

## DRESDEN 1945

Allied aerial bombing of German cities during WW II was the most destructive form of military air power ever unleashed on civilian targets. Over 50 major German cities were targeted by the British Royal Air Force (RAF) and the US Army Air Force (USAAF) between mid 1943 and April, 1945.

In the case of Hamburg, Berlin and perhaps several other major cities legitimate questions can be raised as to their strategic military value, either as a port cities, or as rail and transportation centers. On the other hand, there were German cities that were destroyed that had no strategic military value. Their fate was simply the result of wanton destruction.

In particular was the case of Dresden, a pre war German city rich in architecture, the arts and music. The evidence reveals that there doesn't seem to have been any reason for its destruction, nor the killing of over 100,000 residents and war refugees the evening of February 13-14, 1945. Most Germans, for many years after the war, spoke of what had happened to Dresden, that evening, as something "cruelly apart". Official allied records and other details of the bombing and results remained classified until the late 1970's.

This paper will examine the origins of strategic aerial bombing theory, as a modern instrument of war, analyze the strategic decisions within the allied civilian and military leadership that targeted Dresden for total destruction, and lastly comment on the moral and legal implications after the fact.

### Origins of British Air Doctrine

During WWI, the Germans used twin engine aircraft to drop several tons of bombs on London in July 1917. The surprise daylight raids killed or wounded scores of civilians. To the British, it seemed that, the Germans, flying at 18,000 ft in their new "Gotha" aeroplanes were able to come and go at will over their capital. By the end of the war thirty tons of bombs had been dropped on the city.

As a result of the London bombing attacks, the British government established the Jan Smuts Committee to consider the future of air defense. The Smuts Report predicted that aerial bombardment, in future wars, would be capable of destroying industrial and populous centers on a vast scale, perhaps becoming the principal operations of war. Older forms of military and naval operations, the committee reported, could become "secondary and subordinate".

In 1921, Giulio Douhet, an Italian, had similar theories and published them in a treatise entitled *Air Supremacy*. Douhet believed that air power should be used to strike directly at the enemy's vital economic centers. His air strategy required that no energy and resources were to be spent on preliminary air battles, with the enemy's aircraft, for command of the air.

It was Douhet's belief that a well organized, well planned, and well flown aerial bombing raid constituted an offensive that could not be stopped. Bomber aircraft, sent to attack the enemy, he believed, would always get through to their targets. In the 1930's, U.S. Air Corps General William "Billy" Mitchell and Britain's General Hugh Lord Trenchard studied Douhet and became strong advocates of his theories on the strategic use of air power.

A result of the Smuts Report was the creation of an independent and separate Royal Air Force (RAF) under the command of Douhet's apostle General Hugh Trenchard. Though Trenchard's WWI air experience was limited to command of bombing operations in, twin engine, wood and canvas, biplanes,

the new RAF commander began to think of an RAF composed of long range four engine bombers. As soon as British factories could deliver his new aircraft Trenchard planned to assemble a large force of his new bombers to destroy German cities one by one. Trenchard envisioned the terrified residents, of a city under bombardment, fleeing to the next nearest city which had not yet been bombed. The city of refuge would also be targeted and while in the process of being bombed the panic generated would cause a larger tide of refugees to flee to the next city and the next. causing confusion and loss of morale. The dislocation and destruction of the enemy's economic sectors and the creation of utter terror in the civilian population would place pressure on the belligerent government to sue for peace.

Trenchard doctrine in pure form, similar to Douhet's, envisioned an air force without fighters. Bomber aircraft and those of the enemy had no need to engage as they passed each other in, high altitude formations, on the way to their respective targets. The doctrine implied that the invention of the aeroplane introduced a new factor into war, that invalidated the old principle, that the enemy's main military forces must be engaged and defeated before victory could be exploited. In effect, the side that had the most bombers would win. Trenchard believed that his bomber force would win wars solely through air power. The belief was basic to the very existence of the new RAF and it became useful in squeezing a larger share of defense spending for his service.

