Civilian Morale under Aerial Bombardment
1914-1939 Part I
Goss, Milton P.,
Dec. '48

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Since 1914, war, preparation for war, recovery from war, and discussion of wars past, present, and future appear to have been the principal preoccupations of mankind. And from the time of the symbolic destruction of the "scrap of paper" which had supposedly guaranteed the neutrality of a nation, war has increasingly involved the nation as a whole — the man, woman, and child behind the lines as well as the soldier at the front. One of the most terrifying adjuncts of this total war has been the accidental or deliberate dropping of aerial bombs upon civilian populations. In the first World War such bombings were sporadic — sometimes amateurish. By the time of the Japanese attacks on China and the Spanish Civil War in the late 1930s, aerial bombardment of civilian centers had become an anticipated part of warfare. In World War II, of course, mass air raids upon the cities were widespread and commonplace.

It is for the internationalists to examine the morality of this development, and for the military analysts to assess the strategical and tactical value of these attacks. Here it has been deemed appropriate merely to explain the circumstances under which such raids occurred and to attempt a review of the reactions of civilian populations in the period before World War II to their own involvement in this relatively
new type of warfare. In a sense, therefore, this study provides a psychological background for the mass bombardments of the conflict which engulfed the world from 1939 to 1945.

In the preparation of this monograph only a fraction of the world's storehouses of pertinent materials has been employed. Enough, however, has been utilized to give a fair sample of the bulk of information which exists. Within the limitations of time and resources available, it is felt that an adequate coverage of the subject has been possible. Further researches would amplify the findings but would not, it is reasonable to believe, alter the main outlines of the picture. Out of a mass of infinite detail, sufficient evidence has been accumulated to illustrate what must necessarily be generalities, but generalities which are susceptible of confirmation.

Incalculable aid, both in the collection and evaluation of materials and in the review of conclusions reached, has been afforded by Miss Alida W. Herling, of the Documentary Research Division staff, The Air University Libraries, who spent considerable time augmenting the work on this subject undertaken at The Air University in checking the resources of the Hoover Library of War, Revolution and Peace at Stanford University. Thanks are also due Mr. Philip T. McLean, Librarian of the Hoover Library, and members of his staff who willingly assisted in making the facilities of that Library available to Miss Herling. Appreciation is also expressed to
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H. P. G.

Maxwell Air Force Base

December 1948
CHAPTER I
THE AIR WAR AGAINST CIVILIANS
1914 - 1918

At the outset of the war of 1914-1918, aerial bombardment was a factor of armed conflict to which very little attention had been directed. Military aviation, itself, was so new a development that discussion of its potentialities had been slight. About the only instance of the use of aerial bombardment in active hostilities had been in the Italo-Turkish War of 1911-1912, when the Italians attacked Tripolitan tribesmen from the air, and also used airplanes for reconnaissance and liaison purposes.\(^1\) Popular imagination, it is true, was active in its speculations concerning the phenomenon of man's conquest of the air. And writers — both in civilian and military circles — had given attention to the possibilities of employing aircraft in war. However, most of this writing had dealt with problems connected with the support of troops on land or with the movement of naval vessels at sea.

As early as 1899, "a Hague Declaration had prohibited combatants from launching projectiles or explosives from balloons or other kinds of aerial vessels."\(^2\) This was a year


before the first Zeppelin flight and four years ahead of the Wright brothers' achievement at Kitty Hawk. This Declaration came up for renewal at the Hague Conference of 1907 when it was subscribed to by only 27 of the 44 powers represented. Of all the nations taking part in World War I, only Great Britain, Belgium, the United States, and Portugal were signatories to the 1907 Declaration. "As, however, the Declaration contained a provision that the prohibition ceased to be binding when, in a war between the contracting Powers, one of the belligerents was joined by a non-contracting Power, it lapsed automatically in August 1914."4

The sole international rule touching on air warfare which applied prior to 1914 was Article 25 of the Land Warfare Convention, adopted as a result of the 1907 Hague meeting.

This stated simply that the bombardment of undefended places "by any means whatever" was forbidden, the quoted words being expressly inserted to cover attack from the air. The word "undefended" was not defined, and the latitude of interpretation of which the word admits made the Article nugatory so far as bombardment by aircraft was concerned.5

No definition of what were and what were not legal aircraft objectives came out of the Hague Conference. Great Britain began, as early as 1908, to examine the dangers to which the

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3See Royse, op. cit., pp 51-122, for a full discussion of the deliberations at the 1907 Conference.

4Jones, op. cit., Vol III, p 69.

5Ibid.
United Kingdom might be exposed from air attack in the event of war. An Admiralty Conference of 1910 put on record the recommendation that "early steps should be taken to provide naval magazines, cordite factories, dockyards, &c., with some form of defence against overhead attack." This recommendation was brought to the notice of the Army Council, since traditional British defence policy provided that "if enemy aircraft crossed the coast the responsibility for resisting them, whether by anti-aircraft gunfire or by aircraft, would automatically rest with the War Office." Meanwhile, the success of the Zeppelin as a lighter-than-air ship had made it obvious that, in case of war, Germany would be able to use these craft to threaten the naval defenses of the British Isles. "Nor was there much doubt that... they would attempt to do so." German military aviation, while concentrating

6 Ibid., p 70.
7 Ibid., p 71.
8 See J. R. Cuneo, The Air Weapon, 1914–1916, 1947, p 353, which says the British Admiralty recognized the menace and attempted as soon as the war began to protect the islands against Zeppelin attacks.
9 Jones, op. cit., Vol III, p 71. However, in speaking of the development of British aeronautics, Davy says: "There was at this time, doubtless, no thought of the aeroplane being employed for the bombing of civilian populations; indeed the experiments of 1912 and 1913 did not show sufficient promise to warrant any such policy, even if it had been in mind." Op. cit., p 83. However, he adds, "... it seems clear that the threat of bombardment from the air was beginning to be realized. Indeed the possibility that towns might easily be destroyed by dropping petrol bombs from aeroplanes... was referred to in 'The Times,' and a correspondent remarked that 'a number of distinguished men in this country' realized the horrible possibilities which the fact of air attack by dirigibles at night represented, and had started a movement 'the object of which was to secure international agreement against aerial warfare.'" Ibid., pp 89-90.
upon the airship, did not neglect the heavier-than-air variety and these aeroplanes, too, would serve as a threat against British isolation. Numerous other nations were in positions to use aircraft for war purposes, but evidence does not indicate to what extent French, Italian, Russian, Austrian, Turkish, Belgian, or Bulgarian military aviation was prepared for the war which came in the summer of 1914.10

During the first months of the war there were sporadic bombardments by air along the Western Front and by the Germans in Poland. Among the earliest incidents was that of a Zeppelin, the Hansa II, which dropped bombs on Antwerp just before the city fell to the Germans in late August 1914.11 Aeroplanes raided Paris eight times between 30 August and 12 October 1914, killing eleven persons and injuring fifty, while dropping twenty-one incendiaries and twenty-five explosive bombs.12 The first raid, an attack near the railway terminal, Gare de l'Est, "did not agitate the people as much as a message contained in a sand-weighted pouch to which a streamer was attached." The legend read: "The German army is at the gates of Paris. There is

10A good popular account of the aerial capacities of the various countries at the outbreak of the war is contained in E. Middleton, The Great War in the Air, 1920, Vol I.

11L. E. O. Charlton, War Over England, 1936, p 5. This bombardment seems to have had a great effect upon the English people, awakening them to the horrors of air bombardment. Ibid.

nothing for you to do but surrender." The retreat of the Allied armies and the penetration of the German plane to the heart of Paris had more effect upon the people than the casualties, one killed, four wounded. When the raids became more usual, their regularity "caught the jaded fancy of the citizens and they began to treat the raids as though they were spectacles staged for their pleasure, in spite of the efforts of the authorities to drive them indoors." Actually, the first German aerial attack of the war had taken place on 3 August 1914, when a Zeppelin dropped bombs on the frontier town of Luneville, France.

