that recollection is greatly suspect, and not convincing.

There is apparently nothing in Admiral King's own 1945 papers, in the JCS files, or in the diaries and other 1945 archival materials left by King or by others from 1945, or even from shortly thereafter, to substantiate this 1982 “remembered” claim. It is—to repeat—highly dubious.

Admiral Leahy may well, before Hiroshima, have had doubts, even after late May 1945, about the need for an invasion of Japan. But Leahy never so indicated in his own diary for May 26–August 6, nor in any JCS meeting in that period, that he opposed the invasion. At the White House meeting on June 18, Leahy actually supported the invasion (U.S. Department of State 1960).

At no time in 1945, before Hiroshima, did Leahy, in his own diary, in other archival materials, or in high-level meetings, oppose use of the A-bomb on Japan (Leahy diary, May 25–August 6, 1945; Forrestal diary, June 18–August 15, 1945; Stimson diary, May–August 12, 1945).

General Arnold, at least by mid-June 1945, and even shortly before the White House meeting on the 18th (which he did not attend), clearly supported the Kyushu invasion. He was not doing so to avoid conflict with other top-level military men, though he undoubtedly did not want such conflict. During a June 1945 trip to the Pacific, he wrote in his own diary on the 16th: “Continue with plans and [invade] and occupy Kyushu, so as to get additional bases for [U.S. bombers].”

For General Arnold to place in his then-secret and private diary a discussion of the U.S.'s bombing on “invasion day,” and his endorsement of the Kyushu invasion,

is significant. Such evidence seems to undercut the contention, in the mid-1970s, by the then-retired Lt. Gen. Eaker who, in an oral history nearly two decades after Hiroshima and the planned Kyushu invasion, stated, “I knew nobody in [the] high echelons of the AAF [Army Air Forces] who had any question [in 1945] about having to invade Japan.” Both Alperovitz (1995, 336) and Fuller (2023, 107 and 109) failed to recognize Arnold’s substantial support for the Olympic invasion of Japan in November.

Reflecting Arnold’s own support-the-invasion analysis, his chosen representative, Lt. Gen. Ira Eaker, at the special White House meeting on the 18th, actively supported the Kyushu invasion (Joint Chiefs of Staff 1945). After that June 18 meeting, General Arnold in July helped arrange some of the details for the atomic-bombing missions, and he never indicated, according to available April 12–August 14 archival materials, that he had any doubts about using the bomb (Arnold, “Trip to Pacific”; Arnold diary, July 13–July 27, 1945; Stimson diary, April 12–August 25, 1945).

There is apparently no evidence, and no claim by Fuller, that Adm. William Halsey before Hiroshima ever questioned the necessity of an invasion, though Halsey did know of the A-bomb before Hiroshima. What after the war Halsey said about Japan being defeated, and the bomb being unnecessary, is significant in terms of his own thinking. But it does not establish, by good evidential standards, that Japan was very near surrender or that, before Hiroshima, Halsey thought so.

Most likely, Gen. Curtis LeMay, before Hiroshima, did truly believe that the U.S.’s heavy conventional bombing would *soon* win the war and avoid the November invasion. But whether LeMay ever said that—in his own diary, or elsewhere—explicitly, and unambiguously, before the war’s ending, seems somewhat questionable.

After the war, General LeMay sometimes stated that the atomic bombing was unnecessary. But his wavering judgment on that subject, and his consistency involving his postwar statements and his wartime August 1945 actions, seem to be undercut by some evidence. In August 1945, after the first two atomic bombings, LeMay was actually pushing for the use of a third A-bomb (interviews with Norman Ramsey and Frederick Ashworth, various dates).<sup>2</sup>

After the war, General Eisenhower sometimes claimed that he had told Secretary Stimson in July 1945 that the intended atomic bombing of Japan was unnecessary. But there is no 1945 evidence supporting such a claim. Significantly, Stimson in his own July 1945 diary characterized their discussion in very different terms. One history-journal article seems substantially to refute Ike’s postwar claims of what he said to Stimson at Potsdam about the bomb (Bernstein 1987).

Seeking to deal fully with what Leahy, King, Nimitz, Arnold, Halsey, LeMay, and Eisenhower said and thought about the invasion and the atomic bomb, and

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2. Norman Ramsey was a physicist and future Nobel Prize winner who helped assemble the atomic bombs.

about defeating Japan, and producing Japan's surrender, might require another ten thousand words. This short section is, thus, rather brief for such purposes. It is conceived to present some important evidence, and to challenge Fuller's stated evidence and his expressed conclusions. Those conclusions often seem very heavily to rest upon Alperovitz's 1995 book (which frequently uses distantly post-Hiroshima oral histories), on postwar memoirs (mostly by Leahy, and King and Whitehill), and occasionally on some other literature.

### **Thinking and Evidence about Producing Japan's Surrender before November 1, 1945**

It is certainly correct, as Fuller notes, that General Marshall and Gen. Douglas MacArthur wanted an invasion of Japan, and that their quest for presidential approval of an invasion rather easily triumphed under President Truman, who had been an army man and who greatly admired and trusted Marshall. But an analyst should recognize that Truman's approval on June 18 of the Olympic operation did not displace the U.S.'s blockade-bombing strategy, but actually supplemented it.

Under that strategy, the heavy conventional bombing would continue, as would the strangling blockade, but an invasion would occur *if* the blockade-bombing strategy did not help produce Japan's surrender before the scheduled invasion (Bernstein 1995b).

For President Truman and his top advisers, the atomic bombing was not viewed, in prospect, as a disjunctive alternative to the U.S.'s bombing-blockade strategy, or to the U.S.'s planning for an invasion. The atomic bombing was viewed, in prospect, as the use of a powerful weapon that might greatly help to speed the ending of the war by producing the desired surrender.