### **Origins of U.S. Air Doctrine**

In the 1930's the United States adopted a defensive air strategy introduced by, another Douhet apostle, General William Mitchell. The Roosevelt administration as late as 1937, had supported military aviation as a defensive arm against invasions from air or sea. By 1939, the Nazi threat persuaded Roosevelt that a large air force with offensive capability would serve to deter German aggression. U.S. military air doctrine now supported the use of long range bombers, flying at high altitudes, on their way to strategic targets. The American doctrine would not focus on cities and their civilian populations, but on the enemy's industrial and transportation sectors. Destroying the enemy's economy, America strongly believed, would deny them, the continued ability, to wage war.

In August 1941, the U.S. Air War Plans Division completed a document, AWPDP-1, which set forth a basic doctrine on priority of targets in strategic bombing. AWPDP-1 affirmed economic targets to be the focus of aerial attacks achieved through daylight precision bombing.

### **Early Experience In Aerial Combat**

The allies were poorly prepared to conduct strategic bombing in 1940. German air defenses inflicted heavy losses on allied bombers and crews. The weather systems over Germany were terrible for precision bombing, a factor that the allies had not previously considered. If the war had ended in 1943 the scorecard would have supported the view that strategic bombing had failed. In 1941, 22% of RAF bomber crews got within five miles of their targets. In the heavily defended industrial Ruhr Valley the figure was about 7%. The RAF took a number of measures that increased their bombing effectiveness. They introduced electronic navigation equipment, produced the new, long range, Lancaster four engine bomber, and employed new tactics whereby veteran crews flew ahead of the main bombing force and marked aiming points with pyrotechnics. But as the British increased the effectiveness of their bombing so did the Germans increase the effectiveness of their defenses. The US Army Air Force (USAAF) also pressed by the heavy losses, introduced long distance fighter aircraft to protect bombers on the way to German targets. For both bomber commands, the use of fighter escorts improved chances of survival as well as reaching the targets.

The Trenchard, Douhet and Mitchell troika was proven incorrect. Unescorted bombers were especially vulnerable to attack and would not always get through to their targets

It wasn't until after the invasion of Normandy, in June 1944, that the RAF and USAAF resumed the strategic bombing offensive over Germany. The establishment of allied radar sites and airfields in France permitted them to strike deep within German territory.

### **RAF Bomber Command 1942-1945**

Air Marshal Sir Arthur Harris became Commanding-in-Chief of Bomber Command, in February 1942. Harris, an ardent pupil of Lord Trenchard took command of a weak RAF consisting of 378 serviceable aircraft of which only 69 were heavy four engine bombers. RAF Bomber Command needed aircraft and Chief of Air Staff, Sir Charles Portal, brought it to the attention of the Allied High Command at the Casablanca Conference in January 1943.

Portal presented a paper in which he urged the immediate creation of a combined RAF / USAAF fleet of 4,000 - 6,000 heavy four engine bombers. Portal's request included a new allied bombing initiative against Germany that calculated, at a minimum, the total destruction of 6million city dwellings. His calculation also included 900,000 civilian deaths and 1 million casualties. The Chief of Air Staff had gotten what he asked for at Casablanca - the government of Winston Churchill had approved a policy of attacking city centers.

Under the official name "area bombing", the policy was to be carried out by Air Marshall Sir Arthur Harris and RAF Bomber Command.

The first successful use of the new Lancaster bombers, authorized by the Casablanca Conference, were used to attack Hamburg in July 1943, when a series of round the clock bombing raids, by the RAF and the USAAF, leveled the city and killed 48,000 people. It was during the Hamburg raid that the "fire storm" was identified for the first time.

A "fire storm" erupted when the allies dropped large quantities of incendiaries on the city. The tall buildings, concentrated at the town center, created the conditions that rapidly produced huge spreading fires. The air above Hamburg became a superheated inferno and the rush of heated air upward developed the characteristics and power of a tornado. The temperatures reached 2,000 degrees Fahrenheit as the fire sucked all the oxygen out of the air. No one caught in the Hamburg "fire storm" had any chance of escape.