Two German bombs dropped on the main street during a raid on 14 September caused the population of Ghent to seethe with indignation at this attack on their allegedly undefended city. Similar feelings were aroused by an indiscriminate bombing of Amiens on October 16th. On the Eastern Front Zeppelins raided Warsaw five times in the first six months of the struggle, killing forty persons. Early in December the Zeppelins were

\[13\] Cuneo, op. cit., pp 366-367. He says: "These raids were of no military value to the Germans and accomplished nothing as far as the Germans were concerned except the opportunity they gave the journalists to impart a little glamour to the air service. They were so publicized that consciously or unconsciously people have grown to consider all air raids of World War I as being such naive affairs. This is an erroneous impression." P 368.

\[14\] Middleton, op. cit., Vol I, p 115.

\[15\] Ibid., p 47.
succeeded by aeroplanes and until the end of January, 1915, the city was "bombed incessantly."  

The regulations for lighting throughout the town were rigorously enforced by the authorities. By 11 P. M. the entire town was in absolute darkness, the only visible sign of life being the twinkle of the sparks from the trolleys of the trams. Warsaw, however, took these demonstrations of aeroplanes easily, and their flight over the city scarcely awakened more than a passing interest, hardly anyone taking shelter, even when an aeroplane was directly overhead.

For their part, the British aerial forces, mostly from the Royal Naval Air Service, made several small raids on military objectives in Germany. On 22 September 1914, one aeroplane got through to Düsseldorf and dropped bombs on an airship shed there with no effect. On 8 October another flier completely destroyed an airship shed and the craft inside at Düsseldorf, while a second aeroplane "was not so successful at Cologne owing to heavy mist, so he discharged his missiles on the main railway station." Later that autumn, on November 21st, three Avros flew 250 miles from Belfort, France, to Friedrichshafen, Germany, the main production and testing center for Zeppelins. The planes dropped bombs on the Zeppelin sheds and caused severe damage to one airship, while one of the British planes was shot down during the attack.

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16 Ibid., pp 92, 93, 112.
17 Ibid., pp 93-94.
The most discussed exploit of the British air arm in the first six months of the war was the raid on Cuxhaven, the German naval station, on Christmas Day 1914. The British seaplanes had hoped to find the Zeppelin sheds there, but they had been moved to Nordholz. This attack, coupled with the RNAS raids on Friedrichshafen and the Rhineland, convinced the Germans that their valuable Zeppelins were liable to be destroyed upon the ground before they could be sent against the British Isles.20

Throughout this period, Britain was relatively free from air attack, but not from worry. Regulations to reduce the night lighting of cities were imposed in the early autumn of 1914 after observation flights by British airmen had revealed that "in clear weather, nothing short of absolute darkness would prevent a pilot who knew London from finding his way to any locality."21 At first, because the Zeppelin menace was not believed imminent, "it was not considered worth while ... to render London traffic unsafe or to reduce lighting in any district to such an extent that business would be throttled."22 Indecision led to conflicting observances of the dimout procedures and on 1 October 1914 more stringent restrictions

21Ibid., p 83.
22Ibid., pp 83-84.
were ordered enforced.\textsuperscript{23}

In December 1914 the first aerial raids on England took place. Two bombs were dropped into the sea off Dover near the Admiralty pier on the 21st, and on the 24th two projectiles dropped by an aeroplane landed on the Kentish coast near Dover Castle. On Christmas Day, a third German plane reached the outskirts of London, but no bombs were released until the pilot was well clear of the metropolitan area. Then he let loose two missiles which fell harmlessly in the countryside.\textsuperscript{24}

As may be gathered from what has been said of aerial bombardment during the first autumn of the war, the bombings were mostly of military objectives and the results were negligible. Great Britain, France, and Germany, in general, were avoiding the issue of whether bombings of cities might be regarded as legitimate war-making efforts. If accusations were made, as they were in the case of the German bombings of Ghent, Antwerp, and Warsaw, that the cities were undefended, two answers could be given. First of all, the belligerent power could say that

\textsuperscript{23}\textit{Ibid.}, p 84. These regulations provided, among other things, that "from sunset to sunrise all powerful outside lights be extinguished; that street lamps be extinguished or shaded to break up conspicuous groups or rows of lights; that lighting on railway premises be reduced to the minimum; that lights inside shops and other premises be shaded; and that lights on omnibuses and tramcars be no more than sufficed for the collection of fares." \textit{Ibid.}

\textsuperscript{24}\textit{Ibid.}, p 89; Morris, \textit{op. cit.}, p 16; and Davy, \textit{op. cit.}, p 92.
the whole thing was a regrettable error; that because of poor visibility or mistaken identity, the pilot released bombs on an area he believed to be fortified.\textsuperscript{25} Or, the belligerent power could reply that railroads, terminals, shipping, or munitions plants were legitimate targets and that it was unfortunate that the falling bombs had missed the edges of the target and had caused death and destruction in civilian neighborhoods. No nation was anxious to take the responsibility for being the first to declare unrestricted air warfare upon its opponents.

A cursory check of the map showing the 1914 bombings of Paris, for example, reveals that many of the missiles fell on residential areas of the city. But there is no way of telling whether or not the planes may have tried to avoid hitting non-military objectives. Aim was poor on most occasions, with bombs hitting near railway lines, government buildings, freight terminals, and Père Lachaise cemetery, Notre Dame, and the middle of the Seine with equal indiscrimination.\textsuperscript{26} In the

\textsuperscript{25}"During the Great War each side accused the other of 'indiscriminate' bombing, while being equally certain of the care and discrimination exercised by its own airmen. In point of fact there appears to have been little if any intentionally indiscriminate bombing practised by either side, but the difficult conditions in which air raids were frequently carried out . . . produced a seeming lack of discrimination which inflicted considerable casualties amongst the civil population." H. M. Hyde and G. R. F. Nuttall, \textit{Air Defence and the Civil Population}, 1937, pp 38-39. Italics in original.

\textsuperscript{26}See the map facing p 54 in "Red Book" of the British Fire Prevention Committee, No. 240, \textit{Air Raid Damage in London}, 1923.
early days of aerial bombardment it was commonly regarded as a miracle if the bombs fell within the general neighborhood of their target, and another miracle if they exploded as intended.

The Germans became particularly incensed over a French raid on the city of Freiburg which occurred on 4 December 1914. This attack upon what the Germans called an "entirely defenseless city" was regarded by them as the first attempt of a "power to carry the horrors of aerial warfare to a thoroughly peaceful locality." These first attacks obviously could affect little but German morale," Cuneo says.

It was a case of the pot and the kettle, since, although the Germans admitted that the British had refrained from bombing civilian populations up to the end of 1914, the Germans regarded themselves as blameless, while the French pointed to German attacks on Paris, Amiens, Belgian, and Polish cities, and other non-military targets in defense of their actions.


28Cuneo, op. cit., p 371.

29von Hoeppner accused the British of attacking military objectives far removed from the battlefields, but admitted that they still "adhered to the principle of sparing the civilian population." Germany, he said, imposed on itself a limitation of attacking only objectives of a military nature "within the theatre of operations, or the area within which the armies were fighting." Op. cit., p 16.
Leaving aside the question of original sin and the web-spinning of international lawyers, it is sufficient to say that the ineffective raids of Christmas Day 1914 — British on Cuxhaven, German on London — marked the end of the fencing for position in this matter of air warfare. After the holiday season, the combatants were in earnest in their attempts to demoralize their enemies by the use of the air arm.

