

BOMBING, STATES AND PEOPLES IN WESTERN EUROPE 1940-1945

THE PROJECT EXHIBITION

Comparative Overview

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BOMBING STRATEGIES

Germany dropped 74,172 tons of ordnance on the United Kingdom in World War 2, nearly four-fifths of it in 1940-41 and a further one-eighth in the V-weapon offensive of 1944. The Allied bombing offensive, gathering momentum later in the war than Germany's, at a higher level of technological development and with far greater industrial muscle behind it, did 'better'. According to the United States Strategic Bombing Survey, the Allies dropped 2.7 million tons of bombs on continental Europe. Half this total went to Germany, 21.8 per cent to France, and 13.7 per cent to Italy, the remaining 14.2 per cent being shared between Austria, Hungary, the Balkans, Belgium and the Low Countries, and Scandinavia. The Royal Air Force did 45.8 per cent of the Allies' bombing, the United States Air Forces 54.2 per cent. Bombs killed 60,595 British civilians. In Germany, an estimated 420,000 civilians died in air raids; in France and Italy, some 60,000 each.

Why bomb? Most obviously, aircraft were employed in World War 2 as very long-range artillery against an enemy's naval or ground forces, or air bases. This was the characteristic use of the Luftwaffe for the first year of the war: as an integrated ground support weapon in the Polish campaign of 1939 and the successful attacks on France, Belgium and Holland in 1940. The Battle of Britain, too, was a (failed) bid for air superiority prior to the invasion planned for that September but never executed. The Allies, too, used aircraft for such quintessentially military missions. In winter 1941-2, indeed, an unwilling RAF Bomber Command devoted a third of its (modest) effort to attacking the German battlecruisers *Scharnhorst* and *Gneisenau* in Brest harbour; *Tirpitz* was similarly pursued (though using a much smaller percentage of bombload) from 1942 onwards. Luftwaffe aerodromes, especially in France, were a constant target from 1940; so, from late 1943, were V-weapon (or 'Crossbow') sites. After the Normandy landings, bombers were used as ground support in attempts to break through enemy lines at Saint-Lô, Caen, and countless smaller targets; in Le Havre, aerial bombing was seen as a substitute for a long siege. Strictly speaking, these were

'tactical' raids, but they were also some of the heaviest of the war, with Le Havre taking nearly 10,000 tons in the space of a week. A further type of military objective was the enemy air force in flight: forced to send up its fighters to defend ground targets on unfavourable terms, an enemy might, in time, suffer unsustainable losses of aircraft and above all of trained pilots. This was part of the Germans' aim in the Battle of Britain; it was also a key purpose of the American 'Big Week' offensive, involving bombers with large fighter escorts, in February 1944.

Strictly military targets, however, including enemy naval bases, airfields, and V-weapon sites, accounted for just 20 per cent of the Allies' total bombing effort in Europe, according to the United States Strategic Bombing Survey. Altogether more substantial, according to the Survey, was the bombing of non-military targets that conditioned the enemy's ability to wage war. Some 37.4 per cent of Allied bombs in the West were dropped on industrial targets, including aircraft factories, oil, chemical, and synthetic rubber plants, and other manufacturing sites. The destruction of ball-bearing factories and synthetic oil plants, in particular was expected (especially by the Americans) to cripple the German war effort. A further 36.3 per cent hit transport facilities – inland and maritime ports (4.2 per cent) and land transport, chiefly rail (32.1 per cent); transportation targets were particularly favoured by Eisenhower's deputy Air Chief Marshal Tedder, from the 1943 campaign in Italy, through the spring 1944 'Transportation Plan' against France and Belgium, and finally in the Reich itself. Similarly, the Luftwaffe targeted Coventry as a major centre of Britain's arms industry, and the London docks as the capital's commercial lifeline. Needless to say, attacks on such targets entailed large-scale 'collateral damage' – the deaths of civilians, disproportionately workers and their families living close to the targeted factories or railway installations.

Not all the air chiefs agreed with a narrow focus on oil or ball bearings or railways. Indeed, the head of RAF Bomber Command from February 1942, Air Chief Marshal Sir Arthur Harris, dismissed such objectives as 'panacea targets' and insisted that the best way to wage a bombing war was to destroy whole cities one by one. The policy of 'area bombing', adopted by Bomber Command shortly before Harris took over the top job, was in part dictated by the inability of RAF bombers to hit precise targets, especially at night. But it was also shaped by two other considerations. One was the view that it was more effective to view cities as whole economic systems, containing multiple and inter-dependent targets, rather than to hit limited objectives within them. The other, explicitly acknowledged in Bomber Command's directive of 14 February 1942, was that bombing should be used to damage civilian morale, and especially that of factory workers.