Thus, in the pre-Hiroshima analysis, the atomic bombing was conceived as a powerful supplement whose use might—it was hoped—help produce a surrender and obviate the invasion. There was no guarantee, for Truman and others, in their pre-Hiroshima thinking, that the atomic bombing, conducted in the context of the ongoing blockade-bombing strategy, would quickly produce Japan's surrender and obviate the invasion.

In most of the A-bomb planning, the weapon was to be used on major Japanese cities, and, with the exception of the arsenal in Kokura, the targeting in the other cities was not primarily directed against what would normally be defined as military targets.

After Nagasaki, General Marshall, who on May 29, 1945, had expressed his great uneasiness about the A-bomb mostly targeting noncombatants, seriously considered using A-bombs as tactical weapons in the early campaign on Kyushu. Such a strategy would presumably have meant not using more A-bombs on Japanese cities in the interim between Nagasaki (August 9) and Olympic (November 1), or at least

reserving a small batch until about November 1 (McCloy Papers, McCloy memo, May 29, 1945; Marshall Papers, Hull-Se[e]man transcript, August 13, 1945).

Both before the atomic bombing of Hiroshima and after the atomic bombing of Nagasaki, the invasion planning at high U.S. levels continued. Evidence in early August of the large Japanese troop buildup on Kyushu produced deep alarm for some in Washington, and consideration by some leaders of possibly changing the site of the scheduled invasion. But the U.S. invasion plans were not changed (Bernstein 1999).

### Fuller on the Road to Japan's Likely Surrender: Problems

Ignoring such evidence on the continued U.S. planning for the Kyushu invasion, Fuller offers a somewhat different, but not necessarily incompatible, analysis. He contends, in a slightly hedged statement on page 112, that “It is *likely* [my emphasis] that the intense economic pressure from the blockade would have forced Japan to surrender before the start [in November 1945] of Operation Downfall.”

Significantly, Fuller, by his phrasing—“It is likely”—seems rather quietly to indicate that other results, though not likely, might also occur: a longer war, and the invasion. Not openly acknowledging such a possibility, Fuller never confronts this matter directly. Instead, he moves on in his next sentence to rely substantially on a statement by historians Kai Bird and Martin Sherwin (2005, 301) in their Oppenheimer biography.

The Bird-Sherwin statement, as quoted by Fuller is: “Truman and the men around him knew that the initial invasion of the Japanese home islands was not scheduled to take place until November 1, 1945—at the earliest. And nearly all the president’s advisers believed the war would be over prior to that date”—November 1, and thus no invasion (Fuller 2023, 112).

But there are two serious problems with Fuller’s reliance on that statement. One problem is that Fuller omits the rest of what Bird and Sherwin (2005, 301) wrote: that one or two events would occur to produce Japan’s surrender. They were “the shock of a Soviet declaration of war” producing Japan’s surrender, or “a [U.S.] political overture” to Japan of promising “that the Japanese could keep their emperor.”

Hence, for Bird and Sherwin, one of those two important events—both unmentioned by Fuller—seemed necessary to produce the surrender soon, and thereby to obviate the large November invasion of Kyushu. Bird and Sherwin were not relying only, and perhaps not even significantly, on the U.S.’s siege strategy—the blockade and bombing.

The second problem is that the group of what is described as “nearly all the president’s advisers” *believed*, is highly questionable. More correctly, one should say: they *hoped* that they were correct, and in the weeks before the atomic bombing, they did not build any firm policy on avoiding the use of the atomic bomb and on having the war nevertheless speedily end before November 1, 1945.

None of them was seeking to avoid the use of the bomb, and none of them is known to have ever said to Truman, before Hiroshima, don't use the bomb because there is another way—a Soviet declaration of war, or modified surrender terms, or a combination—that will avoid use of the bomb (Stimson diary, McCloy diary, Leahy diary, Forrestal diary, all May–August 1945; Bernstein 1980).

Nor did Truman or his top advisers, in the days before the first atomic bombing, or even after the Hiroshima bombing and before the second bombing, or in the brief time after the Nagasaki bombing, take any significant action—until Japan's conditional-surrender offer on August 10—to prepare for a very speedy end of the war. When that conditional-surrender offer occurred, Truman and his advisers were surprised—and not prepared (Leahy diary, August 10, 1945; Forrestal diary, August 10, 1945; Stimson diary, August 10, 1945).

### **U.S. War Planners and Cutting Back U.S. War-Goods Production**

Arguing, as Fuller briefly does on page 114, that the U.S.'s reduction of war-goods production “when it was still uncertain the atomic bombs would ever be available” establishes that the U.S. “leadership was confident the war could be won without atomic bombs” seems, basically, to be a correct conclusion.

But that statement also greatly simplifies, and thus somewhat overlooks, significant matters: By 1945, for U.S. leaders, the issue was not whether the U.S. would win, and that Japan would lose. The significant issues were, rather: How soon? On what terms? Might a costly invasion, or even two invasions, be avoided?

Fuller's phrasing seems greatly to obscure these important matters. No one in high-level U.S. policy circles argued, before Hiroshima, that the atomic bombing was essential to winning the war. Rather the assumption, for Truman and others, was that the atomic bombing would *help* win the war, and *help* speed Japan's surrender.

A truly nuanced and in-depth discussion of the cutbacks in war goods would also involve an analysis of who supported the cutbacks, when the cutback decisions were made, and whether they heavily involved “war planners,” or others, and in the case of “war planners,” who and when.

