Strategic Bombing in World War II: A Data-Driven Analysis

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1 Chapter 2:

1.1 Wars aux allures déchaînées

For the historian, warfare is compelling neither for its tactical play-by-play nor for opportunities to pass retrospective judgment, but rather because it reveals the deepest values of the society that wages it. The American approach to strategic bombing—with its persistent emphasis on scale over precision—reflects fundamental patterns in how mass democratic societies wage total war. Understanding these patterns requires examining not just what happened, but why a democratic society made these particular choices about how to wage war.

I introduce the work of J.F.C Fuller as a lense through which to view the American approach to strategic bombing. As an influential military theorist writing both before and after the war, Fuller identified a causal connection between mass democracy and the emergence of total war: warfare unlimited in scope and unconstrained by traditional military objectives, involving the mobilization of entire societies and the deliberate targeting of civilian populations. Rather than total war being something invented by the Nazis when they invaded Poland (as one eminent historian has claimed), we find in Fuller's analysis the very principles that underpin modern democratic states as the driving forces behind the phenomenon of total war.

Before the advent of mass democracy, warfare operated within clearly defined limits. As James Q. Whitman demonstrates, wars under monarchical sovereignty were conducted as contained political disputes, with professional armies acting as instruments of statecraft.² Fuller aptly characterizes this earlier form of warfare as an "auction-room" where conflicts, though certainly brutal, remained confined to designated battlefields and did not consume society at large.³

This contained nature of warfare was fundamentally transformed by Rousseau's concept of the "general will." This idea endowed the nation-state with what Fuller terms a "quasi-divine sanction," creating a powerful new mythology around popular majorities' supposed ability to divine and pursue the general interest. Although Fuller regarded this assumption as "patently fallacious," he recognized how it "flattered the popular imagination and unthinkingly was accepted as an article of faith."

The French Revolution demonstrated the profound implications of this transformation. The fusion of people and state under popular sovereignty fundamentally altered the character of warfare. As Fuller observed, "A new order of living and of killing emerged out of the cry of 'Vive la nation!'" War-making decisions were no longer guided by cabinet politics but by what he calls "the occult powers" of "wealth and public opinion—economics and emotionalism." When warfare became an expression of the general will, traditional restraints

¹Antony Beevor at Intelligence Squared Event (2012)

²James Q. Whitman, The Verdict of Battle: The Law of Victory and the Making of Modern War (Cambridge, MA: Harvard University Press, 2012), Chapter 4

³J.F.C. Fuller, The Conduct of War, 1789–1961: A Study of the Impact of the French, Industrial, and Russian Revolutions on War and Its Conduct (New Brunswick, NJ: Rutgers University Press, 1961), 24

⁴J.F.C. Fuller, The Conduct of War, 1789–1961: A Study of the Impact of the French, Industrial, and Russian Revolutions on War and Its Conduct (New Brunswick, NJ: Rutgers University Press, 1961), 24, 36 ⁵J.F.C. Fuller, War and Western Civilization, 1832–1932: A Study of War as a Political Instrument and

proved powerless against the unleashed passions of the nation.

Honoré Gabriel Riqueti, comte de Mirabeau, proved clairvoyant when, speaking to the French National Assembly on May 20, 1790, he anticipated the consequences of placing the power to declare war in the hands of a people's assembly:

"Your votes will demand of you: will we be better assured of only just and equitable wars if exclusively delegated to an assembly of 700 persons the exercise of the right to make war? Have you foreseen how far the impassioned movements, the exaltation of courage, and the fervent ignition might carry and justify imprudence? ... While one member proposes deliberation, war will be clamored for; you will see around you an army of devotees. You will not be deceived by ministers; nor will you ever deceive yourselves... Behold the free peoples: it is because of more ambitious, more barbarous wars than they have ever undertaken. Behold the political assemblies: it is always under the spell of passion that they have decreed war."

