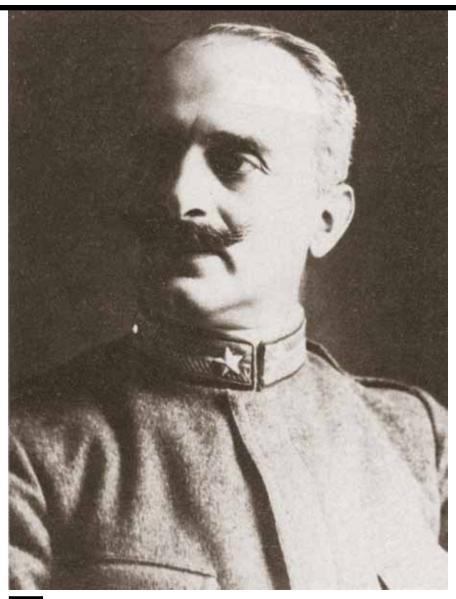
# The legendary and controversial airpower theorist is debated to this day.

# Douhet

By Robert S. Dudney



n 1911, Italy went to war with the fading Ottoman Empire. Rome's target was Libya, a Turkish province. It was a forgettable war but for this fact: The Italian Army brought its fledgling force of nine aircraft, which flew history's first reconnaissance and bombing missions.

For military airpower, it was the Genesis 1:1 moment.

This long-ago war also had a historic indirect effect: It helped to launch a new career for an obscure Italian officer, Maj. Giulio Douhet. Douhet, long an artilleryman, had just gone on aviation duty. The Libyan war convinced the Army to form a true aviation unit, and Douhet got the command.

The rest is history, and controversy. Over the decades, Douhet has been called many things: airpower "prophet," theorist, evangelist, visionary, charlatan. He is viewed by many as the "father of airpower," the first to see its true strategic potential.

Phillip S. Meilinger, the airpower historian and analyst, called him "the first great air theorist" and "perhaps the most important air theorist." Douhet's basic work, *The Command of the Air*, published in 1921, was the first comprehensive analysis of airpower.

To critics, the name "Douhet" is synonymous with a dark side of airpower. They say he articulated a vision glorifying the "knockout blow" with fleets of bombers prowling the skies, burning cities, and causing mass death.

His book, to critics, stands as the last word on airpower extremism—the idea that airpower alone could win wars.

For decades, the writings of Douhet have generated intense debate. The clash of opinion goes on unabated, even though he went to the grave in 1930.

"Clearly, Giulio Douhet was a visionary," said military historian I. B. Holley. "With only the scantiest empirical evidence to go on, he visualized the concept of strategic air war. By sheer imagination, he also recognized the necessity of air supremacy or what he called 'command of the air.'"

He did all of this by 1915, Holley noted, almost before there even was such a thing as military aviation.

Douhet was born on May 30, 1869, in Caserta, near Naples, into a family with a history of military service. Young Douhet was an excellent student, standing first in his class at Genoa Military Academy. At 19, he was commissioned into the artillery corps.

Douhet soon took up advanced studies at the Polytechnic Institute in Turin, a bastion of science and engineering.

In 1900, the Army assigned Douhet then a captain—to the general staff, where he explored technological issues. The young officer lectured widely on



Italian dirigibles bomb Turkish forces in Libya. Douhet predicted the skies would become as important as land or sea.

military mechanization. By all accounts, Douhet's technological interest kicked into high gear with the arrival of aircraft in Italy.

In 1905, Italy built its first lighterthan-air dirigible. The military potential of such craft struck him instantly, and he buried himself in studies of air technology. Douhet followed aeronautical events closely, and was fascinated by the first flight of an Italian fixed-wing aircraft in 1908.

In a 1910 essay, he predicted, "The skies are about to become a battlefield as important as the land or the sea. ... Only by gaining the command of the air shall we be able to derive the fullest benefit" of combat in this realm.