An analysis focusing on cutbacks and planning would also factor in such significant evidence as the following: that Under Secretary of War Robert Patterson, on August 2, a few days before the Hiroshima bombing, asked George Harrison, a top Stimson aide on A-bomb matters, whether there should be substantial cutbacks in procurement orders, but that not until seven days later, on the 9th, after the Hiroshima bombing and probably after the Nagasaki bombing, did Harrison even respond—and then in very equivocal terms (Bernstein 1995c, 128). Though knowing that a second atomic bombing had occurred or was imminent, and that more A-bombs would soon be available for added nuclear attacks on Japan, George Harrison on the 9th, still unsure about the future, did not endorse any cutbacks.

Harrison was not being coy or intentionally difficult. On the 9th, he apparently was unsure how long the war would continue and how and when it would end. So, quite understandably, he was being purposely cautious, and rather evasive, in responding to Under Secretary Patterson, a valued and trusted colleague.

### **Oil (and Aviation Gas) Shortages, Japan’s “Paralyzed” Armed Forces, and Fuller’s Counterfactual Argument: Some Problems**

On pages 94–97, Fuller presents what seems at first glance to be a strong counterfactual argument: Japan’s oil imports had severely dwindled, and Japan’s tanker shortage, among other causes, along with the monthly consumption of oil, meant that in 1945 the “oil reserve of 3.7 million barrels . . . would have been totally exhausted in less than three months.” And “even if Japan had had oil,” the nation could not transport it “to key strategic positions,” and that “meant the Japanese armed forces were *effectively paralyzed* at the time of the atomic bombing” (my emphasis).

Fuller’s contentions, and the problems with data and categorization, require close attention. In analyzing and critiquing his contentions, there is a need to get deeply into the data, the problems of arithmetic, the questions about the reliability of sources, and even about whether to treat aviation gas as part of oil supplies, or separately.

In emphasizing oil, it seems that Fuller was not concerned with aviation gas, which was needed for kamikazes and other planes; or perhaps he assumed that aviation gas was a part of the total numbers in dealing with Japan’s oil.

In fact, for USSBS and other analysts, aviation fuel apparently was sometimes separately categorized from oil, and sometimes put together with oil (USSBS 1946a, 80,134). That makes analysis rather difficult, but such difficulties do not undercut the substantial evidence suggesting that Japan’s forces, by most calculations of the data, contrary to Fuller, were not “effectively paralyzed.”

To start: the evidence, if an analyst focuses only on aviation gas, is greatly unsettling in the effort to establish a conclusion that Japan’s “armed forces were effectively paralyzed at the time of the atomic bombing.” A USSBS study reports that Japan *may* have had about 1.156 million barrels of aviation gas on July 1, 1945, and apparently indicates that the consumption of such fuel in the three-month (April–June) period, during the costly Okinawa battle, had averaged only about 200,000 barrels a month. Such low monthly-consumption numbers apparently left substantial aviation fuel for use in war, had Japan not surrendered in mid-August 1945 (USSBS 1946c, 20, 25).

But that evidence becomes considerably more complicated. USSBS could only find 316,000 barrels for the army and navy, so that approximation of 1.156 million may be unreliable. The meaningful total might be only about 316,000 barrels of aviation gas—about 27 percent of the approximate 1.156 million number. Adding

to problems, the aviation-gas supplies, according to USSBS, “were hidden away in mountain caves and dispersed to hundreds of spots,” so it was unclear, to USSBS investigators, how the Japanese would get the aviation gas to “airfields with sufficient speed” to deal with the invasion (USSBS 1946d, 20–21).

Thus, there are basic questions, which unfortunately are not considered by Fuller: How much aviation gas was actually available in Japan? How many kamikazes could that aviation gas actually supply? What would be the likely state of the internal Japanese transportation system, and could that aviation gas reach the airfields in time to be used against the invasion? How much damage could those fueled kamikazes, and other Japanese planes, do to the U.S.’s invading force?

Much of Fuller’s basic analysis, in focusing explicitly on Japan’s *oil* shortages, rests on the answers involving at least two, and perhaps three, questions that Fuller does not explicitly address: (1) By August 1945, how much oil did Japan’s military forces on Kyushu and especially on southern Kyushu, committed by Japan to the Ketsu-Go operation (the planned response to the U.S. invasion), possess? (2) How much oil did those Japanese forces need, according to Japanese planning, to fight against the U.S.’s Kyushu invasion and to inflict great injury on the U.S.’s invading forces? (3) Even if the oil-fuel supplies were inadequate to support Ketsu-Go, did Japanese leaders understand this in August 1945, or, if not, what is the evidence that they would have understood this in, say, October 1945, and have acted upon such analysis and given up before November 1945 on any version of Ketsu-Go?

Taking question (3) first: Fuller provides no evidence that speaks to that scenario of Japanese leaders recognizing the presumably severe oil-shortage problem, and *thus* possibly giving up, or strongly considering giving up, on Ketsu-Go. Examining the postwar U.S. interrogations and statements of Japanese wartime officials can provide useful information on this subject of oil. But Fuller has not done that work.

Taking question (2) next: Fuller’s numbers, upon *initial* examination, indicate, by his statement, that if the Japanese oil reserve was 3.7 million barrels, and if consumption in 1945 was at the 1944 monthly rate (he indicates 1.6 million barrels), the supplies “would have been totally exhausted in three months.”

But Fuller’s statement and his table 11, upon closer examination, are actually quite unclear. Does he think the 3.7 million barrels were in reserve in January 1945, or in July 1945, or in mid-August 1945? When? He apparently means, it seems, the end of 1945, according to the data table (from John Ellis’s book) on which Fuller states he is relying.