The triumph of popular sovereignty unleashed what Fuller terms "the jinni of popular absolutism" from its "monarchial brass bottle," transforming the auction-room of war into a slaughterhouse.⁷ This transformation stemmed from democracy's activation of humanity's deeper tribal impulses. Fuller argues that this pattern emerges from our evolutionary heritage: "Man as he is can only be explained by man as he was, and never by man as we would like him to be." When channeled through mass democracy, these ancient tribal loyalties transform political opponents and foreign nations into existential threats to the collective.

Fuller's analysis leads to a stark conclusion that directly challenges democratic idealism: "The motive force of democracy is not love of others, it is the hate of all outside the tribe, faction, party or nation." This tribal hatred, legitimized through popular sovereignty and amplified by mass participation, becomes the driving force behind total war. Drawing from Clausewitz's observation that "War belongs to the province of social life," Fuller argues that modern warfare evolved into "a war of ideas, a conflict between different conceptions of civilization." The general will, rather than promoting universal brotherhood, "predicates total war, and hate is the most puissant of recruiters."

the Expression of Mass Democracy (London: Duckworth, 1932), 18

⁶Translated by GPT-40. Original text from Mirabeau's speech: "je votes demands a vous-mernes: serat-on mieux assure de n'avoirquedesguerresjustes, equitables, si Vondelegueex clusive-ment a une assemblee de 700 personnes Vexercice du droit defaire la guerre? Avez-vous prevu jusqu'ou les mouvements passiones, jusqu'ou Vexaltation du courageet d'une faus se dignite pour roient porter et justijier Vimprudence . . .? Pendant qu'un des membres proposera de deliberer, on demandera la guerre a grands cris; vous verrez autour de votes une armee de dtoyens. Votes ne serez pas trompes par des ministres; ne le serez-vous jamais par vous-memes?... Voyez les peuples libres: e'est pardes guerres plus ambitieuses, plus barbares qu'ils se sont toujours distingues. Voyez les assemblies politiques: e'est toujours sous le charme de la passion qu'elles ont decrete la guerre.'" From J.F.C. Fuller, The Conduct of War, 1789–1961, 26

⁷J.F.C. Fuller, The Conduct of War, 1789–1961: A Study of the Impact of the French, Industrial, and Russian Revolutions on War and Its Conduct (New Brunswick, NJ: Rutgers University Press, 1961), 24

⁸J.F.C. Fuller, The Conduct of War, 1789–1961: A Study of the Impact of the French, Industrial, and Russian Revolutions on War and Its Conduct (New Brunswick, NJ: Rutgers University Press, 1961), 41

⁹Ibid

This combination of tribal psychology and democratic institutions transformed warfare into wars of righteousness—conflicts that expressed not merely territorial disputes or political calculations, but fundamental conflicts between entire societies and their ways of life. Democratic warfare thus became unbound from traditional limits, pursuing not just military victory but the complete transformation of the enemy society.

Churchill's wartime leadership exemplified this democratic drive toward righteous warfare. His declaration that victory must be achieved "at all costs" and his characterization of the enemy as "a monstrous tyranny, never surpassed in the dark, lamentable catalogue of human crime" captured the moral absolutism inherent in democratic warfare. In place of the careful calibration of power that had characterized traditional diplomacy, democratic societies pursued total victory through the complete destruction of their enemies.

This outcome of total war cannot be traced back to any individual, whether it be Churchill or Hitler; it cannot be blamed on the scapegoat of industrialization (a crutch of Marxists and Realists alike). Rather, it stemmed from the inherent nature of mass democracy itself—the unleashing of "the jinni of popular absolutism." When warfare became an expression of the general will, it inevitably took on the character that Fuller described as wars aux allures déchaînées—wars of frenzied appearance, unbound from traditional limits and driven by the passionate certainty of democratic righteousness. ¹¹

Clausewitz famously described warfare as a "remarkable trinity" composed of three forces: the government and its political aims, the military and its professional conduct of operations, and the people with their primal passions and hatreds. In modern democratic states, these three elements often fall out of equilibrium, with the people—the demos—and their passions assuming unprecedented influence. The democratic revolution elevated popular passion from a subordinate force, previously constrained by monarchical authority, to the dominant driver of warfare.