### **Strategic Decisions August -December 1944**

In August 1944 Sir Charles Portal devised a plan known as "Thunderclap". The plan involved bombing Berlin using the combined air power of the RAF and USAAF. The objective was to bomb the civilian population of Berlin into submission, to destroy their morale and willingness to continue the war.

"Thunderclap" reached the planning stage at General Dwight Eisenhower's Supreme Headquarters Allied Expeditionary Force (SHAEF) where Sir Arthur Harris C-in-C of Bomber Command was still subordinate to SHAEF. Bomber Command had been assigned to SHAEF since May 1944 when the entire RAF was assigned to support Overlord.

In early September Harris worked out a “Thunderclap” plan for a daylight raid by RAF and USAAF bombers on Berlin. The SHAEF Psychological Warfare Division labeled the plan terrorist. The American air command went on record as opposing “morale” bombing in principle.

In late September, the Combined Chiefs of Staff of SHAEF met in Quebec. The meeting, known as the Octagon Conference, established, as a priority, an allied bombing campaign to bring about the progressive destruction and dislocation of German military, industrial and economic systems. On September 25, the Allied High Command launched what became known as “Pointblank” and issued formal orders to all allied air commands. Oil and only oil, was to be the sole, first priority, target. Transport links, tank and vehicle production plants were to be second. “Thunderclap” had been rejected.

At the Octagon Conference, Sir Charles Portal requested that RAF strategic forces be removed from SHAEF control and reverted back to the Air Ministry. Portal had put “Thunderclap” aside and became completely committed “Pointblank”. Air Ministry papers had warned him that unless Bomber Command addressed itself urgently to the oil attack, the U.S. 8<sup>th</sup> Air Force would complete the task single handedly. Portal clearly believed that by re-establishing his control of Bomber Command, it would be possible for the RAF to be in tandem with Allied High Command and more important to play a significant role in attacking German oil supplies.

In direct defiance of orders, from Allied High Command, RAF Bomber Command resumed attacks on German cities. In the last three months of 1944 Air Marshal Harris dispatched 14,254 sorties to industrial cities in the Ruhr where over 60,000 tons of high explosives were dropped. Between October and December 1944 only 6%-14% of Bomber Command sorties had been directed against oil targets. More than 58% had been directed on cities. The Air Marshal had returned to his great area bombing campaign, precisely where he had left it in April. Portal pleaded with Harris to follow the “oil plan”. Harris was obsessed and consumed with area bombing. Very good at evasion he blamed the weather for not bombing oil targets. He protested “*the number of cooks now stirring the broth*”. Harris told Portal that to complete his initial plan of urban annihilation, all that was required was the destruction of several more cities - Leipzig, Dresden, Chemnitz, Nuremburg, Munich and the surviving areas of Berlin and Hanover. Harris asserted, flatly, that he had no faith in selective bombing and none whatever in the present oil plan. Harris stubbornly saw his own role, in the ultimate Trenchardian sense, as the independent director of a campaign that he was entitled to wage as long as he had the confidence of his superiors; notably Sir Winston Churchill with whom he dined with on a regular basis. The press, newsreel and radio publicity had also built “Bomber” Harris into one of the most celebrated British leaders of the war. Harris made it very clear to Sir Charles that if Bomber Command was going to advance from area to precision bombing he would have to be sacked. The Chief of Air Staff for the rest of the war was never able to exercise authority over him.

### **Notes, Memo’s & Decisions – The Fate of Dresden**

After 1942, Churchill and his scientific advisor, Lord Cherwell, gave a free hand to the RAF. Harris had been elevated to Commanding-in-Chief of Bomber Command just when a directive was issued to the command to open up a new offensive, primarily aimed at the homes of the German people. It was Cherwell’s plan to strike 58 of Germany’s largest cities and to render 1/3 the German people homeless within 15 months. It had been just after Normandy that the British Chiefs of Staff heard Churchill declare that “the time might well come, in the not too distant future, when an all out attack, by every means at our disposal, on German civilian morale might be decisive”.