There is, unfortunately, a basic problem with that 3.7 million figure, though initially it may look comfortably reliable. It comes from John Ellis’s useful 1993 data volume (*World War II: A Statistical Survey*), table 84 (on page 276), which is also identical, with 3.7 million, in Ellis’s 1995 volume on this subject. But if one looks at Ellis’s table 84, and at that table’s data for the end of 1944 (15.3 million barrels in stock), and adds the 1 million barrels apparently produced in Japan in 1945, the



total is then 16.3 million barrels; yet if one independently does the arithmetic, and subtracts the 4.6 million barrels stated, by Ellis and thus by Fuller as consumed in 1945, the total oil stock at the end of 1945 is 11.7 million barrels, and not 3.7 million barrels.

Perhaps there's a typographical error or more in Ellis's table 84. But simple arithmetic, using his stated numbers, produces very far above 3.7 million barrels. Might there have been 11.7 million barrels? That seems too large. But checking—instead of surmising without substantially reliable data—is essential.

If, in fact, there were 11.7 million barrels by the year's end, that total is very far above an amount that would have left Japan's armed forces "effectively paralyzed" when the atomic bombing occurred. But assuming that there are problems with both the 3.7 million total and with the 11.7 million total, it is useful, nevertheless, to pursue closely parts of Fuller's analysis for 1944-45 involving Japan's oil supplies for the likely invasion period.

Why didn't he provide Japan's monthly rate for the meaningful two-and-a-half month period from June through mid-August 1945? It is apparently possible, using what seem to be reliable numbers assembled by USSBS from wartime and postwar Japanese sources, to get better leverage than Fuller provides on these issues involving the monthly consumption rate and the totals for oil in the key period, up to mid-August, in 1945.

Such USSBS sources allow an analyst to address question (1). It turns out that, by using a 1946 USSBS report, an analyst can obtain what seem to be useful numbers for the important three-month (April-June) period in 1945. In that three-month period, *total* consumption was about 2.95 million barrels, which means a monthly rate during that three-month period of slightly under 1 million barrels. And the July-September total consumption in the next three-month period in 1945 was about 1.6 million barrels; that suggests a *monthly* rate in the approximately six-and-a-half week period of July into mid-August of about 533,000 barrels (USSBS 1946a, 134).

But it is possible, though rather unlikely, that the 1.6 million barrel *total* should be mostly prorated for *only* the approximately six-and-a-half-week period (about one and a half months) in July to mid-August 1945. That would mean, as for April-June 1945, a monthly consumption rate of about 1 million barrels.

The USSBS report places Japan's total oil inventory starting in July 1945 at about 2.84 million barrels (1946a, 134). That would mean that, as seems likely, if monthly consumption had run at about 533,000 barrels for all four months (July through October), about 700,000 barrels of oil would still have existed in early November 1945 at the time of Ketsu-Go.

It seems unclear, short of seeking and examining detailed Japanese military plans, how the Japanese military would have been able to operate with only about 700,000 barrels in November 1945, where the oil was definitely located, and what Japanese forces, in what situations, would have received priority for the fuel.

But if, as seems highly unlikely, the monthly rate of consumption for the July-through-mid-August period should be calculated as being about a million barrels, and if that monthly rate is extrapolated into October 1945, then the conclusion—greatly implausible but not fully impossible—is: virtually no oil by November 1945.

These various calculations are interesting. They yield significantly differing conclusions about Japan's available oil resources at the likely start of the U.S. invasion and the Japanese implementation of Ketsu-Go. But unfortunately, these calculations tend often to rest on some unknowns, or on uncertain data, or on a troubling combination.

Ignoring many issues and some important sources, Fuller does not effectively establish that Japan's oil consumption and oil stocks in early August 1945, "at the time of *the atomic bombing*," were such that Japan's "armed forces were effectively paralyzed" (my emphasis). Nor does his essay establish that Japan, at that time, or even in early November 1945, "did not have enough oil [located in appropriate places] to continue the war."

Far more research is needed in reaching beyond Fuller's treatment of the subject. It is necessary to determine important evidence on at least four sets of crucial matters—Japan's oil (and aviation gas) supplies and their location; consumption rates for various periods; Japan's related war plans; and the knowledge in July–August 15 by Japan's war leadership of their nation's oil (and aviation gas) situation and whether the leadership generally agreed on the crucial numbers.

### **Japan's Aviation Gas, Kamikaze Plans, and Ketsu-Go: Significant Data and Troubling Conclusions and Questions**

Distressingly, as the preceding section in this essay discusses, much of importance seems uncertain involving Japan's oil and aviation gas supplies by mid-1945, and later. Sometimes the available sources on Japan's oil and aviation gas numbers are rather at odds with one another, and occasionally are even contradictory, in dealing with Japan's overall oil supplies (often including aviation gas) for 1945 and the U.S. invasion.

But the U.S. Strategic Bombing Survey, in one report, may well have pinned down very useful information on Japan's aviation gas and on that military's plans, and capacities, for its kamikaze assaults in autumn 1945 against the U.S. invading forces on Kyushu in the Olympic operation.

Dealing only with kamikazes, the U.S. report in that important section was somewhat limited. It did not deal usefully in detail with other Japanese aircraft, nor with Japanese military ground vehicles (including especially tanks). Ground forces did not use aviation fuel.

That study, *Japanese Air Power*, was issued by USSBS's military analysis division in the agency's Pacific-War series in mid-1946. The report was based in part on

consultations with USSBS's oil and chemical division, which produced the two *Oil* reports in early 1946.

Short of delving into the relevant USSBS archival records, it is not possible to establish that *Japanese Air Power* is generally reliable on its important numbers, and there were apparently some postwar challenges by Japanese officials when they were shown the USSBS numbers (Barrett 2020, 321–22).

But given the centrality of those numbers in core segments of that 1946 report, it seems reasonable to conclude—yet with at least minimal uneasiness—that the general numbers in the USSBS report on important subjects are probably nearly accurate in substance, even if there may be some but not large errors in the details. Obviously, relying fully on those USSBS numbers may be a bit risky, and the use of them necessarily has to be somewhat tentative.