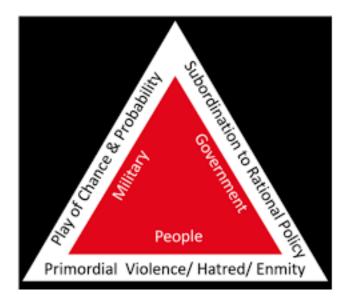


Figure 1: Clausewitz Trinity of War

 $^{^{10}}$ Ibid, 310

¹¹Ibid, 33

This transformation manifested across various political systems—Liberal Democracy, National Socialism, and Communism—which, despite their apparent differences, shared this fundamental reorientation of political authority around popular sovereignty and mass mobilization. When such societies engage in warfare against one another, the conflict inevitably transcends traditional military or political objectives. The enemy becomes not merely an opposing army or government but a mirror image of one's own society—a totality that must be confronted in its entirety.

This mirroring effect transforms the nature of conflict itself. Victory can no longer be achieved through limited military success or diplomatic compromise. Instead, warfare becomes an existential struggle between competing social orders, demanding nothing less than the complete transformation of the enemy society. The goal shifts from achieving specific political objectives to pursuing total victory through the comprehensive defeat and reconstruction of the opposing nation. We will now see some examples of this.

At Casablanca, the Combined Chiefs of Staff defined victory as the "progressive destruction and dislocation of the German Military, industrial, and economic system, and the undermining of the morale of the German people." The RAF's Combined Bomber Offensive was explicitly "designed to so destroy German material facilities as to undermine the willingness and ability of the **German worker** to continue the war," as if the German worker was some monolithic entity to be slain.

Most telling was the British Chiefs of Staff's casual reference to bombing as a means to "inflict direct damage on Germany and Germans." This deliberate distinction between state and people crystallizes how democratic warfare had evolved to target not just military forces or industrial capacity, but the entire fabric of enemy society. The careful balance of Clausewitz's trinity had given way to a totalizing view that saw these elements as a single, indivisible target for destruction.

When German General Hans-Jürgen von Arnim was captured in Tunisia, General Eisenhower's staff suggested following the traditional military custom of receiving the defeated commander—a practice reflective of the more gentlemanly form of monarchical warfare:

The custom had its origin in the fact that mercenary soldiers of old had no real enmity toward their opponents. Both sides fought for the love of a fight, out of a sense of duty or, more probably, for money. A captured commander of the eighteenth century was likely to be, for weeks or months, the honored guest of his captor. The tradition that all professional soldiers are really comrades in arms has, in tattered form, persisted to this day.¹⁵

But Eisenhower forcefully rejected this tradition.

For me World War II was far too personal a thing to entertain such feelings. Daily as it progressed there grew within me the conviction that as never before

¹²"Plan for Combined Bomber Offensive From the United Kingdom," Combined Chiefs of Staff, May 14, 1943

¹³Ibid.

¹⁴"Memorandum by the British Chiefs of Staff," January 3, 1943

¹⁵Dwight D. Eisenhower, Crusade in Europe (Garden City, NY: Doubleday, 1948), 123-4

in a war between many nations the forces that stood for human good and men's rights were this time confronted by a completely evil conspiracy with which no compromise could be tolerated.

Most tellingly, Eisenhower frames the conflict in explicitly religious terms:

Because only by the utter destruction of the Axis was a decent world possible, the war became for me a crusade in the traditional sense of that often misused word.

Here we see one of America's most senior military commanders rejecting the traditional professional courtesies of his station, instead treating the enemy as an absolute moral evil. We see how the general will had transformed even career officers from dispassionate professionals into crusaders against evil.

This zealotry was not contained within just the military cadre, but was taken up enthusiastically by the American public as well. Herbert Hyman's wartime polling data reveals a population not merely accepting of total war, but actively demanding it. By January 1944, a staggering 81% of Americans demanded unconditional surrender from Germany, with only 1 in 10 willing to accept anything less. ¹⁶ Perhaps most tellingly, rather than exhibiting war weariness, the data showed an extraordinary appetite for sacrifice - in August 1942, 70% of the population felt that people had not been asked to make enough sacrifices for the war effort. Even by April 1944, after years of rationing and mobilization, 58% still believed more sacrifices were needed. ¹⁷ Here we see how the people themselves become the driving force pushing for ever more extreme measures in pursuit of total victory.