The area bombing policy, and the associated goal of hitting enemy morale, raises a number of questions. The first was what morale really meant: this the RAF never fully defined. The second was whether any practical distinction could be made between attacking civilian morale, for example, by 'de-housing' them, and simply trying to kill civilians. British politicians claimed that the RAF never tried to take civilian lives; Harris was less fastidious, believed that killing large numbers of German civilians was justified in the name of victory, and wished the politicians would say so. Thirdly, it may be asked if the Allied policy could be justified on the grounds that 'the Germans started it' by bombing civilians during the Blitz. On balance, the German raids of 1940-1941 can be viewed as aimed primarily at industrial and transport targets, rather than deliberately targeted at civilians; only the smaller raids of 1942, and above all the V-weapons offensive of 1944, were clearly intended to terrorise the civilian population. Fourthly, did attacks on morale 'work', for example by sapping an enemy's will to continue the war? Not, it appears in the British or German cases; but it can be

argued (and was, by the British bombing chiefs) that bombing played an important part in securing the surrender of Italy. Finally, was there a practical distinction between British 'area' bombing by night and the 'precision' bombing that the American air forces aimed to achieve by day, with the sophisticated technology of the Norden bombsight? Such a distinction appears, in practice, to have been limited, as the bombsight was less effective in the cloud cover of Europe than in the clear American skies where it was developed, and the bombload carried by US aircraft could not but cause massive collateral damage. The Americans were also, it may be noted, quite prepared to use area bombing against Japan – culminating in the use of two atomic bombs on 6 and 9 August 1945.

PREPARING FOR BOMBING

Returning from the Spanish Civil War, George Orwell evoked 'the deep, deep sleep of England, from which I sometimes fear that we shall never wake till we are jerked out of it by the roar of bombs.' (George Orwell, *Homage to Catalonia* (Harmondsworth: Penguin, 1966: 1st edn. 1938), 221). No aspect of future war was more vivid to Europe's populations than bombing. In World War I, it had killed a few thousand civilians – relatively speaking, a tiny number. But the ghastly novelty of the experience, and the assurance that with visibly improving aircraft, it could only be made worse with repetition, caught the continent's imagination. So did the practical experience of German and Italian bombing during the Spanish Civil War.

It was an Italian, Giulio Douhet, who first theorised the future bombing war in *The Command of the Air*, published in Italian in 1921. In the next conflict, Douhet warned, all the rules of war would be abandoned and Europe's air forces would use poison gas against enemy cities. No form of defence could protect civilians from airborne attack; the best remedy, therefore, was an air force itself capable of overwhelming the enemy's defences and inflicting a knock-out blow.

Although Douhet's book was not widely read across Europe, the idea of the 'knock-out blow' from the air soon haunted Europe's populations – and governments. All believed, in the words of Stanley Baldwin, that 'the bomber will always get through' – and all believed in the eventuality of gas attack. Only the British, however, tried to build an offensive bomber force to deter or destroy possible attackers, and even they did not rely on it totally; all European powers undertook defensive measures to face the threat. These included the organisation of 'active' defences – fighters and anti-aircraft weapons – and a variety of 'passive' defence measures, including building shelters, distributing gas masks, planning the evacuation of non-essential populations (especially children) from cities, developing black-out measures, and recruiting and training volunteers for duties including the enforcement of air raid precautions, firefighting, rubble clearance, first aid, and assistance to the bombed-out. All governments, too, recognised the importance of mobilising local authorities and civilian populations on the ground.

Indeed, the nature of the measures taken, their timing, the difficulties in the way of implementation, and their inadequacy when the bombing threat materialised were remarkably comparable across Britain, France, Germany, and Italy.

Basic instructions on defence against air attack were issued in Britain, France, and Italy during the 1920s. Each of these countries developed a comprehensive legal framework for passive defence

from 1935 onwards –the French laws of 1935 and 1938, for example, or Britain's Air Raid Precautions Act of 1937; they were joined in this, in 1935, by Germany, where air defences became a top priority after Hitler's accession to power in 1933.