That 1946 USSBS study concluded—probably from USSBS's oil and chemical division—that Japan's aviation-gas supplies totaled 1.156 million barrels on July 1, 1945, and 1.011 million barrels on October 1, 1945. The total consumption for July–September 1945, according to the *Japanese Air Power* report, was small—214,000 barrels. In that three-month period, 68,000 barrels of aviation gas had been produced in Japan from various sources, so the net reduction in the aviation-gas inventory for the three-month period was only about 146,000 barrels (1946b, 44–45).

In view of those reported numbers, and apparently the rather limited consumption in that three-month period (July–September), it seems generally reasonable to conclude that the wartime consumption in the significant six-and-a-half week period of July 1 through August 15 (the end of the formal U.S.-Japan war) did not exceed about 200,000 barrels, for a monthly wartime rate of about 137,000 barrels in that short period.

Thus, extrapolating loosely from such data, had the war continued into early November 1945, and the U.S. invasion, the total Japanese consumption of aviation gas up to November 1 (the beginning date for Olympic) would have been about 548,000 barrels in a four-month period. That probably would have left about 608,000 barrels to respond to the U.S. invasion.

A key issue is: How much aviation gas was needed by Japan to deploy kamikazes against the invading U.S. forces? The USSBS conclusion: “Ten thousand suicide sorties, each of 5 hours duration, would consume a maximum of about 50,000 barrels” of aviation gas (1946b, 25).

That averages about five barrels for each kamikaze. Whether the Japanese could have deployed many more than the 5,350 kamikaze-suitable planes reportedly ready in mid-August 1945 and have reached to the Japanese military's intended total of 10,700 kamikaze-able planes by November 1, seems uncertain (1946b, 24). But even allowing for possibly about 11,000 kamikazes by November 1945, and slightly more than an average of five hours per plane, the total needed would be only near 60,000 barrels of aviation gas. That number was far under the likely general inventory of about 608,000 barrels.

Such numbers, even if slightly errant, certainly suggest, upon initial examination, that Japan very probably would have had more than enough aviation gas to generally implement its kamikaze plans, even possibly involving more than 10,000 suicide planes against the Kyushu invasion. Japan's military would have had—to repeat, and to emphasize—about 608,000 barrels on November 1. That was slightly more than ten times the needed 60,000 barrels, if such a large amount—and not 50,000 barrels, or less—had been needed.

But that USSBS report, and thus the analysis so far in this section, does not address a crucial set of issues: Was the aviation gas located close enough to the kamikazes to be available for their use? Might the U.S. planes, in advance of the November 1 invasion, have been able to thwart much, though probably not all, of such kamikaze action by bombing the relevant Japanese airfields, railroads, surface roads and bridges, and aviation-gas storage facilities?

Such key questions—really a set of questions—rest upon important, and intertwined, issues not adequately addressed in that 1946 USSBS report: Where were the kamikazes located? Where was the aviation gas located? Did the availability of the aviation gas to the kamikazes depend on railroad transportation, or even decent surface roads and bridges? If so, would there have been adequate transportation, if the U.S. Air Force, as planned, had largely destroyed much of the Japanese railroad network, starting in about mid-August 1945?

Most of these issues are briefly acknowledged in the *Japanese Air Power* volume, but they are not really answered (1946b, 25). Without reasonably good answers to these important intertwined questions, it is not easy to assess the USSBS report's explicit conclusion: There was enough available aviation gas for much more than five thousand sorties, let alone about ten thousand kamikaze sorties.

A separate postwar U.S. report, put together by Gen. Douglas MacArthur's staff, and relying heavily on interviews with Japanese officials, but with very vague sourcing, concluded that 330,900 barrels of aviation gas had been put, apparently near mid-summer, in a special reserve for the Ketsu-Go operation (*Reports of General MacArthur* [1950] 1966b, 667–68). Pinning down the basis for that conclusion is undoubtedly very difficult, and perhaps not possible, but even that number is well above the 50,000 barrels needed for ten thousand suicide flights, or the 60,000 barrels for about eleven thousand such sorties.

Significantly, the 1946 USSBS *Japanese Air Power* report states, “[if] the Japanese had been able to fly say 5,000 suicide sorties, a figure by no means impossible,” and if their success rate had been at their overall wartime average—of 1.8 percent for ship sinkings and 18.6 percent for damaging hits and near-misses—“they would have sunk about 80 ships and damaged about 900.” According to that report, most of the damaged or sunk ships, however, would not have been battleships, aircraft carriers, or cruisers, but smaller craft (1946b, 25).

That USSBS report's alarming conclusions—of Japan's ample aviation gas for more than ten thousand suicide sorties, and thus the possible Japanese damage to

U.S. ships from even five thousand such kamikaze sorties—are certainly deeply troubling. Those alarming conclusions seem significantly to undercut Fuller’s contention that “the Japanese armed forces [because of a shortage of oil in] key strategic positions . . . were effectively paralyzed at the time of the atomic bombing.” That important conclusion, in Fuller’s essay, should be assessed, at this juncture, as *very questionable*.

Far more research, probably conducted heavily in available archival materials, has to be done on that important contention. Certainly, Fuller’s conclusion cannot be accepted at this time. It rests upon too little research, and his essay’s significant conclusion about the “paralyzed” Japanese armed forces does not confront the substantial, and heavily unsettling, contrary evidence provided by USSBS in its report on Japanese air power and aviation gasoline.

### **Ethics, Killing, Blockades, and Likely Costs in Lives**

Fuller recognizes that there are severe ethical problems, as the philosopher A. C. Grayling pointed out, in seeking to justify the atomic bombings on the grounds that they saved the lives of soldiers. Grayling had stated that “saving military lives by substituting civilian deaths . . . is no different morally from a soldier on the battlefield using a civilian as a shield” (2006, 249).