This is revealed by the action of the German naval staff after the Cuxhaven raid. Fearing that their Zeppelins would be destroyed by British fliers before they could be brought into the conflict, the German naval high command petitioned the Emperor for permission to begin airship raids on Great Britain. On 9 January 1915, the Kaiser granted the request of the naval chief of staff, but "stipulated that the raids were to be expressly restricted to shipyards, arsenals, docks, and military establishments generally, and that London itself was not to be attacked." 30

It is not the purpose here to detail the attacks on Britain by German airships and aeroplanes which followed this change of campaign. In all, approximately 200 enemy airships and 430 German aeroplanes appeared in the skies over Great Britain during the war years. The airships dropped 5,806 bombs, weighing 440,000 pounds, in 51 raids. These bombs killed 557, injured

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1,358, and caused an estimated £1,527,585 damage to property. The heavier-than-air craft dropped 2,772 bombs, weighing 164,321 pounds, in 52 raids. Persons killed by aeroplane bombing totaled 857, and 2,058 were injured. Property damage was estimated at £1,434,526. An overall tabulation therefore gives the following results:

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Raids</th>
<th>Bombs</th>
<th>Weight</th>
<th>Killed</th>
<th>Injured</th>
<th>Property Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>630</td>
<td>103</td>
<td>8,578</td>
<td>604,821£</td>
<td>1,414</td>
<td>3,416</td>
<td>£2,962,111</td>
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Thus it becomes apparent that 4,830 casualties, most of them among civilians, and property damage of approximately $14,000,000 provided for Britons a foretaste of what was to come in 1940-1945. It is appropriate, therefore, to try to discover what effect this aerial bombardment had upon the morale of the Britishers in 1914-1918.

One writer, Air Commodore Charlton, gives a very good picture of the British public and its reactions to the air raids of 1914-1918. His portrayal evokes in the minds of those who were in England during the "blitz" of the 1940s a feeling of kinship with the older Britons who went through the Zeppelin scares and the aeroplane attacks of a generation earlier.

With the imposition of dimout regulations for London in September 1914, according to Charlton, "There was glumness and

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31 Jones, op. cit., Vol V, Appendix I.
uneasiness and sheaves of rumour began to fly." He continues:

Street lights were reduced in number and shaded. Shop window illumination was greatly diminished and the interiors of public transport vehicles, trams and buses, darkened to the point of semi- obscurity. Blinds had carefully to be drawn before house lights were put on in private dwellings.

For the better part of two whole years, until the airship ceased to raid, the whole country lived and suffered under a Zeppelin psychosis. "Not a Zeppy night to-night, thank God," would one say to another, scanning the sky, as they parted for their homes at the end of the day's work.33

Through it all were "the tension, the overworked nerves, the horror, the pathos, the heroisms, and the compelling changes in the lives of the people which the air raids brought about."34

When the aeroplane replaced the Zeppelin as the chief raiding instrument, the moon which had been regarded by the British as an ally became an aid to the enemy. The Zeppelins had avoided moonlit nights, but the Gothas and the Giants, the two principal types of German bombers, could do their best work when the country below was bathed in brightness. So, "the periods of the Hunter's Moon and the September Harvest Moon . . . were especial nights of terror to the teeming masses of the Metropolis."35

33Ibid., pp 7-8.
34Ibid., p 8.
Defence precautions were taken in behalf of London as well as for more immediate military objectives and for other urban areas in the United Kingdom. In time the populace became used to the warnings and took cover with alacrity, but in the beginning curiosity impelled many to remain in areas of danger, craning their heads towards the skies and often hampering the work of anti-aircraft attack or the rescue of bombing victims. When the public learned by experience that air raids were a serious business, there was "a sauve qui peut scramble for shelter. . . . The fizzing, high-pitched whine of the bomb arriving from above at incredible speed, though with a sensible approach, seemed to be personally directed at each one who heard it, and the curious, cushioned sound of the resulting explosion, evil as it was, occasioned a sense of relief that the missile had found its mark elsewhere."

One man's memory of the events of 1914-1918 is not a collective recollection nor an official reconstruction of the scenes of the times. Yet Charlton epitomizes the feelings of the people of Britain, and especially of those of the citizens of London, when he says, "It is not by simple calculation and comparison that the real lesson of those days can be taken to heart. Beside the dead and injured must be put far and wide

36 See ibid., p 10, also Jones, op. cit., Vol. III, passim, and A. Rawlinson, The Defence of London, 1915-1918, 1924, for full discussions of these measures.

37 Charlton, op. cit., p 12.
terrorization of the populace. . . . The ill health of vast numbers must be counted in, and the misery caused. The constant obsession of minds with a dead weight of fear to the exclusion of everything else must be reckoned."

Narratives of the air war often tell in detail what happened during each attack on the British Isles. Frequently these accounts include remarks upon the behavior of the civilian population as well as on the counter measures demanded by the people of their government. A listing of some of these factors may show how incalculable a part of the war scene was civilian morale as it resisted or gave way to the air attacks. The examples are given chronologically because in that way the changing tides of popular reaction may be indicated. Since there were more than one hundred raids during the war, and the records do not always mention civilian behavior, only those occasions upon which comment was available are contained in the descriptions which follow.

38 Ibid., pp 21-22. "The drone of the airplane, the rattle of anti-aircraft guns, the crash of bombs, were heard by hundreds of thousands of nerve-racked people, people who had been on their guard night after night, people running for refuge into underground stations or cellars, sleeping with their clothes on, trying to protect themselves from something which came from the sky, crashing down on their heads, a mass of defenseless people without even the psychological satisfaction of being able to strike back, to fire something into the air, a mass untrained and undisciplined for defense, men and women crying out for protection not for themselves so much as for their children, their aged, and their sick and invalid relations." W. O'D. Pierce, Air War, 1939, pp 102-103.
19-20 January 1915

"The British public were less alarmed than indignant. They were not content with the passive measures of more and more darkening. They urged that active means must be devised for bringing the raiders to action."\textsuperscript{39}

10 May 1915

A Zeppelin dropped bombs "together with a piece of cardboard on which was scribbled in blue pencil: 'You English. We have come and will come again soon. Kill or cure. German.'" The civilians took this to be a warning of further attacks and asked that defence measures be increased.\textsuperscript{40}

31 May 1915

"In one short night . . . the Londoners\textsuperscript{7} found that the confidence, which up to that moment they had reposed in the absolute security of their homes and property, had been sadly misplaced and was in no way justified by their actual position. The dropping of these extremely ineffective bombs, however, did infinitely more good than harm to the country at large and vastly increased our chances of emerging victorious from the great struggle in which we had engaged."\textsuperscript{41}

6 June 1915

"Following the attack, rioting broke out in Hull, and many German, or supposed German, shops were sacked before order was restored.

\textsuperscript{39}Morris, \textit{op. cit.}, p 19.

\textsuperscript{40}Jones, \textit{op. cit.}, Vol III, p 103.

\textsuperscript{41}Rawlinson, \textit{op. cit.}, p 4. "The enemy no doubt believed that the advent of Zeppelin airships over London at night would create a panic amongst the inhabitants, very similar in effect to that which would have been produced by a similar event in Berlin. . . . The result actually produced was a most effectual 'waking up' of the population of London. . . . There was, of course, no sign whatever of any kind of panic, but there undoubtedly was a certain feeling of dismay. This was immediately followed by a deep and universal anger that such attacks should be made upon our defenceless women and children." \textit{Ibid.}, pp 4-5. The italics are Rawlinson's.
restored by troops.\(^\text{42}\)

**15 June 1915**

"It was not to be expected that the defencelessness of the industrial towns of the north and east of England, forcibly demonstrated by the Tyne raid, was to be allowed to continue without considerable public protest, and the attention of the Government was directed from many sources to what was described as an impossible state of affairs."\(^\text{43}\)

**8 September 1915**

"Traffic is at a stand-still. A million quiet cries make a subdued roar. Seven million people of the biggest city in the world stand gazing into the sky from the darkened streets. . . . "For God's sake, don't do that!" says one man to another who has just struck a match to light a cigarette. "Whispers, low voices, run all through the streets. . . . Suddenly you realize that the biggest city in the world has become the night battlefield on which seven million harmless men, women, and children live."\(^\text{44}\)

**13-14 October 1915**

The area was "the scene of the utmost confusion. . . . Farther down the street police were forcing back the crowds . . . and way was made with difficulty for little groups of men carrying the killed and wounded on stretchers hastily converted from notice boards torn down from the walls of the Lyceum Theatre. It was probably this latter fact which gave rise to the sensational rumours which flew around London that night and are still

\(^{42}\)Jones, op. cit., Vol III, p 103. See also Cuneo, op. cit., pp 354-355, and 361. Charlton, op. cit., p 130, erroneously gives the date of these occurrences as January 1915.