In fact, the American people had already sacrificed a great deal unbeknownst to them. The Federal Reserve's wartime policies led to the money supply roughly doubling between 1941 and 1945, with the monetary base growing from \$20 billion to \$40 billion. This expansion facilitated unprecedented deficit spending that reached 30% of GDP annually during the war. ¹⁹

This monetary expansion wasn't merely a technical response to wartime needs—it represented a fundamental shift in how democratic societies finance total war. As Keynes observed with remarkable candor:

"By a continuing process of inflation, governments can confiscate, secretly and unobserved, an important part of the wealth of their citizens. By this method they not only confiscate, but they confiscate arbitrarily; and, while the process impoverishes many, it actually enriches some."²⁰

The contrast with pre-democratic warfare is striking. As Hans-Hermann Hoppe demonstrates, during the monarchical age with commodity money largely outside of government control, price levels generally fell and purchasing power increased, except during times of

¹⁶Memorandum on the Attitudes of the American People, Columbia University Archives

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¹⁸"WWII and Today: Monetary Parallels," Federal Reserve Bank of Atlanta, accessed April 15, 2024

¹⁹ World War II: America's Spending, Deficits, Multipliers and Sacrifice," CEPR, accessed April 15, 2024

²⁰John Maynard Keynes, Essays in Persuasion (London: Macmillan, 1931), 77.

war or new gold discoveries. Various price indices for Britain show prices were substantially lower in 1760 than they had been a hundred years earlier, and lower still in 1860.²¹

This pattern changed dramatically in the democratic era. The U.S. wholesale commodity price index, which had fallen from 125 in 1868 to below 80 in 1914, rose sharply through successive democratic wars: to 113 after World War I in 1921, then to 185 after World War II in 1948, reaching 255 by 1971.²² This inflationary pattern wasn't limited to America—during just two decades of irredeemable fiat money (1971-1991), the consumer price index in the United Kingdom climbed from 24 to 157, in France from 30 to 137, and in Germany from 56 to 116.²³

What this reflects across various governments is a totalitarian impulse to weaponize the money supply to its fullest extent, thereby confiscating the wealth of the people arbitrarily and without their full knowledge, allowing the government to rapidly put those resources to work in pursuit of total victory.

What these economic policies reveal is democracy's inherent capacity for a uniquely insidious form of totalitarianism. By weaponizing the monetary system itself, democratic governments achieved what no monarch had dared attempt: the systematic confiscation of their citizens' wealth through currency debasement, conducted not through visible taxation but through the hidden mechanism of inflation. This financial sleight-of-hand allowed democratic states to mobilize resources on an unprecedented scale while maintaining the illusion of voluntary participation. The genius of this system lay in its opacity—unlike the forced requisitions of earlier wars, which provoked immediate resistance, inflationary finance enabled democratic governments to extract so a vast amount wealth from their populations so rapidly that it enabled to incredible material mobilization necessary for waging a total war.

We can also see these democratic impulses towards total war in how post-war occupation was conducted through the process of denazification. The way a victor treats their defeated enemy reveals how they conceived of them during wartime, and the American approach to occupying Germany demonstrates how deeply the logic of total war had penetrated democratic thinking. As outlined in the Preliminary Report of the Working Committee Denazification Policy Board in December 1945, the occupation's goal went far beyond traditional military objectives: "The best assurance of peace... lies in the creation of a free, democratic society in which political and economic power rests upon a broad popular base." Most tellingly, the report explicitly called for changing "the basic social attitudes of the German people." 24

This ambitious program of social engineering was further codified in JCS 1067/6, the directive that guided American occupation forces. The document insisted that "It should be brought home to the Germans that Germany's ruthless warfare and the fanatical Nazi resistance have destroyed the German economy and made chaos and suffering inevitable and that the Germans cannot escape responsibility for what they have brought upon themselves."²⁵ This remarkable statement reveals how democratic warfare had evolved beyond

²¹Hans-Hermann Hoppe, Democracy – The God That Failed: The Economics and Politics of Monarchy, Democracy and Natural Order (New Brunswick: Transaction Publishers, 2001), 58.