Each of these legal frameworks assigned an important role to local authorities in the development of passive defence plans on the ground. Each also, however, aimed to co-ordinate and direct local authorities' efforts, whether through existing means (the prefects, in France and Italy) or new ones (Regional Commissioners in Britain, the Air Regions in Germany).

In all four countries, formal, administrative preparations ran well ahead of real, material protection for civilians. This was not, by and large, for lack of understanding of what was required. True, each government overestimated the danger of gas attacks (which, in fact, never came), and underestimated the amount of provision needed for bombed-out households; but the assessment of other needs was broadly correct. The real problem was finance. The costs entailed were beyond the capacity of local authorities to bear. Things got done only when central governments made the effort. But when war seemed remote, the expense involved in air raid protection appeared unnecessary; when war seemed imminent, 'passive' defence had to compete with rearmament in the national budgets. In addition, passive defence faced resistance from pacifists, who viewed it as militarisation by the back door.

The result, by 1940, was a very limited level of protection against bombing across all four countries. Deep, bomb-proof shelters, it was recognised everywhere, were prohibitively expensive and were therefore largely reserved for essential services; other civilians would have to make do with more makeshift arrangements – dugouts, covered or not, or reinforcements to cellars and rooms. Evacuation plans for non-essential civilians existed, but not always at the required level of detail. Black-out measures had been enacted, but faced technical difficulties; in many cases, civilians were reluctant to co-operate, as they were with periodic attempts at air raid practices. Air raid protection personnel were recruited, but their numbers, equipment and training were often inadequate.

Were some countries better prepared than others? The gap was probably greatest between the two Axis powers. Both were, in principle, 'air-minded'; governments had encouraged the public's interest in aviation and its military uses. Fascist Italy began its legislative preparations in the 1920s, but by 1939 had provided shelters for only 1 per cent of the population, and prepared incoherent evacuation plans. Italian workers were expected to be equipped with gas masks by 1948. Few Italian volunteers came forward to man the National Union for Anti-Aircraft Protection, UNPA. German preparations only dated from 1933. The major success was the recruitment, by 1939, of some 15 million members to the Reich Air Protection League, which organised the 'self-protection' of the population against attack. Even here, however, the population was slow to comply with the requirement to reinforce and protect a bomb-proof room in each household, or to co-operate with black-out exercises. And a major nationwide shelter-building programme would have to wait till 1941.

The two democracies achieved about as much as each other. Both had developed the legal and administrative framework in the 1930s – the French rather more rapidly than the British. Both recruited passive defence volunteers – though in the hundreds of thousands rather than the millions available in Germany. Both had evacuation plans, activated in September 1939 (when bombing did not immediately follow the declaration of war, many evacuees returned home). Both delayed any

substantial shelter-building programme until central government decided to make funding available – in 1938 in both cases; by 1940 they had shelter accommodation, of the most basic kind, for about 10 per cent of the urban population. In two respects the British could be said to have got ahead: gas-masks were available for the whole population by 1940, and the Anderson shelter offered some safeguard for households with the garden to put one – and involved the householders in their own protection. But the gas-masks proved unnecessary, and the homes most badly hit in the Blitz – working-class terraces – had no room for Andersons.

Organising the protection of civilians against cataclysm from the air faced states with a challenge of unprecedented administrative complexity, involving a level of management of civilian life that went far beyond the co-ordination of war production undertaken in World War 1. Perhaps it was not surprising that the level of constraint (and expense) required was not really forthcoming until 'the roar of bombs' made the threat palpable.

STATES AND BOMBING

The states of Western Europe were faced in the Second World War with an unprecedented task. They were expected to be able to provide effective protection, welfare and aftercare for the entire population in the event of a major bombing campaign. Civilians had not been in the firing line before in the modern age, and states had never imagined that this would be a requirement. The ability to provide sufficient support was a test of the institutional strength and capacity to act of particular states, whether democratic or authoritarian. A developed state structure, with trained personnel, widespread information on the population, and financial security was a recent phenomenon. Bombing placed all of these elements under severe strain.