Often, but not always, critiques of the atomic bombing are rooted, at least in part, in the fact that the two atomic bombings killed massive numbers of noncombatants. It is worth speculating on the interesting, but not implausible, counterfactual: What if, instead, a mostly military target (for example, a large war-plant complex) had been carefully chosen, and the numbers of obvious noncombatants had been, say, in the few thousands, though the workers in the war plants might die in much larger numbers? Should those workers be categorized as noncombatants, or is that perhaps too simple?

That hypothetical, and such concern about atomic bombing a military target, can be usefully underscored by President Truman’s own claims, in his July 25, 1945, diary entry, that he and Secretary Stimson agreed on bombing an essentially military target (Bernstein 1980). Such targeting, of course, did not basically occur, with the partial exception of placing Kokura on the target list. A-bomb targeting, in order to avoid killing noncombatants, was never intended by the men—well below President Truman—who actually controlled the A-bomb targeting.

After Hiroshima, President Truman, as he indicated to his cabinet on August 10, 1945, acknowledged, somewhat obliquely, that the people the A-bomb had killed and injured in Hiroshima and Nagasaki were substantially noncombatants (Henry Wallace diary, August 10, 1945). But generally, Truman erroneously clung instead to the false contention—as he maintained in late 1946 to ex-Secretary Stimson—that the A-bomb targets had primarily, if not entirely, been military targets (Stimson Papers, Truman to Stimson, Nov. 13, 1946, and Dec. 31, 1946).

The death of so many noncombatants in the atomic bombings—whether the numbers are only somewhat above 110,000 or instead near 200,000—has led some analysts, in looking back on the 1945 atomic bombings, to conclude that other possible actions, including a naval blockade, were more desirable. In his essay, Fuller may be assuming this.

Citing Grayling, Fuller wrote, in footnote 31, that “there are ethical problems with starving Japan into submission” through the food-denying blockade; and that it constituted violence which, in ethical terms, “would have been more proportional than the atomic bombing.”

Perhaps, in his phrasing, Fuller, concerned about ethics, only wanted to suggest, but not to endorse, such a perspective. His brief statement, in his footnote 31, is ambiguous on his own position. Yet, he also suggests, on page 112, that the peril of starvation could have been avoided if the blockade had been slightly modified to “let enough food into Japan to prevent mass starvation.” That might have been quite complicated, but it is an interesting notion.

Fuller adds, however, that “the onus for the suffering would be on the Japanese government for delaying their inevitable surrender.” But he omits the fact that adequate food supplies would also have greatly reduced for the Japanese government the threats of domestic discontent and even upheaval, and thus that the pressures of moving toward surrender might well have been significantly reduced.

Ideally, Fuller, as a thoughtful analyst, might well have devoted far more attention (than about two-thirds of a page) to the troubling linked issues of the U.S.’s blockade, possible starvation within Japan, the ethical subject of the resulting non-combatant suffering, and the U.S.’s desire—successfully implemented—to put significant pressure on Japan by basically eliminating food imports into the island nation.

## Examining Numerical Data and Sourcing: Problems

A large problem in Fuller’s article involves some of his numerical tables. Many of his tables include the year 1945. But are the cited production statistics and many other specified numbers for 1945 for the entire twelve-month year? In most cases, shouldn’t the numbers be restricted (and so specified) for 1945 as including only the first seven and a half months, the period up to Japan’s mid-August agreement to surrender?

A troubling problem involves the number of Japanese “Combat Aircraft” in 1945, and especially in the days before the August 15 surrender. Fuller’s table 23, drawing explicitly on John Ellis’s data, states 4,600 Japanese planes, though it is unclear whether that number is for about August 15, or earlier in that year, or possibly the average computed for wartime 1945. Far more troubling is that the MacArthur occupation authorities reported what totaled more than 12,700 planes (*Reports of General MacArthur* [1950] 1966a, 136).

That large number of more than 12,700 Japanese planes (including gliders and transport craft), if generally reliable, seems to undercut parts of Fuller's analysis. That is because Fuller's focus on "economic factors" seems designed often to translate into Japan's fighting prowess, or lack thereof, and the number of 12,700 planes (even if a few thousand were not deemed "combat aircraft") greatly exceeds the 4,600 total.

Only if there was no fuel likely to be available, and if Japanese leaders also foresaw this problem, and if they did not otherwise take precautionary action (saving fuel), would the large number of Japanese planes (mostly combat aircraft) be irrelevant, or largely so, in the Japanese leadership's thinking in, say, September–October 1945, about holding out for Ketsu-Go?

There are some other problems, but probably less important ones, involving some other numerical tables and related data in Fuller's article. His table 2 has a category of total "Civilian Deaths," but the data drawn from Ellis's 1993 volume are *not* in Ellis's book for total "Civilian Deaths"; Ellis's numbers are for total "Civilian Casualties" (my emphasis)—the dead and the injured. In Ellis's book, the numbers for Japan are 393,400 killed and 275,000 wounded or missing.

In addition, Fuller's article, using Ellis's book, reports in table 2 that Japan's total number of military deaths was 2.3 million, and the wounded 94,000, which totals nearly 2.4 million military casualties. Narrowed to only the "U.S.-Japanese War," as provided in Fuller's table 3, the numbers basically are about 1,311,000 Japanese military dead and about 59,000 wounded, for a total of about 1,370,000 Japanese military casualties.

Yet, USSBS stated, in its *Summary Report* for the Pacific war, a total of only "approximately 780,000" Japanese military casualties "during the entire Japanese war" (1946c, 20). In presenting that number, USSBS may have been including Japan's war on the continent. The official U.S. air force history—edited by two rather distinguished historians—relied on that USSBS report and thus provided the same 780,000 number (Craven and Cate 1953, 754).