The Western Allies were keen to help Stalin fight the war in the East by offering their bombers. In early December 1944, Averell Harriman, the U.S. Ambassador in Moscow, on behalf of General Dwight Eisenhower, offered Joseph Stalin allied assistance with the war.

On December 23, Roosevelt offered the use of the Allied air forces based in the Western theatre. SHAEF's Deputy Commander, British Air Marshal Tedder was sent to Moscow to confer directly with Stalin on January 15, 1945. The Russian advance had just broken through the German defenses in the East and both Stalin and Tedder agreed that it was necessary to prevent the Germans from transferring forces to meet the Soviet advance. Allied bombing emphasis was to be on communications, oil targets, railways and waterways.

On January 22, 1945 RAF Director of Bomber Operations, Air Commodore Bufton wrote to Sir Norman Bottomly of the Air Staff to suggest that the time was right to resurrect "Thunderclap" in the context of assisting the Russians. The strategy of using air power against civilians, to repeatedly cause great tides of refugees to flow out from one bombed city to another, said Bufton, would assist the Russian advance by creating additional chaos, already existing, as masses of refugees were now fleeing westward before the Red army.

Bottomly immediately sent a letter to Air Marshal Harris pointing out the implication of the Russian advance and reporting that, in addition to Bufton, Sir Charles Portal also favored one big attack on Berlin, in conjunction with similar operations against Dresden, Leipzig, and Chemnitz. Bottomly telephoned Harris on January 25<sup>th</sup> to tell him that they were going to use the full "Thunderclap" plan. Harris agreed that the main attack on Berlin should be supplemented by simultaneous operations against Dresden, Leipzig and Chemnitz.

The furious telephoning and message passing between Air Ministry at High Wycombe, British Plans, SHAEF, and Joint Intelligence at the War Ministry prompted Churchill to intervene on the evening of January 25<sup>th</sup>. Churchill spoke to his Air Minister Sir Archibald Sinclair and asked to know what plans the RAF had for "*basting the Germans in their retreat from Brestau*". Sinclair had always favored oil targets, as a priority, and so told the Prime Minister. Churchill, in a nasty note to his Air Minister on January 27<sup>th</sup>:

*"I did not ask you last night about plans for harrying the German retreat from Breslau. On the contrary I asked whether Berlin and no doubt other large cities in East Germany should not now be considered especially attractive targets. I am glad that this is under examination. Pray report to me tomorrow what is going to be done".*

On the same day, January 27, Harris was authorized by the Air Ministry to carry out the attacks, which he himself proposed on January 25. Specifically mentioned was "evacuees from the east" and the four cities previously mentioned. Sinclair notified the Prime Minister that he had already complied with his wishes.

*"The Air Officer, Commanding – in Chief, Bomber Command, has undertaken to attempt this task as soon as the present moon has waned and favorable weather conditions allow".* Effectively Churchill's note of January 27<sup>th</sup>, to Sinclair, had sealed the fate of Dresden.

SHAEF military planners approved the operation on January 31st. Tedder mentioned Berlin, Leipzig, Dresden and associated cities "*where heavy attack will cause great confusion in civilian evacuation from the East and hamper movement of reinforcements from other fronts*". On February 6<sup>th</sup> Sir Charles

Portal informed Bottomly that the Air Ministry proposals for the eastern air attacks had been approved by the Chiefs of Staff.