\(^{43}\)Jones, op. cit., Vol III, p 105. Charlton says, "Tyneside had been taken completely by surprise. . . . For many months afterwards the rumour of airships anywhere on the East Coast sent masses of people from their homes to spend the night in the open country." Op. cit., pp 127-128.

\(^{44}\)Morison, op. cit., pp 77-78, quoting a contemporary account by an American journalist, W. E. Shepherd. See also E. Perez, *La Mantanza de los Inocentes*, 1916, pp 19-21.
believed in some quarters to-day, that an appalling tragedy ha: occurred inside the Lyceum itself."45

10 February 1916

Scarborough

"... a report that a Zeppelin had been seen off Scarborough during the afternoon was widely disseminated with the result that railway lights were put out at places so variously distant as Nottingham, Bath, Gloucester, and Worcester, while traffic was held up on the Hull and Barnsley railway and on the North Eastern Coast Lines, and work came to a standstill in two Government factories at Gloucester. These Zeppelins existed only in the public imagination, which was stimulated by a complete lack of faith in the official warning arrangements."46

5-6 March 1916

Hull

"Great feeling was aroused in Hull by the attack. That Zeppelins should be allowed to hover near the town for an hour without any attempt to attack them from land or from the air led to many forceful protests... a Royal Flying Corps officer was mobbed in Beverly" as a measure of public resentment.47

"... in this second agony of the town... the senselessness which fear begets again occurred. A trade-testing lorry belonging to the Royal Flying Corps was damaged and the personnel mobbed as an outlet to the people's sense of outrage."48

19 March 1916

Kent

"... a warning order led to a complete stoppage of traffic throughout the South-Eastern Railway System, on all other lines in and out of London, and on many lines on the East Coast. After every such stoppage it took a long time to return to normal working conditions."49

45 Morison, op. cit., p 93. The italics are his. See also Charlton, op. cit., pp 128-130, and Rawlinson, op. cit., p 23, for additional details of this same raid.

46 Jones, op. cit., Vol III, p 146.

47 Ibid., p 188.

48 Charlton, op. cit., p 131.

49 Jones, op. cit., Vol III, p 244.
23-24 September 1916  London

"For many nights following the attack . . . many thousands of people flocked to the tube railways without waiting for any warning."50

23-24 September 1916  Nottingham

". . . the city authorities blamed the railroads for not extinguishing lights. Thereupon 25 towns presented a petition that all rail traffic be stopped when a raid was impending. This was denied because it would temporarily paralyze much of the country's business. When the speaker for the deputations accepted the decisions he stated that 'he feared that the people would not look at the matter in the same light and that there might be trouble.'"51

25-26 September 1916  Sheffield

"A man got six months . . . for refusing to put out his house light at the bidding of a special constable."52

28 November 1916  London

"The visitor [a Zeppelin] was never even seen . . . and that is what made the people feel unsafe."53

Late 1916  London

"The feeling at the end of 1916 that serious air attacks had, perhaps, ended led to suggestions from many quarters that the lights should be turned up a little at night. So far as London was concerned the military authorities shared the wish for better street lighting because it would assist military traffic. . . . After much discussion the lights of London were made a little brighter, but not for long."54

50 Ibid., p 247. See also Davy, op. cit., p 97.
51 Cuneo, op. cit., p 361.
52 Charlton, op. cit., p 134.
53 Ibid., p 135.
54 Jones, op. cit., Vol V, p 2.
Early 1917

"The nocturnal gloom of London was bad enough, but it was even more profound in some provincial cities, and the cry for more light went up from many places in the Midlands and in the north. Representations were made from Lancashire that it was inconvenient and even dangerous for the workers, most of them girls, to be compelled to go to and from their work through unlighted streets."\(^{55}\)

May 1917

"... after a raid, the people attacked the local aerodrome, stoned the mechanics, and attempted to destroy the hangars, because of a lack of defense."\(^{56}\)

25 May 1917

"This daylight attack revealed the utter inadequacy of the existing aeroplane defence measures. Deep feeling was aroused throughout the country, and protest meetings were held in Folkestone calling upon the Government to take steps to prevent a repetition of the attack."\(^{57}\)

13 June 1917

"The sight of a formidable formation of enemy aeroplanes over London, swelled in imagination owing to the confusion between friend and foe, aroused the population to a passion of protest. They forcibly represented that such a thing should have been made impossible."\(^{58}\)

"The magnitude of this disaster was undoubtedly increased by the inexplicable failure of the City Police to warn the Liverpool Street station authorities that a raid was pending. This fact, which caused much adverse comment at the time, was conclusively proved by official witnesses at the inquest."\(^{59}\)

\(^{55}\)Ibid.

\(^{56}\)Pierce, op. cit., p 104.

\(^{57}\)Jones, op. cit., Vol V, p 22. See also Davy, op. cit., p 98.

\(^{58}\)Morris, op. cit., pp 223-224.

\(^{59}\)Morison, op. cit., p 123.
A school was struck in the course of this raid with resultant death to 16 children. "There was no crying aloud for vengeance, or loud demands for peace at any price to stop the horror. What had happened was accepted in the account with grief and mourning in the reckoning."^60

"It is not surprising that the facts of this raid aroused feelings of indignation which stirred the whole country, particularly when it became known that all the raiding aeroplanes had returned safely... As an act of terrorism it served a purpose and it was, on that account, an event of some significance in the history of air power."^61

7 July 1917

"... the most spectacular of all German assaults upon the capital... raised the public indignation to a pitch of fury. ... The raid was the subject of some exceptionally plain speaking in the House of Commons... when complaint was also made of the large number of casualties caused by our anti-aircraft shells."^62

Summer-Autumn 1917

"Many people made their way into the western suburbs of London where they passed the night, and this practice... caused

^60Charlton, op. cit., p 139.


^62Morison, op. cit., pp 127-129. See these pages for more complete accounts of the protests by the press of London on this occasion. See also J. M. Spaight, Air Power and War Rights, 1924, p 9, which quotes the London Daily Mail, 9 July 1917, as saying "... there has not been a more discreditable event in our military history than Saturday's raid. There is not a single redeeming fact. The story is altogether humiliating." Later that month the London Star, 23 July 1917, complained "that some defence squadrons had been withdrawn from London to carry out exhibition flying before the King in France, and that aircraft which should also have been defending the city were employed as an air escort for Princess Mary when she went to visit (of all places) Southend." Ibid. Jones, op. cit., Vol V, p 38, has the reports of a Cabinet meeting called at this time to deal with the problem of stopping the raids. See also Davy, op. cit., pp 101-103.
embarrassment in the districts which were visited."\(^{63}\)

3-4 September 1917

"... these two raids ... caused an immense agitation, and new methods of defence were loudly demanded. The Press was particularly plain speaking. ... It derided the official view that raids could not be prevented, demanding an Air Defence Commander who could defend."\(^{64}\)

24 September - 1 October 1917

"... a concourse of people, estimated at about 100,000, had rushed to take shelter in the underground railways. On each subsequent night, whether raids were made or not, the numbers grew to a maximum estimated total of 300,000. People took up their places as soon as darkness set in, or even before, prepared to camp out until all possibility of danger had passed. They blocked the stairs and the platforms, and the majority of them, it was said, did not prove amenable to the efforts of the railway officials to distribute them to the best advantage. The suggestion was made at the Cabinet meeting \(^{65}\) on 1 October that the feeling of panic was fostered by publication in the newspapers of illustrated articles depicting air-raid damage, and it was arranged that the Prime Minister should see the editors of the leading newspapers and ask them to cease to publish descriptive accounts and pictures of air-raid destruction."