In almost all cases the preparations made in the 1930s to cope with real bombing were inadequate. This was scarcely surprising, since bombing on this scale had never been experienced before. In each of the four states provision for shelter was improvised and rudimentary. In Germany it was not even extensive. In Hamburg public shelters in 1940 could accommodate only 50,000 people out of more than one million; only in 1943, on the eve of the firestorm had this been increased to 378,000. In Britain shelters were expected to be used during the day and for very short periods of time. The raids were the exact opposite – at night and for hours on end. In both Britain and Germany, however, the national government and the local authorities (and the National Socialist Party in Germany), reacted rapidly and flexibly to the situation. In both states shelter provision was extended and improved and effective welfare arrangements made. In France and Italy the situation was more mixed. Italian civil defence preparations were poorly co-ordinated and under-resourced and shelter provision haphazard. In France, active civil defence measures were more systematic, but were never fully tested as they were in Germany and Britain.

The state needed to be able to demonstrate that it could provide some level of air raid protection that the public would respect. In Britain and Germany this was a critical factor since the scale and intensity of bombing, by a clearly defined enemy, placed the state at the centre of efforts to sustain morale and prevent any form of social or economic breakdown. In Italy and France, on the other hand, the role of the state differed. France was divided until November 1942 between an occupied zone and the rump French state, based on Vichy. Italy was a unitary combatant until September

1943, but was then divided between a liberated zone and a German-occupied north. This made the question of providing effective shelter and welfare more complicated, while in both cases the split wartime personality undermined public belief in the capacity of the state to provide what was needed. It is striking that in both cases the church or voluntary organisations played an important role as surrogate state institutions in contrast to the British or German experience.

For states at both national and local level the most important functions in the aftermath of bombing were to provide information, emergency shelter and food. In Britain, in the few early examples where the state failed to supply one or other of these facilities, there was evidence of popular anxiety and passive hostility. All states learned that if they failed to provide the minimum needed by a population under conditions of disaster, they would be the ones to be blamed. In Germany and France mobile columns or emergency trains were set up, bringing food, clothing, first aid and repair units to bombed areas. In Britain convoys of trucks arrived in blitzed towns armed with leaflets, first aid, emergency supplies and, most important of all, money. Thousands of pounds were handed out as temporary relief to dispossessed householders. In Germany too issues of compensation and immediate payment, in cash or kind, proved to be one of the most important testing grounds for social confidence in the authorities. Arguments over financial compensation became a volatile issue for the Italian industrial working classes and contributed to declining confidence in the regime.

States were also under pressure to inform their populations and to monitor popular opinion. Since morale was widely thought to be a key objective in bombing attacks, states were obliged to think of ways of sustaining public commitment. This could be done by promising revenge, as the German regime did in 1943 and 1944 in a propaganda campaign that anticipated (too far in advance) the advent of the V-weapons. It could be done as in Britain by emphasizing the special capacity of the British to sustain hardship with a stoical indifference. The propaganda of 'we can take it' backfired eventually on the evidence that the public was much more interested in 'giving it'. In Italy the idea of the enemy as uncultured barbarian, destroying the homeland of ancient Rome and the Renaissance, may well have played to public sentiments, but it made little difference to the reality of being heavily bombed. Propaganda in almost all cases was handled clumsily.

One aspect particularly concerned the relationship between state and people: the way in which the dead were reported and the bodies treated. States were reluctant to issue any communiqués that gave details of casualties for fear that it would encourage the enemy. On the other hand, rumours abounded. In Britain the state agreed to publish casualty lists in the localities, by putting up a list of dead on town hall doors, but newspapers could not publish them. In Germany newspapers were instructed at first not to publish death notices, but eventually were permitted to do so, but again articles with aggregate losses were not permitted. Far from reassuring people, the lack of information undermined confidence in what the states were saying on other issues. There were also tensions over the treatment of the dead. Local authorities resorted to mass graves where casualties were high, and in many cases coffins were replaced with cheap shrouds. In Germany bodies were burned where the number of dead was overwhelming and the risk to health evident. The population wanted the dead properly treated. In Britain burial in a mass grave was made into a military ritual with bands and union jacks, which was approved more. But the treatment of the dead, where the public sphere clashed with the private wish to mourn, remained a contested area between state and people.

On balance the states of Western Europe were sufficiently developed to be able to cope with bombing even of a severe and extended kind. Indeed the heavier the bombing became, the more dependent the population became on what the state could provide. This was the opposite of what had been expected from bombing theory before 1939. The exception to this rule was Italy, where the state failed not only to cope with protection from bombing, but on a range of other important issues. Heavy bombing in Italy pushed some Italians towards more extreme solutions in partisan activity and industrial sabotage. But since northern Italy after 1943 was dominated by the German army, the 'state' simply imposed its solution to the problem by summary punishments and vicious anti-partisan operations. Northern Italy was in this sense a failed state, in which allegiance was compelled and effective welfare and protection could not be provided. The result was to push the population towards forms of self-help which bypassed the state altogether.