In addition, Fuller errs in offering specific numbers for the totals killed "instantly" and dying later from each of the atomic bombings. Such precise numbers are unknowable, as Alex Wellerstein (2020), among others, has shown.

Fuller's claim of precise numbers from the two atomic bombings; his confusion of Japanese deaths and casualties; and the discrepancies between Ellis's (and thus Fuller's) numbers on the one side, and those on the other side(s), about Japanese combat aircraft totals, and about Japan's military dead and total military casualties, are all troubling. Aside from the impossibility of determining precise numbers in the two atomic bombings, the informed resolution of these other problems seems important. That underscores the necessity to check all the tables and data that Fuller regards as essential, or even very important, in his analysis.

## Reflections and Conclusions: Some Themes, Problems, and Possibilities

Though Fuller's article is unpersuasive, he has, nevertheless, written a challenging essay. Focusing in particular on oil, his essay may lead to far more scholarly study involving that subject and aviation gas—and the implications for the likely invasion.

Fuller's article may also help push scholarship on the A-bomb to look more closely at economic factors in general in actually producing Japan's surrender, and as likely to produce surrender, and at how U.S. leaders in pre-Hiroshima 1945 estimated the impact of Japan's beleaguered economy on pushing Japan to surrender, ideally without a U.S. invasion.

Such analysis should keep in mind that the U.S.'s desire for Japan's surrender included not only the surrender of the four Japanese home islands, and the military forces there, but the surrender of Japan's armies on the Asian continent. Those surrenders on the continent between about August 15 and 20 by Japanese forces, as it turned out, normally involved surrender to the USSR's armies, or to the U.K.'s armies.

Yet, had the Japanese government in its upper reaches not unitedly endorsed Emperor Hirohito's surrender decision, or if Hirohito had not openly called for his nation's surrender, the situation on the Asian mainland might, conceivably, have been different: sustained continuing war there reaching well beyond about August 15–20.

Had Emperor Hirohito not openly declared the surrender, and if General Anami, the powerful war minister, had not called for loyalty to the emperor and thus also for the Japanese army's acceptance of surrender, it seems somewhat questionable whether Japan's generals on the Asian continent would have accepted the Tokyo government's surrender decree. It is not impossible, and perhaps it is even likely, that some of Japan's armies on the continent would have fought on for some time because they refused to surrender.

A government's surrender is, fundamentally, a *political* act. The government's announced decision, to be effective, generally requires the nation-state's military, both at home and abroad, to accept the central government's decision.

To express what should be obvious, but is too often forgotten: Understanding Japan's surrender is a very complicated subject. It requires, in the use of evidence, carefully distinguishing what actually occurred in Japan from what U.S. officials thought in the pre-Hiroshima period, or even later. Unless there is firm evidence that various U.S. leaders after Hiroshima, and really after the war, carefully studied the major published and unpublished materials on Japan's decision-making, those U.S. leaders' judgment cannot be reasonably treated as the path to significantly understanding what occurred, and why, in Japan in its uneasy road to surrender.

It is, however, a reasonable conclusion, drawn heavily from Japanese materials, that the August atomic bombings of Japan were very likely unnecessary. It seems highly probable, but not rigorously provable, that a somewhat different history would have occurred. That different history would have meant awaiting Soviet entry into the



war, and softening surrender terms to allow a modified emperor system, while *continuing* the heavy conventional bombing of Japan and the strangling blockade. Such a combination of U.S. actions would have probably produced a Japanese surrender before November 1. That would have obviated the invasion (Bernstein 1995a). Thus, there were probably substantial missed opportunities to avoid using the atomic bomb.

But, importantly, there was no desire by President Truman and his closest advisers to seek to do so: to avoid using the bomb. Indeed, some saw political-military advantages, in future dealings with the Soviets, by the U.S. using the A-bomb on Japan. That prospect—of future leverage on the Soviets—was an attractive bonus, but not a controlling motive, in the U.S. decision to use the atomic bomb on Japan (Bernstein 1995b, c).

## References

- Alperovitz, Gar. 1995. *The Decision to Use the Atomic Bomb and the Architecture of an American Myth*. New York: Alfred A. Knopf.
- Arnold, Henry H. Papers and Diary. Washington: Library of Congress.
- Asada, Sadao. 2007. The Shock of the Atomic Bomb and Japan's Decision to Surrender. In *Hiroshima in History: The Myths of Revisionism*, edited by Robert J. Maddox, 24–58. Columbia: University of Missouri Press.
- Barrett, David Dean. 2020. *140 Days to Hiroshima: The Story of Japan's Last Chance to Avert Armageddon*. New York: Diversion Books.
- Bernstein, Barton J. 1977. The Perils and Politics of Surrender: Ending the War with Japan and Avoiding the Third Atomic Bomb. *Pacific Historical Review* 46 (1): 1–27.
- . ed. 1980. Truman's Potsdam Diary. *Foreign Service Journal* (August): 32–34, 36.
- . 1987. Ike and Hiroshima: Did He Oppose It? *Journal of Strategic Studies* 10 (3): 377–89.
- . 1995a. Compelling Japan's Surrender without the A-bomb, Soviet Entry, or Invasion: Reconsidering the US Bombing Survey's Early-Surrender Counterfactuals. *Journal of Strategic Studies* 18 (2): 101–48.
- . 1995b. Understanding the Atomic Bomb and the Japanese Surrender: Missed Opportunities, Little-Known Near Disasters, and Modern Memory. *Diplomatic History* 19 (2): 227–73.
- . 1995c. The Struggle over History: Defining the Hiroshima Narrative. In *Judgment at the Smithsonian*, edited by Philip Nobile, 127–256. New York: Marlowe and Company.
- . 1999. The Alarming Buildup on Southern Kyushu, Growing U.S. Fears, and Counterfactual Analysis: Would the Planned November 1945 Invasion of Southern Kyushu Have Occurred? *Pacific Historical Review* 68 (4): 561–609.
- Bird, Kai, and Martin J. Sherwin. 2005. *American Prometheus: The Triumph and Tragedy of J. Robert Oppenheimer*. New York: Alfred A. Knopf.
- Bix, Herbert. 2000. *Hirohito and the Making of Modern Japan*. New York: HarperCollins.