"The oft-repeated alarms, the long hours of waiting in cellars and public shelters, the sound of circling aircraft, punctuated at intervals by the dreaded detonations, above all the joyful release of pent-up feelings when the 'All-Clear' signals were finally sent out, all these gave to those fateful nights a terror and fascination unmatched in any other period."\(^{66}\)

\(^{63}\) Jones, \textit{op. cit.}, Vol V, p 136. As the western suburbs of London were the more wealthy and exclusive residential areas there is possibly something of social snobbishness in this remark.

\(^{64}\) Charlton, \textit{op. cit.}, pp 89-90.

\(^{65}\) Jones, \textit{op. cit.}, Vol V, pp 89-90.

\(^{66}\) Morison, \textit{op. cit.}, p 139.
"The effect . . . up to date was a grievous loss of munition output from Woolwich and other factories in the affected areas, and a growing tendency on the part of large sections of the public to give way to panic en masse."\(^{67}\)

1 October 1917  
London

"The War Cabinet proceeded to discuss the possibility of making air raids into Germany. The Press, it was stated, had for some time been fostering a strong agitation for reprisals, and it seemed that the feeling of the public favored immediate counter-attacks. Furthermore, although the damage to life and property as a result of the moonlight raids was small, the military consequences were not inconsiderable. . . . It was stated at the War Cabinet meeting that, owing mainly to the attitude adopted by the Press, a feeling of insecurity had been engendered in the capital, and that if counter-attacks could be successfully organized there was good reason to suppose that the morale of munition workers in Germany might be equally affected."\(^{68}\)

19 October 1917  
London

"Had the responsible authorities been taken unawares . . . ? Speculation was rife and much indignation was expressed concerning the apparent inertia of those entrusted with the defence of the capital."\(^{69}\)

23 October 1917  
London

An Order in Council "empowered the authorities to instruct owners to erect hoardings in front of damaged property. This was done on the advice of the Commissioner of Police in order that damaged buildings might not remain open to the gaze of passers-by or sight-seers who would be reminded of the dangers of air attack."\(^{70}\)

31 October and 6 December 1917  
London

"The German crews were disappointed with the visible results of

\[^{67}\text{Charlton, op. cit., p 91.}\]

\[^{68}\text{Jones, op. cit., Vol V, pp 86-87.}\]

\[^{69}\text{Morison, op. cit., p 144. See also E. B. Ashmore, Air Defence, 1929, pp 67-68.}\]

\[^{70}\text{Jones, op. cit., Vol V, p 137.}\]
the incendiary bombs. . . 'large numbers of these bombs were dropped, both times with no success. The sound idea of creating panic and disorder by numbers of fires came to nothing owing to the inadequacy of the material employed.'"\textsuperscript{71}

18 December 1917

"The attack . . . had developed so swiftly that the Commissioner of Police had had insufficient time to send out the constables of the metropolis with their Take Cover placards. . . . the Commissioner, after consultation with the Home Secretary, had decided that the maroons must be fired as it was impossible to warn the general public effectively in any other way. Once night signals had been employed, the retention of the arrangement, so strong was public opinion on the matter, became inevitable. Even so, the Government did not go all the way to meet public demand."\textsuperscript{72}

11 January 1918

The War Cabinet met to consider resolutions adopted by a mass meeting "organized by the trade union movement" among the people of Sheerness. These resolutions included "a protest 'against the continued refusal of the military authorities to provide suitable bomb-proof shelter and a greater measure of protection against enemy action'. . . [(and)] also stated 'that any further delay in dealing with these matters would be an outrage upon the inhabitants and may prove disastrous.'\textsuperscript{73}

28-29 January 1918

". . . London's nerve was shaken by a tragedy. . . . By the irony of circumstances this took place in a building which had been officially approved as an air-raid shelter. The night began in the most disastrous fashion with a stampede . . . in which fourteen people quite needlessly lost their lives. It was a case of sheer and undisciplined panic."\textsuperscript{74}

\textsuperscript{71} Ibid., pp 104-105.

\textsuperscript{72} Ibid., p 107.

\textsuperscript{73} Ibid., pp 109-110.

\textsuperscript{74} Morison, op. cit., pp 155-156. The particulars of this raid, with its attendant panic are graphically set forth in ibid., pp 156-160, and in Charlton, op. cit., pp 145-147. Blame for the panic was placed upon "the behaviour of young
On the occasion of the last German raid of the war on London "the stout-hearted London public altogether forgot their losses, now that the defence could show results in enemy machines destroyed."^75

These specific examples, of course, are augmented by many general observations relating to the effects of bombing raids upon the civilian population of Great Britain. As before, the accounts of Charlton are the best written, if not the most detailed. In analyzing the German objectives, he writes:

Obviously he hoped to inflict great loss and damage, and cripple as far as possible our own efforts by bombing targets of essential military importance. Obviously also, when indiscriminate bombing began so soon after the commencement, making civilians, men, women, and children, the chief sufferers, he was attempting to break our will to war.

If the seat of government of a nation remains functionable and intact the will to war is not easily broken. In this instance, although people became dispirited under the continuous strain of the raids, and war-weary to an unrealized degree, there was never a thought or word spoken of bringing pressure to bear to end the War.

Russians . . and the coroner found occasion to remark that their ways approached the ways of lower animals." Charlton, op. cit., p 146. "Any individual who was panic-stricken or lost his morale was the exception, but where he did, it was largely due to the bad influence of alien or semi-alien population, who, with but few exceptions, behaved in a manner that was both despicable and dangerous." This generalization comes from the British Fire Prevention Committee's "Red Book", op. cit., p 8.

^75Ashmore, op. cit., p 89.
To the individual who suffered, or witnessed suffering, or who experienced its effects, each occasion of a bomb explosion was a colossal calamity, embracing his whole world and absorbing his whole ego. But in the aggregate the visible result was mild and seldom of national importance.\textsuperscript{76}

Commander Rawlinson, who was in charge of the first mobile anti-aircraft guns in London, makes an interesting comment on the attitude of the people of the poorer districts of the city toward efforts to defend them against attacks. He says:

On the approach of the guns, on their way to their stations, the whole population of this district invariably "turned out" and gave us a reception which was always most gratifying. It is difficult to describe the feeling shown, nor by what means its absolutely spontaneous and genuine character was brought home to us. It was, however, impossible to mistake the sentiments of the people, and I have often seen poor women with streaming eyes, holding up their children to see the guns as they passed, making it easy for us to realize the relief which it must have been to these poor defenceless people to see that at any rate some sort of defence was being provided for them, and that the wholesale murder and destruction of which they had seen so many instances could now no longer be carried out by the enemy without risk of punishment.\textsuperscript{77}

General Ashmore remarks that "among the great bulk of the London public the moral effect of the raiding was never excessive; it tended to die away altogether when the defence could show any sort of results. The raids, even at their worst, entirely failed to produce the despondency expected by the

\textsuperscript{76}Charlton, \textit{op. cit.}, pp 99-100.

German High Command. Instead, there was aroused a feeling of intense rage, with demands for reprisal.\textsuperscript{78} However, Cuneo observes, "It is loosely stated in many sources that the raids actually raised the British morale. This is sheer nonsense. . . . It was generally accepted by plant managers that on the morrow of a raid not more than ten percent of the outside workers would be in their places at their usual time and that twenty percent would be absent all day. For some interval after a raid or an alarm it was difficult or even impossible to induce workers to agree to overtime."\textsuperscript{79}

One of the most authoritative writers on air power, examining the results of aerial bombardment on England during the war, has this to say:

\begin{quote}
No doubt, on the whole, London took the air raids with dignity and composure, but no one who is acquainted with the facts can admit that the people who left London to crowd into Maidenhead, Manchester, Brighton and other safer towns, were exclusively "Jews and aliens." When Lord Curzon replied to the attacks upon the Government with a sneer (it was alleged) at the people of London "cowering in cellars," there was some indication that Government and people were a little "rattled." . . . The idea that the German raids had none but a stiffening effect — they certainly had that, too — upon the moral of the people, is one that is not altogether correct. . . . "As to the purely moral effect . . . which filled the Tubes and raised the rents in Maidenhead and Brighton . . . our attitude recalls the remarks of Mr. Jorrocks, who, when he was asked after a fall if he was hurt,
\end{quote}

\textsuperscript{78} Cuneo, \textit{op. cit.}, p 361.