State institutions responded to the growing dependence of the population. They were flexible about introducing emergency and improvised measures, from communal feeding and welfare to extensive evacuation schemes. But they relied on the activity of police, civil defence workers, local bureaucrats and volunteer organisations. The success of the state was possible not only because of established institutional patterns and social policies, but because of the willingness of an important fraction of the population to identify with and to endorse the state's efforts. This willingness had little to do with success in the war (Britain was up against it in 1940/41, the Germans in 1943/5, for the French it seemed irrelevant) but much more with popular perception of a relationship between rulers and people that promised a convincing short-term remedy to the adversities of being bombed.

SOCIETIES AND BOMBING

When bombs fall on residential areas, railway stations or factories, they inevitably destroy homes and kill civilians. These events can be 'collateral damage' in the language of military strategists, but are central to the experiences of the victims. As historian Sandro Portelli put it, both points of view (of those planning the bombing and of those on the ground) are 'correct in their way', and the relationship between them represents the 'ultimate contradiction of war' (S. Portelli, 'So Much Depends on a Red Bus, or Innocent Victims of the Liberating Gun', *Oral History*, 34, 2006, pp. 29-43). What was the response of bombed populations to the bombers? How did society in the four countries cope with extraordinary levels of violence and destruction?

For the people who experience air attack, the bomber normally represents the enemy – directly responsible for the devastation. This was particularly the case for Britain and Germany, who attacked each other relentlessly. The picture was more complicated in the case of French and Italian civilians, who were bombed by those who were increasingly seen (from the start in France, from 1943 in Italy) also as their 'liberators'. Both contemporary perceptions and later memories of British and American raids were, in these two countries, mixed. In Italy, bombing was presented by the perpetrators as a response to Italian aggression; as a result, the guilt factor is important in understanding the Italians' responses. France, on the other hand, was never an enemy, but an allied country that had been occupied; raids there never aimed, in theory, at French civilians, but at German war production and military targets. The difference in the aims of the bombers and in the international relations between bombers and bombed determined to a certain extent the different political, social and cultural reactions to the raids among the populations of the four countries.

At the core of the Blitz 'spirit' in Britain was the need to show the enemy that the population could 'take it', and both contemporary and later accounts have blended into the country's national identity. This was not the case in Germany, Italy or France.

The British bombing of Germany and Italy aimed to create a political dividend by stimulating social unrest particularly among the industrial workforce. Bombing would test the endurance of the workers, with the intention of provoking bombing-related manifestations of political dissent, absenteeism, social disaffection and anxiety. In the Italian case, these predictions seemed to be partly borne out. Italy was the country least prepared to face bomb attack, both in terms of anti-aircraft defences and of passive defence measures. In particular, the lack of shelters or their poor conditions, the changing and chaotic evacuation plans, and the malfunctioning of the alarm system depressed the morale of the population when the consequences of the raids became serious, from 1942 in particular. This increased defeatist opinions, which, particularly in the large cities, often resulted in open criticism of the regime. Workers went on strike both in spring of 1943 (under the strain of bombing and against the Fascist regime) and in the spring of 1944 (again under bombing, and against the German-controlled Salò Republic).

In the German case, by contrast, the RAF had reached the conclusion by summer 1943 that although workers' morale might be depressed, Gestapo and SS control still remained strong. Even the raid on Hamburg of summer 1943, although the mass killing of some 37,000 civilians could hardly have failed to 'depress' the population, provoked not so much the decline of morale but the complete destruction of everyday life and the total impotence and numbness of the survivors, who blamed neither the enemy nor the regime. More generally, the resilience of the German population in bombed areas was due to the fact that revolting against the regime would have brought worse consequences than coping with disaster. Bombing did not create a 'Blitz spirit' in Germany, and by the time of the heaviest raids few could believe in the resistance of the 'people's community'. Although discontent existed among the German population, often fanned by rumours hostile to the authorities, the regime remained the only source of food and material support.