- Butow, Robert J. C. 1954. *Japan's Decision to Surrender*. Stanford, Calif.: Stanford University Press.
- Craven, W. F., and J. L. Cate, eds. 1953. *The Army Air Forces in World War II*, vol. 5. Chicago: University of Chicago Press.
- Dornin, Robert E. (1982) 1987. *Reminiscences*. Annapolis, Md: U.S. Naval Institute.
- Ellis, John. 1993. *World War II. A Statistical Survey: The Essential Facts and Figures for All the Combatants*. New York: Facts on File.
- . 1995. *World War II: A Statistical Survey: The Essential Facts and Figures for All the Combatants*. New York: Facts on File.
- Feis, Herbert. 1961. *Japan Subdued: The Atomic Bomb and the End of the War in the Pacific*. Princeton, N.J.: Princeton University Press.
- Forrestal, James V. Papers. Princeton University.
- Frank, Richard. 1999. *Downfall: The End of the Imperial Japanese Empire*. New York: Random House.
- Fuller, Edward W. 2023. An Economic Case against the Atomic Bombing of Japan. *The Independent Review* 28 (1): 87–116.
- Grayling, A. C. 2006. *Among the Dead Cities: The History and Moral Legacy of the WWII Bombing of Civilians in Germany and Japan*. New York: Walker and Company.
- Hasegawa, Tsuyoshi. 2005. *Racing the Enemy: Stalin, Truman, and the Surrender of Japan*. Cambridge, Mass.: Belknap/Harvard Press.
- , ed. 2007. *The End of the Pacific War: Reappraisals*. Stanford, Calif.: Stanford University Press.
- Joint Chiefs of Staff. 1945. Minutes of Meeting Held at the White House on Monday, 18 June 1945 at 1530. Washington: Record Group 218, Records of the Joint Chiefs of Staff, Central Decimal Files, 1942–1945, box 198 334 JCS (2-2-45) Mtg 186th-194th.
- Kawamura, Noriko. 2015. *Emperor Hirohito and the Pacific War*. Seattle: University of Washington Press.
- King, Ernest J. Papers. Washington: Library of Congress.
- King, Ernest J., and Walter M. Whitehill. 1952. *Fleet Admiral Ernest J. King: A Naval Record*. New York: W. W. Norton.
- Leahy, William D. Diary. Washington: Library of Congress.
- . 1950. *I Was There: The Personal Story of the Chief of Staff to Presidents Roosevelt and Truman Based on His Notes and Diaries at the Time*. New York: Whittlesey House.
- LeMay, Curtis Papers. Washington: Library of Congress.
- Marshall, George C. Papers. Lexington, Va.: George C. Marshall Foundation Library.
- McCloy, John J. (AC1916) Papers and Diary. Amherst College Archives and Special Collections, Amherst College Library.
- Newman, Robert P. 2004. *Enola Gay and the Court of History*. New York: Peter Lang.

- Reports of General MacArthur.* (1950) 1966a. Vol. 1, *The Campaigns of MacArthur in the Pacific*; vol. 1 suppl., *MacArthur in Japan: The Occupation: Military Phase*. Prepared by the General Staff. Washington: Government Printing Office.
- Reports of General MacArthur.* (1950) 1966b. Vol. 2, part 2, *Japanese Operations in the Southwest Pacific Area*. Compiled from Japanese Demobilization Bureaux Records. Washington: Government Printing Office.
- Spatz, Carl Papers and Diaries. Washington: Library of Congress.
- Stimson, Henry L. Papers and Diaries. New Haven, Conn.: Yale University (Sterling).
- U.S. Department of State. 1960. *Foreign Relations of the United States: Conference on Berlin (Potsdam)*, vol. 1, 903–10. Washington: Government Printing Office.
- United States Strategic Bombing Survey (USSBS). 1946a. *The Effects of Strategic Bombing on Japan's War Economy*. Washington: Government Printing Office.
- . 1946b. *Japanese Air Power*. Washington: Government Printing Office.
- . 1946c. *Oil in Japan's War*. Washington: Government Printing Office.
- . 1946d. *Oil in Japan's War: Appendix to the Report*. Washington: Government Printing Office.
- . 1946e. *Summary Report*. Washington: Government Printing Office.
- Wallace, Henry A. Papers and Diary. Iowa City: University of Iowa Special Collections.
- Wellerstein, Alex. 2020. Counting the Dead at Hiroshima and Nagasaki. *Bulletin of the Atomic Scientists* (August): 122.
- Yellen, Jeremy A. 2013. The Specter of Revolution: Reconsidering Japan's Decision to Surrender. *International History Review* 35 (1): 205–26.

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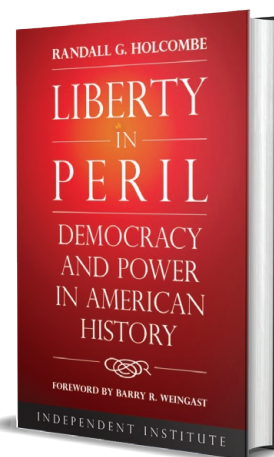
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