\textsuperscript{79} Cuneo, \textit{op. cit.}, p 106.
replied, 'Not at all, not at all — rather the contrary.'

The most considered summations are made by the official historian of the RAF, H. A. Jones. He concludes his long appraisal of the effects of the raids with the following observations.

Those in Germany . . . who expected that air attacks on cities would cow the population of England were disappointed. The raids were neither powerful nor sustained enough to test such a possibility. Their effect, in fact, was far otherwise. They led for the most part to a stiffening of the national temper. They were often used by the Government to stimulate recruiting and the national effort generally, but there were times also when the drive came from the opposite direction, when the attacks acted on public opinion until the Government were compelled to vitalize their air policy.

Also of great military importance was the effect on the output of munitions and of factories generally. This was never confined to the places over which the German airships and aeroplanes flew, nor within the limits of time during which they were over this country . . .

Official figures for some raids show that when an attack was in progress, seventy-five per cent. of munition workers, in areas warned of the attack, ceased work, and that the output continued to be restricted for about twenty-four hours after the raid had ended.

Of the continental countries, as has been mentioned, Poland, Italy, Belgium, France, and Germany experienced bombings of civilian populations. After the first months of the


conflict, the Polish cities were left pretty much alone, with only occasional missions dropping but a few bombs.\textsuperscript{82} In Belgium, perhaps because it was first an active theater of war and later an occupied area, no particular notice seems to have been taken of the number or nature of aerial bombing raids.\textsuperscript{83} That they occurred is probable, but, save for actual military objectives or troops in battle, the targets of the warring powers lay beyond the Belgian frontiers. The Germans saved their bombs to drop on England, the British and the French carried theirs across the Rhine to the German cities.

Venice was the scene of 34 raids between 24 May 1915 and 23 October 1918, mostly by Austrian aeroplanes. The two worst raids occurred on 9-10 August 1916 and 27-28 February 1918. The first was an incendiary raid and the second a continuous

\textsuperscript{82} Middleton says that in the winter of 1914-15 Zeppelins raided Lodz, Lowitsch, and Skiernewice with serious casualties among civilians. At the latter city "the Germans gave further evidence of their policy of kultur by annihilating the entire population, some 200 souls, with bombs from the air." \textit{Op. cit.}, Vol I, p 94. This seems to be an exaggeration, as nowhere in other available sources is there mention of such casualties early in the war. "Polish cities, such as Warsaw and Lodz, suffered very little, due to the fact that they were occupied very early by the Germans." Royse, \textit{op. cit.}, p 183. This author does not mention Skiernewice. He lists Riga and Reval as the only considerable cities other than Warsaw, Lodz, and Sochaczew which were attacked behind the Eastern Front, and observes that Riga had but one visitation, from a dirigible, while Reval remained unscathed. \textit{Ibid.}, pp 182-183.

\textsuperscript{83} The German raid on Antwerp, mentioned on p 4, above, followed one on Namur which took place in early August 1914. At Antwerp, "Bombs fell in the heart of the city, apparently dropped without careful aim at any military objective." Royse, \textit{op. cit.}, p 175.
eight-hour attack with high explosive bombs. In all, 34 civilians were killed and 49 wounded in Venice. An Italian account relates that:

Innocent homes, monumental public buildings, ancient palaces, and venerable churches were made targets of unreasoned hatred, and priceless treasures of art were thereby lost forever.

They hoped in vain to break the indomitable spirit of the populace, already so sorely tried by the anguish of helplessness when, on the near-by firing line on the Piave the fate of the Queen of the Lagoons trembled in the balance as day and night the battle against the invaders ebbed and flowed.  

These raids caused an almost nightly evacuation of Venice, especially when there was moonlight. The people made a pilgrimage to the country, "carrying with them the bedding which they required in the tiny villages and scattered farm-houses where the nights were spent. In the morning they 'trekked' back to the towns [of the province of Venetia] for their daily labours."  

Other Italian cities bombed included Verona, Milan, Brescia, Rimini, Bari, Ravenna, and Padua. Treviso, for example, underwent 32 attacks by Austro-Hungarian planes between April 1916 and October 1918, with severe material damage, but only limited

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casualties. The number of casualties was small, but the disruption of daily life was considerable, and the destruction of such non-military objectives as churches and historic monuments brought protests to the Austrian attackers from the Pope. It is probable that, light as these air raids were in comparison to those on Britain, the Italian people reacted in somewhat the same fashion as the supposedly more phlegmatic Anglo-Saxons.

In France, the town of Dunkerque earned the name "City of Dreadful Night" as a result of 25 raids between January and June 1915, and it continued to suffer from attacks throughout the war. Other French cities near the battle lines received their share of attention from the Germans. By 1915 most of the northern French cities were being subjected to systematic raids. Nancy was repeatedly hit. Belfort, Besançon, Toul, and Verdun received many attacks from the air. Calais, reportedly, had 220 bombings which killed 185 civilians and wounded 364. The amount of destruction of military supplies and munitions "was hardly worth the cost of the bombs dropped,"

87 Royse, op. cit., p 182.
88 The Germans operated from Ostend and raided Dunkerque, Nieuport, Furnes and La Paune in late 1914 and early 1915. On 28-29 Jan 1915 they "made a squadron raid with 14 airplanes on Dunkerque, the first night attack of such proportions in the war." Cuneo, op. cit., p 353.
89 E. Badel, Les bombardements de Nancy, 1919, says that between 4 Sep 1914 and 31 Oct 1918, Nancy was bombed more than 100 times by airplanes, Zeppelins, and artillery. P 1.
but the raids "were chiefly psychological in their effect, aimed at the morale of the townspeople."90 The industrial city of Lille was subjected to a number of aerial bombardments. By late August 1918 air raids had been responsible for the deaths of 85 civilians and the wounding of 211. The city's population was uneasy under the attacks, but there is no indication that the people became panicky at any time.91 But the attacks on Paris received much more publicity. The capital, like London, was a prime objective for the German airships and aeroplanes, although the air campaign against Paris was never so intensive as it became in the case of London.

Paris was subjected to three raids by lighter-than-air craft, on 21 March 1915, 29 and 30 January 1916. Twenty-five people were killed and forty wounded during these bombings. Aeroplanes raided the city 26 times between 30 August 1914 and 15-16 September 1918, killing 242 persons and injuring 562.92 The total casualties of 267 killed and 602 wounded were, therefore, well below those counted in Britain during the raids. If a comparison is made between Paris and the County of London, which was subjected to 25 raids with 594 killed and 1,708

90 Royse, op. cit., pp 176-177.
91 Cliquennois-Pâque, Lille Martyre, 1919, p 399.
92 Morison, op. cit., pp 174-175. Jones, op. cit., Vol V, p 157, says there were two raids by airships and 44 by aeroplanes, with 278 killed and 636 injured.
injured, the severity of the raids on Paris is still less than those on London.93

The impact of the air war upon the people of Paris must have been much the same as it was upon the Londoners. In writing of the first reactions of the Parisians to the bombardment of the city by the "Big Bertha" on 9 March 1918, one author says:

Fortunately, there were no signs of panic . . . no hysterical behaviour. Either as his native characteristic or as a war acquisition, the average Frenchman looked annoyed or worried under such circumstances; the peculiar pucker of his face on this occasion may have indicated fear, but no panic. . . . The war had developed in the people of France a peculiar resignation to the unusual, an acceptance of the inevitableness of tragedy. . . . Each new tragedy, reverse, loss, seemed only to add to that concentrated cold fury that boded none the less ill to the enemy because it was usually hidden under a serene interior. So the millions of Parisians sought shelter promptly, with obvious signs of great concern, some fear, but with no signs of panic.94

Since the people of Paris did not know until later that day that they had been shelled by a fixed gun rather than bombed by aeroplanes, it is reasonable to assume that this represents the sort of behavior they displayed during air raids on the city.95 The Parisian suburbs and the surrounding villages were

93 These figures are from Jones, op. cit., Vol V, Appendix II. See p 12, above, for the total figures on British casualties and raids.