Then came Libya, and Douhet was tasked with identifying its aviation lessons. His final report dwelled on the organizing, training, and equipping of an air force. He observed that the airplane was well-suited for "high altitude bombing." On the sensitive matter of command, Douhet showed a streak of daring, noting there was nothing preventing "the formation of independent air units" under certain circumstances.

In 1912, Douhet assumed command of Italy's new air unit, based at Turin. There, he wrote what was probably the first air doctrine manual, "Rules for the Use of Airplanes in War."

His aviation stint proved memorable—and short. He had become a true believer; he viewed the airplane as a potentially dominant weapon, but only if it could be pried out of the hands of uncomprehending ground commanders. He soon began preaching the need for an independent air force, created by, of, and for airmen.

Army officers were irritated by his untraditional ideas. They were outraged when, in early 1914, he dispensed with budgeting formalities and ordered a three-engine bomber from his friend and fellow airpower enthusiast.

industrialist Giovanni "Gianni" Caproni. For that, the Army exiled Douhet to an infantry division at Edolo, near the Austrian border.

He was there in July 1914, serving as division chief of staff and pondering airpower, when the Great War erupted in Europe.

### **A Turning Point**

Now a colonel, Douhet badgered the Army with ideas about national preparedness. Italy should build an air force potent enough "to gain command of the air," he declared in a December 1914 essay, so as to render the enemy "harmless." He advocated production of 500 bombers capable of dropping 125 tons of ordnance per day on "the most vital, most vulnerable, and least protected points" of Austrian or German soil.

In 1915, Italy finally entered the war. Douhet was shocked by the Army's poor condition and leadership. He wrote scathing letters, advocating use of airpower. He was arrested in September 1916 and court-martialed for spreading false news and agitation. Military judges sentenced him to a year in prison.

Then, in October 1917, came Italy's disastrous battle at Caporetto, with some 300,000 casualties. It more than vindicated Douhet's acid remarks about the Army. As a result, he was released from jail and returned to duty as di-

rector of aviation at the General Air Commissariat.

Things did not go well, and in June 1918 he left military service. The Army overturned Douhet's conviction and promoted him to brigadier, yet he declined to return and focused on his writing about airpower.

It is clear Douhet was profoundly affected by the carnage of World War I, appalled at the murderous result of years of stagnant trench warfare. More deeply, he saw what happened when a force using outdated tactics and illogical plans went up against modern weapons.

In 1921, Douhet completed *The Command of the Air*, his principal treatise on the concept of strategic airpower. While in time it would become hugely influential, initial response was muted.

Things were different in 1926 when he published a revised and more strident version. The book drew harsh attack, especially from army and navy partisans. Small wonder, as it openly claimed their forces to be obsolete.

Douhet devoted his final four years to intellectual combat with such foes. In this, as one historian put it, he proved to be "tireless, blunt, impatient, and very self-confident."

What, exactly, did Douhet preach? The main assumptions of his airpower concept, all contained in *The Command of the Air* and other writings, can be summarized briefly.

- Wars are no longer fought between armies, but between whole peoples, he believed, and future wars would be total and unrestrained, with civilians as legitimate targets.
- Wars are won by destroying "the enemy's will to resist"—and only this produces "decisive victory." Defeat of enemy forces is a poor indirect route. It is far better to strike directly at "vital centers" of power inside an enemy nation.
- World War I was a turning point, showing armies and navies can no longer end wars; the power of the defense—poison gas, machine guns—makes offensive action futile.
- The airplane, though, is revolutionary, "the offensive weapon par excellence," able to bypass surface defenses and carry out massive attacks on cities, destroying the enemy's will to resist.
- For national defense, command of the air is necessary *and sufficient*. The army's job is to mop up after air attacks. The navy is of even less use.

The centerpiece of Douhet's theory was what he saw as the airplane's potential to devastate an enemy's indus-



Children in London perch on the ruins of their home after a German bombing raid in 1940. World War II was the first test of Douhetian theory, and the reviews are mixed. Attackers were able to inflict massive damage, but did not break the will of the people.

trial heartland in relatively short order. However, he believed that an air force's first task was to achieve command of the air, similar to today's concept of air supremacy.