²²Ibid.

²³Ibid.

²⁴"Preliminary Report, Working Committee Denazification Policy Board," December 20, 1945, Box 3, Folder: Denazification, Telford Taylor Papers, Rare Book and Manuscript Library, Columbia University.

²⁵"JCS 1067/6: Directive to Commander-in-Chief of United States Forces of Occupation Regarding the

merely defeating enemy armies—it now demanded the complete moral capitulation of the enemy population, who must be made to accept total responsibility for their own destruction. This was an attempt to cement the righteousness narrative of this crusade before any alternative interpretations could emerge.

1.2 "Strategic" Bombing as Total War

When viewed through Fuller's framework, the strategic bombing campaign reveals the inherent logic of democratic warfare. The extraordinary mobilization of resources—the endless production of bombs and bombers, the massive economic apparatus required to sustain the campaign—reflected more than just a preference for indirect sacrifice over battlefield costs. It manifested democracy's fundamental drive toward absolute victory through overwhelming force, regardless of strategic efficiency.

One striking example comes from 1940, early in the war, when the British planned a campaign to see the Black Forest burn. As Nicholson Baker documents in *Human Smoke*, Churchill directed Air Marshal Portal to deploy a novel weapon—"calling cards" made of phosphorus wafers sandwiched between layers of moist fabric, designed to ignite when dried by the sun. When contemplating targets for these incendiary devices, Churchill's thoughts turned to the Black Forest. "In fact," Baker writes, "why not burn down all the forests of Germany?" ²⁶

The New York Times reported the operation with barely concealed enthusiasm, making light of the attack with a headline pun about "Nazis Incensed." The article described how RAF bombers "unleashed a devastating attack with incendiary bombs on the famous Black Forest," with fires still burning days afterward. One pilot casually recalled dropping bombs near a mountain where "a legendary giant" was said to live, creating "a nice new little patch of fire about a mile square." The British authorities attempted to justify the operation by claiming there were military depots hidden in the forest—a rationalization that strains credibility given the impossibility of targeting specific facilities by burning down an entire ancient forest.

What we see here is a breakdown in the supposedly "strategic" nature of these bombing campaigns. This was an almost religious assault on one of the spiritual centers of German nationalism, from ancient pagan traditions through to romantic nationalist conception of the German Volk. As Daryl Cooper observes, "Given its ubiquity throughout human history, it is hard to say that war is unnatural... But I think it's safe to say that when you've descended to the point of trying to burn down ancient forests, more or less out of spite, that something essential in your humanity has been sacrificed on the bloody altar." This operation reveals how claims of strategic rationality often masked deeper ideological or religious impulses.

This Black Forest operation was not an isolated example. The strategic bombing cam-

Military Government of Germany," April 26, 1945, Box 2, Folder: JCS 1067, Telford Taylor Papers, Rare Book and Manuscript Library, Columbia University.

²⁶Nicholson Baker, Human Smoke: The Beginnings of World War II, the End of Civilization (New York: Simon & Schuster, 2008), 227-228.

²⁷ "Incendiary 'Cards' A British Weapon," The New York Times, September 11, 1940.

²⁸Daryl Cooper, "The Martyr Made Podcast: Enemy, Prologue: Enemies of All Mankind," accessed April 19, 2025.

paign consistently prioritized scale and destructiveness over precision and efficiency, to a degree that operational necessity alone cannot explain. What emerges from this pattern is the campaign's true nature: an ideological crusade aimed at transforming German society through overwhelming force. The emphasis on massive area destruction over tactical precision reveals that beneath the veneer of military strategy lay the deeper logic of total ideological war.