95 It is interesting to note that more people were killed in Paris during the 44-days' bombardment by German big guns
often raided by German planes. Paul Mowrer describes attacks upon Chantilly in early March 1918, on Chalons-sur-Marne later that month, and on Senlis in May, but he gives only his own reactions which were somewhat mixed with his fears for his wife and children living further from Paris.96

There is some indication that the French press suggested that France and Germany come to some agreement concerning the bombing raids and that members of the Chamber of Deputies furthered the suggestions.97 Von Hoeppner represents that Socialist members of the Chamber "advanced the proposition of starting parleys with Germany in order to obtain a limitation of aerial attacks,"98 but Ashmore asserts "that the French Government never made any move towards such an arrangement."99

As in Britain, popular dissatisfaction with the inadequate defenses against air attack resulted in demonstrations directed at the air forces. In one instance:

The French pilots who were stationed at Buc, Villacoublay, and Saint-Cyr, for the defence of Paris, were bitterly reproached for failing to ward off the raiders. Indeed the powerlessness of the French aircraft to defend Paris

than by the air raids of the previous three and a half years. Morison, op. cit., p 179. The casualties from the big guns were 256 killed, and 625 wounded. Ibid., p 180.

96Mowrer, op. cit., pp 311-320.
97Von Hoeppner, op. cit., p 104.
98Ibid.
brought a lasting unpopularity upon the French aviation. The pilots were openly accused of spending their time in the Paris restaurants when they should have been in the air defending the city.100

Whatever the reactions of the French people, it is clear that the raids on Paris reveal "a close and often startling likeness" to those on Britain. "They are characterised by the same grotesque combination of irrelevance and horror."101 So, it may be judged, were the reactions of the French people to aerial bombardment.

Not until late in the war did the German civilians feel the greatest force of attack from the air. There had been sporadic sorties by British and French planes in the early months, as indicated in the remarks on the raids of 1914. That the French attack on Freiburg in December 1914 had been particularly resented by the Germans has already been mentioned. Following this raid,

From all quarters and especially from the war industries there came an insistent call for air defense and it was urged that due warning of an attack should be provided. It was asked in high places how the requirements of the field armies could be met if the factories and their machinery were destroyed and the workmen endangered.102

The year 1915 saw some forty raids on German cities with


101Morison, op. cit., p 178. A popular account of the aerial raids on French cities is to be found in Mortane, op. cit., Vol II, pp 309-362.

casualties of 109 dead and 343 wounded. The next year some 151 were killed and 237 wounded in approximately the same number of raids, forty-one. The raids of 1917 more than tripled those of the previous year, 148 attacks being made against German cities by Allied planes.103 When 14 French planes raided Karlsruhe on 22 June 1916, 120 civilians were killed and about 150 wounded. This "caused a furor behind the German front . . . . The public clamor for protection brought a crisis to German home defense."104 The principal effect of these attacks was not in the direct destruction caused — the attacks were far too few — but rather in indirect effect. The falling off of the production in essential war industries was alarming partly because the morale of the workers was lowered by the attacks and partly because of the loss of time as a result of air raid alarms."105 Von Hoeppner adds that the Allied raids on Mannheim, 24 December 1917, and on Trèves, Heidelberg, Karlsruhe, Rastatt, and Freiburg during January 1918, caused the Germans to retaliate against Paris. But he gives only by indirection a hint that the German populace was smarting under the sting of air bombings.106 That they were is indicated by the fact that


104 Cuneo, op. cit., p 376.

105 Ibid., p 377.

106 Ibid., p 103.
"when the Allied air raids on the Rhine were being systematically carried out in 1918, German pilots, if they appeared in uniform in certain Rhineland areas, were attacked." 107

One of the few evidences that the air raids by the French and British were seriously affecting the German people comes from a passage in General von Hoeppner's book which reads as follows:

It was stated in emphatic terms [in the Reichstag] that the morale of the civilian population in the cities in the western and southwestern sections of the Empire was so badly shaken and the people were so haunted by the dread of hostile air raids that immediate and effective relief must be secured. With reference to the sufferings of the people in the South German cities, the High Command stated in reply to the inquiry from the Reichstag [on 21 March 1918] that they had lost sight of the plight of the French cities which had endured more than three years of war with great steadfastness, and that up to the present we had received no proposals from the hostile governments [to arrange for a limitation of such attacks] and that no definite measures could be taken unless certain advances were made by the enemy. 108

The Spring of 1918 brought intensified activity on the part of the newly created Royal Air Force and cities well into Bavaria, such as Kaiseraultern, Pirmasens, and Landau, were bombed by the British. However, there is no direct evidence that these raids caused undue panic among the Bavarian civilians. 109 To the end of the war the RAF kept up this

107 Pierce, op. cit., p 175. This is similar to reactions cited in the case of French and British populations when they were the victims of air raids.


persistent campaign against German cities, striking principally at military targets, but causing severe casualties among civilians. The "profound and widespread moral effect of this . . . offensive" led to many public meetings in German towns calling for mutual limitations or "for drastic and often quite impracticable measures of defence" and captured letters revealed a "terror and panic inspired by the raids among the civil population; while well-to-do families in increasing numbers were seeking the temporary security of more distant inland towns."\textsuperscript{110}

Toward the close of the war, after the declaration of independence by the Czechs and Slovaks, it was planned to bomb Berlin from bases in Bohemia, using British planes. The surrender of Germany brought an end to these plans, so Berlin went through the war untouched by enemy bombs.\textsuperscript{111} The total attacks on Germany by British and French planes numbered 675, of which 446 were night raids. Civilian and military casualties numbered 746 killed and 1,843 injured, while property damage was estimated at 24,000,000 marks, or in the neighborhood of \$6,000,000.\textsuperscript{112}

In summing up the results of the air bombardment on

\textsuperscript{110}Middleton, \textit{op. cit.}, Vol IV, p 244.

\textsuperscript{111}Jones, \textit{op. cit.}, Vol VI, p 174. "It is reported that Lewisite, the most effective (but unused) poison gas of the Allies, was to have been used in the attack on Berlin in the spring of 1919." Pierce, \textit{op. cit.}, p 104.

\textsuperscript{112}Jones, \textit{op. cit.}, Vol VI, p 152.
Germany, Jones makes the following statements:

The major effects . . . may be listed as (i) a weakening of the national will, particularly in 1918, when the nerves of the people, through hunger and general war weariness, were actually sensitive; (ii) a falling off in the production of essential war materials, partly because the morale of the workers was lowered by the attacks, but chiefly through loss of time as a result of air-raid alarms, and (iii) a diversion of fighting squadrons, anti-aircraft guns and searchlights, and of a great amount of material and labour, to active and passive schemes of defence.

In quoting a German authority, Major Grosskreutz, Jones goes on to say:

The direct destructive effect of the enemy air raids did not correspond with the resources expended for this purpose. On the other hand, the indirect effect, namely, falling off in production of war industries, and also the breaking down of the moral resistance of the nation, cannot be too seriously estimated.\footnote{\textit{Ibid.}, p 153. The italics are in Jones' text.}

The threat that Allied bombing held for the interior of Germany was apparent, even if the opportunity to employ this method of bringing the Kaiser's forces to sue for surrender never came. As Major Bratt, the Swedish writer on air warfare, observes: "This decision — to make war on the whole population behind the front — is the most important experience of the world-war. It introduces a new epoch in war and the science of warfare . . . . Military thought cannot fail sooner or later to draw the ultimate conclusions from the logic of developments."\footnote{K. A. Bratt, \textit{That Next War?}, 1931, p 53. Italics in original.}
The judgment of Major Bratt's deserves the emphasis which he, or his publishers, saw fit to give it.