In France, bombing produced rumours and emotional responses that revealed a complex relationship between bombers and bombed. However, even without 'Blitz spirit', the morale of the French population did not collapse, not did society and its civil defence institutions. Allied raids were welcomed in the first two and a half years of the occupation, but began to stimulate discontent when the raids grew in frequency and intensity from 1943. There, as in Italy, tragic events during the bombing of cities could provoke mixed feelings among the population, and Vichy propaganda could exploit them in order to whip up anti-Allied sentiments. However, although Allied propaganda had not been able to prepare civilians for the violence and the frequent inaccuracy of the raids, Vichy propaganda and resentment of the raids rarely translated into prolonged expression of anti-Allied, still less pro-German, feeling.

The attitude of Italian and French civilians towards the Allies could change depending on the level of the destruction, but also on the scale of the violence exercised by the German occupiers (in France from 1940, in Italy from 1943). As the raids increased in intensity and frequency in the two countries, the expectations of the French and the Italians began to coincide with the aims of the bombers, in the hope that bombing would bring the war to an end.

In Britain, the population's responses to German bombing were varied, and historical research now presents a more complex picture of how people reacted to bombing than that of a society which coped with destruction thanks to an increasing sense of solidarity between classes and shared responsibilities. In Britain too, the raids provoked fear, anxiety, apathy, resentment against the government and loss of nerve. However, evidence of shock appeared to be relatively short-lived, and contrasts with other evidence of popular enthusiasm, social collaboration and solidarity. The majority of the British population expressed neither social protest or political dissent, nor complete consensus with the government. This was true with regard both to the government's management of the consequences of bombing and to its retaliatory and indiscriminate attacks on Germany. In contrast to Italy, the success of the British authorities in providing material support for the population prevented social and moral breakdown.

It is not possible to provide a single answer as to whether bombing had an impact on class solidarity, either in Britain or in the other three countries. Bombing could reinforce class identities, as in all the four countries the rich had better access to shelter, and could more easily evacuate to properties outside the cities using their own means of transport. However, in some cases bombing encompassed the totality of society. Air-raid sirens sounded and bombs fell on industrial peripheries as well as city centres, uniting citizens through a common experience and in the process breaking down class barriers.

In no country did civilian populations behave in uniform ways under the bombs as early theorists of bombing had predicted. The response from those who it was assumed would be victims of this new technology of death was distinctive and differentiated, and could depend on a number of factors, such as the effectiveness of each country's preparations for bombing, the relationship between bombers and bombed, and the existence of patterns of social contestation and political tradition. Moreover, bombing was only one of the factors which could have provoked the collapse of societies: military performance, food crises, and levels of faith in the government also played an important part.

BOMBING AND ITS EFFECTS

Bombing during the Second World War was pursued in the end because the air forces and governments that authorized it and carried it out thought it would have important strategic effects. The problem for all air forces was to find some measurement that would give a realistic picture of what those effects were. They relied on human intelligence and on photo reconnaissance, but neither was entirely reliable. The RAF and the USAAF were only able to assess the effects when the war was over, but even the United States Strategic Bombing Survey, and the more limited British Bombing Survey Unit, found it difficult to agree on exactly what strategic effect bombing had had.

One obvious measurement was damage to the enemy war economy, which was one of the principal reasons for the bombing of all four countries. The German air force greatly exaggerated the damage to the British economy, but the Blitz in fact cost no more than an estimated 5 per cent loss of production, and had a minor effect on food supply and communication. The British and American air forces thought they might unhinge the German war effort (and the industry and transport working for the Axis in Italy, France and the Low Countries), but the German war effort continued to produce

ever higher levels of output into 1944. Postwar assessments showed a loss of war production of 10 per cent in 1943 and 17 per cent in 1944, but against a rising trend. The real damage was done by attacks on transport, oil and chemicals, which did finally bring the German war economy to a virtual standstill by 1945. But the cost of smothering Germany with millions of tons of bombs was to destroy the urban environment and kill over 400,000 people.

Death, injury and disablement were the most important consequence of bombing. They were regarded as by-products of attacks on military-economic targets by all except RAF Bomber Command, which switched to the deliberate targeting of civilians and their homes in 1941. Accurate accounts of the human damage perpetrated by bombing have nevertheless been difficult to construct. Bodies disappeared in the flames or were too mutilated to identify; sometimes artillery shells and bombs fell at the same time; the seriously injured died later and were not always counted; above all, the state authorities had many other issues to confront beside counting the dead and injured. In Britain the statistics are at their most accurate: 60,595 dead and 86,182 seriously injured. In Italy and France an estimated 60,000 died in each case, but since both were also major battle zones, reaching a precise figure is impossible. In Germany estimates have ranged widely, but the preferred figure is now around 410,000 dead with perhaps another 60,000 foreign workers and POWs. Local evidence suggests, as in the British case, that injuries affected a larger number. The long-term human legacy of bombing for thousands was permanent disablement, loss of sight, brain damage, or disfigurement.