### **The Target - Intelligence Fantasy and Reality**

*“Specific military installations in Dresden in February 1945 included barracks and hutted camps and at least one munitions storage depot”.*

– Top secret USAAF Historical Analysis of the 14-15 February 1945 Bombings of Dresden, declassified 13, December 1978 -

The briefings for RAF and USAAF flight crews sounded vague about what would actually be on the ground when they arrived over Dresden. On the eve of the raid they were told that Dresden had developed into an industrial city of first class importance, and like any large city with its multiplicity of telephone and rail facilities was of major value for controlling the defense of that part of the Eastern Front. Crews were told that the Russian advance was pushing thousands of Panzer troops back toward Dresden center with large concentrations of German forces already camped in the streets.

In reality, since the 18<sup>th</sup> century, Dresden had stood for the finest in art, architecture and music. The contents of the Dresden galleries, begun in 1560, housed many works of art and art objects including world famous collections of Vermeer, Rembrandt, van Dyck, Rubens and Botticelli. Generations of English noblemen had visited the city on the Grand Tour. The city had been a center for music and musicians on a European scale and was best known for the manufacture of fine porcelain china.

The railway network was important as a junction, but for historical reasons only. The tracks did not lead through the city center; instead they skirted outside the city a couple of miles. The main route to the Eastern Front, depended on an Autobahn, which also ran outside the city limits.

Dresden did not have a sufficient air raid shelter network. There were only two formidably strong shelters in the city and only a few private shelters. Dresden residents did not have private gardens or large open spaces where private shelters could be dug. In this high built, closely constructed, city the only option for self help was to connect basements between the row houses. Openings were made in the “party walls “ which divided one set of cellars from another. If fires broke out above and trapped the occupants of one cellar, they could escape into the next cellar and then to the next without having to go above until they had cleared the fires.

On February 13, 1945 Dresden’s normal population of about 600,000 had swollen to at least one million. The advance of the Russian army had pushed thousands of refugees toward Germany. Intelligence reported thousands of refugees and trekkers streaming into the city from Silesia. Most were women, children and the aged. Waiting for West bound trains thousands had camped in and around the main railway station. Thousands more sat on their suitcases in the streets surrounding the town center.

There were no defenses. The front lines had stripped Dresden, almost bare, of heavy anti aircraft guns. Only light flak, for use against low flying aircraft, remained. There were no Panzer troops in the city, only wounded soldiers from the Eastern Front who were in dozens of makeshift hospitals. The city was completely undefended.

## **The Raids on Dresden**

The RAF bomber force consisted of over 800 four engine Lancasters carrying 1,477 tons of Heavy Explosive (HE) and 1,181 tons of incendiaries. The USAAF sent a total of 527 heavy four motor B17 Flying Fortresses carrying 953 tons of HE and 294 tons of incendiaries. Accompanying the bombers were several hundred fighter aircraft used to protect the bombers, drop pyrotechnics, identify targets, and strafe the “deck” to keep firefighters underground.

In the late and early hours of February 13-14, the British, American force bombed the center of the city on both sides of the Elbe reducing it to blazing ruins. The “fire storm”, had erupted, raged like a tornado at 250 MPH, and consumed the entire city. Thousands were killed for lack of oxygen. As additional thousands fled the city, to more open spaces, a second wave of bombers attacked to prevent their exit. Thousands were trapped under burning buildings because many of the cellars had their exits blocked by rubble. Over the city roofs were burning and the masonry walls of buildings acted like a stovepipe. The superheated air from the inferno reached 20,000 ft. and created turbulence, in the atmosphere, that shook the bombers as they flew over the city. On the ground the glow of the fires could be seen for 50 miles. Not a single German aircraft had defended the city. There was no flak. Dresden had been defenseless. Twelve hours later a third attack was made on the periphery of the city along the Elbe where long columns of refugees seeking shelter were attacked and strafed.

It was impossible how many died because no one knew exactly how many refugees and trekkers were in the city that evening. Estimates of the dead, soon after the bombing had ranged from 60,000 to 150,000. In 1958 the church Warden of the Kreuzkirche, in Dresden, placed the figure at 250,000, a figure that is accepted today by the people of Dresden.