Douhet did not argue for air battle, but rather for attacking airfields, parked aircraft, and aircraft factories—"destroying [the enemy's] nests and eggs on the ground" rather than having to "hunt his flying birds in the air."

With enemy air capabilities neutralized, Douhet reasoned, the foe would be unable to attack. One's own bombers could then be freed to unleash a storm of aerial bombardment against critical targets.

Attacks were to feature use of highexplosive, incendiary, and poison gas bombs, in that order. Explosives would knock down big structures, incendiaries would set them aflame, and poison gas would thwart efforts to put out the fires.

Douhet identified five basic types of targets: industrial centers, transportation infrastructure, communications, key buildings, and civilian morale. To Douhet, this last category was the most important.

He bluntly advised heavy use of urban bombing, which would kill and terrorize the civilian population. He famously predicted air attack would turn European cities into "unapproachable, flaming braziers" in a matter of hours.

J. F. C. Fuller, a British confrere, went so far as to write that bombing could turn a city into "one vast raving Bedlam; the hospitals will be stormed, traffic will cease, the homeless will shriek for help, the city will be in pandemonium. [Government] will be swept away by an avalanche of terror."

That this would ultimately force surrender was never doubted by Douhet. "How could a country go on living and working under this constant threat," he asked, "oppressed by the nightmare of imminent destruction and death?"

# An Apocalyptic Vision

Answering his own question, Douhet predicted a kind of popular revolt. "The time would soon come when, to put an end to horror and suffering, the people themselves, driven by the instinct of self-preservation, would rise up and demand an end to the war," he wrote. This would take "very few days."

It was a truly apocalyptic vision. Squeamish politicians and civilians were invited by Douhet to "avert their eyes."

He saw little use for "auxiliary aviation" (that is, fighters). In later years, he even maintained these forms of aviation were "worthless, superfluous, harmful," as they were defensive. "Viewed in its true light, aerial warfare admits of no defense, only offense," he said.

The 1920s and 1930s were years of relative peace, so Douhet's theories did not face the test of war for two decades. The true extent of his influence on actual military doctrine remains a subject of controversy.

It appears American airmen were among the more receptive. In 1922, Brig. Gen. Billy Mitchell met several times with Douhet in Europe. Translated excerpts of *The Command of the* 

*Air* appeared at US Army Air Service headquarters in 1923. Some historians profess to see traces of Douhet's work in Air Service texts on strategic air war.

By the mid-1930s, detailed articles about Douhet began turning up in US military publications, and a translation of the second edition of *The Command of the Air* circulated around the Air Corps in 1933.

However, individual strategy officers disclaimed any Douhetian influence. And Meilinger has noted that when USAAF entered World War II, it did so without the "Douhetian" concept of area bombing and attacks on civilians. No one in the 1930s air hierarchy advocated such an air strategy, he said. For military, legal, and humanitarian reasons, it was expressly rejected in favor of high-altitude, daylight, precision, formation bombing of industrial targets.

It appears, in the United States, Douhet's work served to reinforce the views of Air Corps officers who had already come to the same conclusions by other routes.

Douhet's convictions, as Gen. Henry H. "Hap" Arnold reported in his book, *Global Mission*, provided ideological ballast to US Army Air Forces doctrine. "As regards strategic bombardment, the doctrines were still Douhet's ideas modified by our own thinking in regard to pure defense," said Arnold.

World War II, with its great Allied and Axis air fleets, presented the first real-world test of the Italian airman's basic concepts. How did they fare?

The record is decidedly mixed. Bernard Brodie, the Rand airpower analyst, put it this way in "The Heritage of Douhet," his classic 1952 study: "If we disregard the overall vision and consider only specific assertions, it is clear that in World War II Douhet was proved wrong on almost every important point he made."

According to Meilinger, "His basic precepts—that the air would become a violent and crucial battlefield; that the country controlling the air would also control the surface; that aircraft, by virtue of their ability to operate in the third dimension, would carry war to all peoples in all places; and that the psychological effects of air bombardment would be great—have proven accurate."