The effect that pre-war thinking and wartime planning were most interested in was the possibility that bombing would 'demoralise' the population and perhaps provoke a social crisis, even a revolution. There can be no doubt that bombing was a demoralizing experience for every civilian population that experienced it, but only in Italy does there seem to have been a relationship between being bombed and protesting against the regime that failed to protect the population. After the war the Allies explored German morale to see whether bombing had had any of the effects that had been hoped for, but the evidence was at best ambiguous. Those interviewed certainly claimed that bombing was difficult to bear, but in the list of factors affecting their morale, bombing was just one among many. The Allies were not much interested in surveying the trauma inflicted by bombing, the 'Hidden Damage' as the author James Stern called it, when he put his experiences as a 'morale' investigator into print. But recent interest in bombing among psychologists in Germany has found that the experience left profound psychiatric scars on those who were its victims, even extending to their children.

The most obvious result of the bombing was the destruction of much of the European urban environment. More than half German city areas were destroyed. By the 1980s more than two-thirds of the West German built environment had been constructed since 1945. Some cities were reconstructed to look the way they were, but many architects and town authorities saw the destruction as an opportunity to experiment with modern forms of town planning. Wide roads, parks and green spaces, modern concrete and glass structures were put in place of the cramped older city centres. The same decisions had to be made in other European cities; the tension between a desire to restore and a belief in the virtue of architectural modernity was common everywhere. The City of London, most of it destroyed by fire, was a classic example of the compromises between the old and the new, though the last bombsites were only built over in the 1990s. In other British cities there were long delays in rebuilding, and many of the elaborate plans produced by town

planners proved too expensive to put into effect. In France, Auguste Perret's reconstructed city centre of Le Havre, initially condemned as a near-Stalinist monstrosity, has now become a UNESCO world heritage site, praised as 'an outstanding example of urban planning and architecture'.

In Italy the Allies themselves became involved in inspecting and cataloguing the damage to works of art and architecture which their own air forces had recently perpetrated. The British Committee on the Preservation and Restitution of Works of Art set out to help track down artworks stolen by the German occupiers and by looters. This was an uneasy task, since Allied bombers had done much of the destruction, and thousands of valuable pieces were never recovered. Much less interest was shown in German culture. A full reckoning of the damage done to German cultural monuments and artwork was published by German historians in 1988, two large volumes of losses, many of them permanent.

The most enduring effect was the memory of bombing in the thousands of communities across Western Europe subjected to it in one form or other. Unlike other aspects of the war, the civilian victims of bombing were seldom memorialized as the war dead, like soldiers. Despite the fact that the Blitz in Britain has remained a central feature of public memory of the war, there is no national memorial to the 60,000 who died, nor was bombing used as a way of cultivating a sense of shared victimhood. Elsewhere, bombing has been remembered much more publicly and formally. In the German Democratic Republic, the bombing of Dresden and Magdeburg was used to score political points against the capitalist-imperialist air forces that carried out the raids. In Berlin's centre and in Hamburg, prominent churches were left in their broken state as a permanent memorial to the bombing. All over Western Europe, local historians have played an important part in providing a clear narrative of what bombing did to the communities they write for. Many of these studies date from only the last twenty years. Western Europeans are now better informed about bombing than they were in the 1940s and 1950s, when they were surrounded by its real effects and wanted to rebuild and move on.

With the passage of time, the death of 600,000 Europeans from the bombing offensives has come to symbolize the pointlessness and waste of war, as the trenches did in the First World War. Western Europe suffered for the exaggerated fears and phobias about bombing in the inter-war years, which impelled air forces to see bombing as the supreme instrument of total war and to inflict its operations on civilian targets. One of the results of the bombing was the attempt to define the Geneva conventions on war so that they reflected a widespread desire to find some way of protecting civilian populations. Not until the Additional Geneva Protocols of 1977 was a formula found, but it has been only imperfectly implemented. The debate about the morality of wartime bombing has continued to the present day. Since by implication this debate touches on bombing in modern conflicts, it can be said that the experience of being bombed between 1940 and 1945 has left an enduring, complex and unresolved legacy for the Western Europeans of the present.