Meanwhile, the American people were fed narratives that gradually reflected the escalatory nature of the bombing campaign. I've concluded this after conducting an analysis of over 9,000 American newspaper articles from 1943 to 1946 that contained the term "strategic bombing." Each article was categorized based on how it framed bombing operations: as precision bombing (targeting specific military installations), area bombing (targeting entire urban centers), industrial bombing (targeting economic infrastructure), counterforce bombing (targeting military capabilities), countervalue bombing (targeting civilian morale), or nuclear bombing.³⁰

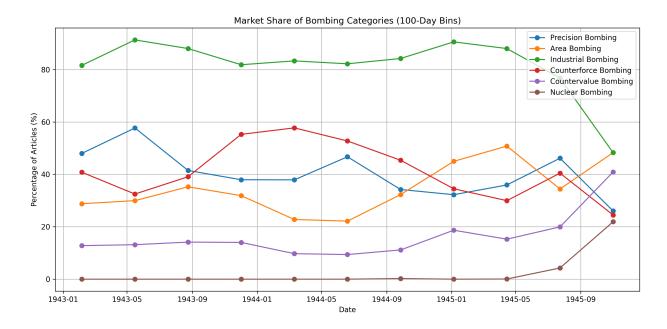


Figure 2: Evolution of Strategic Bombing Narratives in American Media, 1943-1946

The results reveal the evolution in how strategic bombing was presented to the American public. Early in the war, the narrative emphasized precision and counterforce bombing, focusing on specific targets like the Schweinfurt ball bearing plants or military installations. This framing helped dampen isolationist sentiment by portraying bombing as a surgical, technically sophisticated operation. However, as the war progressed into 1944 and 1945,

²⁹The analysis covers the period from January 1943, when the term "strategic bombing" began appearing regularly in American newspapers, through December 1946. Articles were sourced from the newspapers.com digital archive.

³⁰For detailed methodology of the content analysis and category definitions, see methodology_sentiment.md.

media coverage increasingly highlighted area and countervalue bombing, with more frequent reporting of civilian casualties and urban destruction.³¹

Crucially, this shift in media coverage did not reflect actual changes in bombing operations—as we saw in Chapter 1, the proportion of area bombing remained relatively constant throughout the war. Instead, the increased discussion of civilian targeting and urban destruction reveals an ideological transformation. Both government officials and military leaders clearly believed the American public was ready to hear about—and even celebrate—the targeting of German civilians. As we have seen from Herbert Hyman's polling data, this calculation proved correct.

1.3 Conclusion

Democracy's tendency toward moral absolutism transformed warfare into an act of divine retribution. As Fuller observed, democratic societies first reconstructed their enemies as manifestations of absolute evil, then positioned themselves as instruments of heavenly justice. The strategic bombing campaign exemplified this theological transformation—democratic society had elevated its general will to such divine heights that it claimed the power of God himself: to rain fire from heaven upon the cities of the wicked. In this assumption of divine authority lay democracy's greatest sin: the belief that popular sovereignty conferred not just political legitimacy, but the divine right to separate the righteous from the damned, to pass judgment upon the living and the dead, and to deliver apocalyptic vengeance upon those deemed beyond redemption.

The operational characteristics of the strategic bombing campaign—its emphasis on vast area destruction over precision, its sometimes incoherent target selection, and its extraordinary expenditure of resources—reflect not military incompetence but the inherent nature of democratic warfare. Just as the biblical Gomorrah was destroyed along with "all the surrounding region and all those dwelling in the cities and all things growing from the earth," the aim was not merely a tactical military victory but the complete eradication—literally, the uprooting—of the enemy society.

This analysis reveals the strategic bombing campaign's more destructive aspects not as an aberration but as a manifestation of tendencies inherent in democratic governance itself. When warfare becomes an expression of the general will, it inevitably takes on the character that Fuller described as wars aux allures déchaînées—wars of frenzied appearance, unbound from traditional limits and driven by the passionate certainty of democratic righteousness. The campaign's emphasis on overwhelming force, its willingness to target civilian populations, and its ultimate aim of societal transformation all stemmed from democracy's fundamental drive toward total victory through absolute means. In this light, strategic bombing emerges not as a mere military strategy of necessity but as the physical manifestation of democracy's crusading spirit—a spirit that, once unleashed, knows no bounds.

³¹The proportion of articles discussing area bombing increased from approximately 5% in early 1943 to over 25% by late 1945. See Figure 3 for complete trend analysis.