## **Legal And Moral Issues**

On the news of the destruction of Dresden a major wave of anger swept through Whitehall, the Air Ministry and Houses of Parliament. Concerned heightening with the release on February 17, of an Associated Press dispatch from SHAEF that “*Allied Air Chiefs had embarked on deliberate terror bombing of German population centers as a ruthless expedient to hasten doom*”. The AP dispatch, which was accurate, was instantly suppressed by British censors.

The news came as a shock to the American public who believed that the USAAF attacked only military objectives. General George Marshall publicly stated that Dresden had been bombed at the specific request of the Russians. This statement was not true. The Russians had told British Air Marshal Tedder in December that they wanted the allied bomber forces to stop the Germans from shifting troops from the Western Front to the East. In particular, they wanted the allies to paralyze the transportation junctions of Berlin and Leipzig. There was no mention of a target that the Russians had in mind. The Russians did not want Dresden bombed.

Prime Minister Churchill sensed the concern about the Dresden bombing. He knew that area bombing had gone too far this time. He attempted to shift the blame on others. On March 25<sup>th</sup> he composed a memorandum for the Chiefs of Staff Committee, of the three services, questioning the bombing of German cities for the sake of increasing terror.

*“the destruction of Dresden remains a serious query against the conduct of Allied bombing. I am of the opinion that military objectives must henceforth be more strictly studied in our*

*own interest rather than that of the enemy. The Foreign Secretary has spoken to me on this subject, and I feel the need for more precise concentration upon military objectives such as oil and communications, behind the immediate battle zone, rather than on mere acts of terror and wanton destruction however impressive”*

The memorandum was a clear, calculated attempt by the Prime Minister to distance himself from the Bombing of Dresden. Sir Charles Portal convinced Churchill to reconsider the memorandum, withdraw it, and reissue a less damaging indictment against his bomber marshals. The original memo survived.

In his autobiography Harris denied having a hand in the decision to bomb Dresden.

*“ The attack on Dresden was considered a military necessity by much more important people than myself ”.* He alone never made any excuse or apology for himself or Bomber Command for carrying out the decisions of those “much more important than himself”. In a note to Bottomley on March 25<sup>th</sup>, Harris said: *“ I would not regard the whole of the remaining cities of Germany as worth the bones of one British grenadier”.*

His penchant for the complete destruction of German cities had remained without guilt.

There is a universal understanding throughout the civilized world of the significant moral and legal distinction between incidental and deliberate destruction of civilian life in war. It is hard to look back on a night’s work, as was done in Dresden, and other German cities, with any pride. Military and civilian leaders who identified the targets and ordered the attacks could not have looked back on their actions without guilt and the feeling that the destruction was anything but deliberate. Yet in the atmosphere of 1945 Britain it took a brave person to admit their own actions or to speak up publicly and accuse their government of committing, war crimes. In fact, except for, questions concerning “the wisdom” of such attacks raised briefly in the House of Commons on March 6<sup>th</sup>, in both the UK and in the U.S., a high level of intellectual rationalizing had been used to justify, or excuse, what had been done. American criticism was withheld in part for not wishing to publicly condemn an ally for atrocities, that in fact, the USAAF had also committed albeit on a much smaller scale.

Throughout the war Army Air Force officers, especially the Commander of USAAF Bomber Command, General Carl Spaatz, consistently expressed moral revulsion at the wholesale slaughter of non-combatants in the terror bombings. Yet, it was on February 14, 1945 that the USAAF joined with the RAF in the strike against Dresden. Spaatz was to say after the bombing that the USAAF was *“pursuing only a campaign of precision bombing against economic targets”.*

It was Churchill who had introduced city bombing and it was Churchill himself who had signed the death warrant for Dresden. It was Churchill who had enthusiastically backed the bomber Marshals in carrying out an indiscriminate area bombing policy, in which they firmly believed. They were all in it together, the Prime Minister, Lord Cherwell, Lord Trenchard, Sinclair, Tedder, Portal, Bottomly and Harris.