Unfortunately, Meilinger added, Douhet was prone to exaggerate the capabilities of airpower. He said that the war was not kind to Douhet's specific assumptions, "many of which, quite simply, were wrong."



Bombs dropped by AAF B-17s fall toward a railroad center at Bolzano, Italy, in 1943. Douhet overestimated the physical effects per ton of bombs dropped because he did not account for poor accuracy or improved defenses.

Among the errors cited by Meilinger and other historians is Douhet's overestimation of "terror." Douhet put great store in the psychological effects of bombing, yet neither the German nor Japanese people buckled under air attack, and civilian morale did not decline notably. Indeed, there is evidence it hardened their resolve.

Douhet also exaggerated physical damage. The Allied bomb tonnage exceeded by many multiples that specified by Douhet, yet with far less effect than predicted. Serving to undercut the effectiveness of bombing were poor accuracy, bad weather, faulty equipment, better-than-expected firefighting, and so forth.

Douhet virtually ignored the potential threats to airborne bombers and the efficacy of air defenses. The advent of radar, high-performance fighters, and accurate air defense guns proved him wrong. In operations over Germany, the USAAF and RAF each lost some 80,000 air crew members and hundreds of bombers. In the Battle of Britain, radar stripped away the German bombers' surprise factor.

Douhet also failed to see or even grant as possible advances in surface war capabilities—on land or at sea.

Tanks are not even mentioned in *The Command of the Air*.

Land fronts were far from static, shifting rapidly on the western and eastern fronts. This was aided in no small part by aircraft used in a tactical role.

# **Douhet Rehabilitated?**

Douhet backers had a different view. They argued that Allied command of the air was vital to victory in the war, that German and Japanese economies were destroyed, and that civilian morale suffered. They also note a key point: While Douhet banked heavily on use of poison gas bombs to intensify the impact of air attack, they were not used, with (militarily, at least) undesirable results.

In short, when it came to Douhet's theories, many things went wrong but many others went right. The high expectations themselves have to be considered in the equation.

"Strategic bombing was a failure only by the standards of its arch-proponents," wrote historian John Buckley in *Air*power in the Age of Total War, his 1999 book. "Clearly, bombing did not win World War II by itself. ... But it did contribute greatly to the economic collapse of the Axis powers."

Oddly, Douhet's reputation flourished in the wake of World War II, and for a specific reason: the atomic weapon.

Brodie, who was perhaps the most significant nuclear strategist of the era, claimed in 1952, "Time has rescued [Douhet] from his first and gravest error—his gross overestimate of physical effects per ton of bomb dropped."

That was because one bomber with a single atomic bomb could surpass the damage caused by a whole fleet of conventional bombers. In Brodie's view, the bomb had salvaged Douhet's concept of strategic war. "He was able to create a framework of strategic thought which was ready-made for the atomic age," wrote Brodie.

Unquestionably, the test of experience has forced significant changes and redirections in the concept of "strategic airpower," and few if any today would accept Douhet's ideas in unadulterated form.

Paradoxically, some have argued that, as the air weapon has become steadily more capable, a byproduct has been rehabilitation of Douhetism. One USAF officer wrote, "Each technical advance, from early bombsights to more powerful aircraft to the atomic bomb, brought airpower closer to the Douhetian ideal."

In recent years, the emergence of stealth, precision bombs, and space support has produced similar claims.

"It was notable," wrote Buckley, "that in the aftermath of the Gulf War of 1991, many airpower advocates were claiming that the air campaign ... proved Douhet ... correct."

Douhet, if he was indeed a prophet, was something of an accidental one, wrong in many particulars but right when it came to the big stuff. His accomplishment was flawed, but real.

"Considering that it took over two thousand years of warfare on land and sea to produce Henri de Jomini, Carl von Clausewitz, and Alfred Thayer Mahan," observes Meilinger, "we should not be overly critical of the airman who began writing a theory of air war scarcely one decade after the invention of the airplane."

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