In the immediate months, after Dresden, the war was winding down in Europe and the Americans had shifted attention to the Pacific. The allies were trying the Nazis for crimes against humanity, in the ruins of Nurenburg. Millions of refugees needed food shelter and medical care. The Russian occupation was being established inside the gates of Berlin. Britain, France, America, Russia and the rest of the European nations, who had been the victims of Hitler’s Germany, were now the victors. Who was going to indict Winston Churchill, Sir Archibald Sinclair, Sir Charles Portal and company as

war criminals? Who would dare? The Americans? In the minds of the allies it was the Germans who were the criminals.

The Atomic bomb was soon dropped on two Japanese cities, killing thousands of civilians. It was “area bombing” at its peak in an era of 20<sup>th</sup> century terror. Who was going to indict Harry Truman, or General MacArthur as war criminals? The U.N. had not yet been established, or The Hague the seat of a World Court. Who would prepare the indictments? Area bombing had been wrong, very wrong, but no one was prepared to “confess” and no one would be held accountable.

The bombing of innocent civilians had been abhorrent to civilized nations from the time Germany had bombed London in 1917. In the early 1920’s the traditional British military services were alarmed at what they believed to be RAF plans to conduct a private war against civil populations rather than against the enemy’s armed forces. The moral issues were heavily debated, in private, throughout the 1920’s and 1930’s. Those discussions remained classified until 1980 when the Royal Historical Society published a study - *The Shadow of the Bomber: the Fear of Air Attack and British Politics, 1932-1939*.

In *The Shadow* the Chief of the Imperial General Staff, Sir G. Milne, is reported to have opposed Lord Trenchard’s doctrine in 1928. Milne said that it “*advocated unrestricted warfare against the civil population of one’s enemy*”. Sir Milne’s views were in the minority as a rational emerged among Britain’s highest military leaders. The rational put forth simply said “*that although such barbarism should not be condoned, the reality was that the British should have to bomb population centers, because there were “barbaric races” who were prepared to perpetrate similar atrocities on Britain*”.

The bomber marshals of the Second World War, who rose through the ranks in the shadow of Lord Trenchard, saw the kind of war that was coming with Germany, and how it was to be conducted. WWI had been a war of attrition and stalemate. It had been a terrible waste of England’s young men. The experience remained in the British psych, especially Winston Churchill. The next war they had promised themselves would be quick and decisive.

Air power, projected with heavy four motor bombers, was very attractive, especially since Luftwaffe aircraft were not designed to retaliate in kind. The Royal Air Force entered World War II committed to demonstrating that bombs dropped from the air were weapons with unique potential. British air power theorists, in the end, saw a future war where targets would not just be factories, power stations and docks but the factory workers and civilian populations as a whole.

War in the 20<sup>th</sup> century had indeed changed from Clausewitz’s “decisive battle” between two opposing military forces on the battlefield. Air power and strategic bombing introduced the option to “go around” the enemy’s military forces, to identify what was perceived as an alternative “center of gravity”, and to bomb the “morale” hell out of their civilian populations. It all had been accepted and justified as doing what had to be done.

But the irony of the whole campaign of area bombing was that it never achieved its objectives. It did not break the will, nor destroy the morale, of the German people. Questions remain about its effectiveness in contributing to German defeat. Official historians who have studied, carefully, the aerial bombing campaigns of WWII have flatly stated that it was the American precision bombing, particularly the “Pointblank” oil plan, in the fall of 1944, that really broke the back of the German military. Albert Speer, Hitler’s Minister of Armaments, told his interrogators after the war that Germany up to March 1945 were still able to produce aircraft and tanks but had no oil to run them.

The Federal Statistical Office in Wiesbaden computed after the war that 593,000 German civilians died and 3.37 million dwellings were destroyed between 1939 – 1945. The cost of the bomber offensive in British aircrews and resources may not have been worth the results it achieved.

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