In view of the meagre attention paid by writers on the air warfare of 1914-1918 to the effects upon the civilian populations of the various countries, it is difficult to conclude this examination with any but the widest generalities. The phenomenon of air bombardment was a new one in the first World War. The populations of the major powers were used to war in one aspect or another, whether it was fought on their own soil, far away in colonial areas, on the high seas, or in enemy countries distant from their own. But they were not prepared for warfare carried to the populous cities of Europe by means of a mechanical invention new to their experience. To read the average account one would believe that aerial bombardment, once the initial surprise and instinctive reactions had subsided, served to steel the populace against the ruthless enemy. Chauvinistic writers would naturally foster this belief. However, their writings are not valueless for they indicate what the people of a nation would like to believe they did in a crisis, or what they hope their immediate ancestors did under stress.

Even such sober accounts as those of Mr. Jones, published some years after the war, carry a tinge of this patriotism, and one must read between the lines to see that while Britons never shall be accused of cowardice in the face of terror
from the skies, there were uneasy moments when the German air war had the British populace worried. That von Hoeppner, for all his glorification of the Fatherland, admits to impatience with the Reichstag and the civilians of western and southern Germany is also revealing. And it is true that the French citizens did not always display that stoical bravery which Miller attributes to them. In other words, it appears as though civilians in the days of 1914-1918 behaved with the hard-to-analyze contradictions which characterize their conduct under every unpredictable circumstance of war, disaster, and catastrophe.
CHAPTER II
THE PEACE BETWEEN TWO WARS

Dire predictions of things to come filled the decade of the 1920s. Sensational journalists and sober theorists pictured the horrors of the war which many felt was inevitable, despite disarmament conferences, peace movements, the League of Nations, and the increased interdependence of the people of each country on those of all other lands. So great had been the development of aviation under the spur of the 1914-1918 war that a considerable number of the predictions hinged on some phase of what it was believed would be the nature of the air war of the future.

To go through the files of the newspapers and periodicals of the period following the first world war would convince even the most hopeful that mankind was busy planning new devices for destroying life, liberty, and civilization itself: Death rays; germ bombardments; wholesale obliteration of armies and navies and civilian populations by high explosives; gas barrages; and the harnessing of the very elements themselves to spread destruction were only a few of the possibilities examined and discussed by writers and speakers in every so-called civilized nation on the globe.

It is not the purpose here to reproduce the picture of these speculations and warnings in detail. There can be
scarcely an American who grew to maturity in the years between 1910 and 1930 who does not recall the illustrations in the feature sections of Sunday newspapers, in the pages of Popular Mechanics, or in some of the periodicals which carried sensational fiction. These drawings showed cities laid waste; humans in the last agonies of death by devastation on a scale unparalleled in the history of flood, fire, and famine; and the acts of man outdoing the most fearful acts of God. In all the other nations similarly forbidding views of the future fate of mankind could hardly be escaped. Even those who could not read could grasp the implications of such illustrations.

For the literate there were further indications of what the character of the new war would be. Whether in retrospect, in the accounts of the bombings of civilian centers such as are described in the previous chapter, or in books and magazine articles forecasting the prospects of a new war, the inferences were plain. Aerial attacks upon cities would be a commonplace of the next war. And, with the frightening technical advances already made or to be expected in the realm of aviation, very few civilians could hope to avoid the terrors of the war of the future.

One of the more temperate estimates of the situation reads as follows:

It is not proposed here to dwell upon the horrors of air warfare. Such propaganda is of little use as a preventive. People are not easily frightened. Even if they could be,
to do so would be doubtful wisdom. Fear is a breeder of that particular kind of cruelty which is the frequent cause and the natural concomitant of war. Moreover there has been gross exaggeration by alarmist writers on this subject. The reality is bad enough. Exaggeration can only weaken the real and lasting effect which may be achieved by a strict adherence to the truth. But there are certain probable features of air fighting, as it directly affects the civilian, which require to be stressed. During the early attacks . . . aerial projectiles filled with high explosives or deadly gases will unquestionably be used, and it is inevitable that loss of life and great suffering will be inflicted upon civilian populations. For a feature of air fighting will be the tremendously heavy losses of machines, personnel and materials. It will be essential to prevent the replacement of these losses. In order to accomplish this effectively it will be impossible to modify the severity of offensive action, or to discriminate in its employment. There will be no pause and no mercy possible till the period of doubt, fear, and uncertainty as to what is happening, or is about to happen, has passed into a state of complete air dominance on one side or the other. For those directing operations will be up against the overwhelming and decisive factor of speed.

This was written in 1931, at the close of the period initially under discussion here. It represents a moderate judgment which was not too common even thirteen years after the defeat of the Central Powers. Before providing any further summations reached at the end of the first decade of peace, it might be well to indicate the status of aerial bombardment in the early years of the 1920s.

At the first post-war meeting of important powers to discuss matters of armaments and warfare, the Washington Conference of 1921–1922, the question of aerial bombardment of cities was

1P. Murphy, Armadas of the Sky, 1931, p 70.
not officially acted upon. However, "an effort was made to determine whether it was possible to impose limitations upon aircraft." The subcommittee on aircraft which studied the problem passed the responsibility as to "'the desirability of placing any limitations whatever upon aircraft'" to the main committee, and no limitation was enacted.²

The Conference also considered the use of military aircraft. The Committee on the Laws of War had submitted a draft code of "Rules for Aircraft in War." Representatives of Japan and the United States said they were prepared to discuss the code, but Great Britain, France, and Italy declined to agree.³ Discussion was postponed until some future meeting of interested powers. The Washington Conference did adopt a resolution "providing for the future setting up of a commission to consider:

'(1) whether existing rules of international law adequately covered "new methods of attack or defense resulting from the introduction or development, since the Hague Conference of 1907, of new agencies of warfare;" and, if they did not, (2) "what changes in the existing rules" ought in consequence to be adopted as a part of the laws of nations.'⁴


³"The Japanese and American delegates ... represented States to a great degree still protected from air attack by their isolation. Air power in Europe, on the other hand, could already be applied, by striking at a nation's economic and industrial centers. Air supremacy in Europe practically meant military supremacy." Ibid., p 210.

⁴Ibid., pp 210-211.
There followed the gathering at The Hague on 11 December 1922 of a Commission of Jurists to formulate a code of rules regulating the use of aircraft and radio in wartime. The five Washington Conference nations were represented and the Netherlands was invited to participate. The Commission continued its deliberations until 19 February 1923 and thereafter issued a report setting forth the "Rules of Air Warfare."

The rules governing aerial bombardment were the following:

**Article 22:** Aerial bombardment for the purpose of terrorizing the civilian population, of destroying or damaging private property not of military character, or of injuring non-combatants is prohibited.

**Article 23:** Aerial bombardment for the purpose of enforcing compliance with requisitions in kind or payment of contributions in money is prohibited.

**Article 24:** (1) Aerial bombardment is legitimate only when directed at a military objective, that is to say, an object of which the destruction or injury would constitute a distinct military advantage to the belligerent.

(2) Such bombardment is legitimate only when directed exclusively at the following objectives: military forces; military works; military establishments or depots; factories constituting important and well-known centers engaged in the manufacture of arms, ammunition or distinctly military supplies; lines of communication or transportation used for military purposes.

(3) The bombardment of cities, towns, villages, dwellings or buildings not in the immediate neighborhood of the operations of the land forces is prohibited. In cases where the objectives specified in paragraph 2 are so situated that they cannot be bombarded without the indiscriminate bombardment of the civilian population, the aircraft must abstain from bombardment.

(4) In the immediate neighborhood of the operations
of land forces, the bombardment of cities, towns, villages, dwellings or buildings is legitimate provided that there exists a reasonable presumption that the military concentration is sufficiently important to justify such bombardment, having regard to the danger thus caused the civilian population.

(5) A belligerent State is liable to pay compensation for injuries to person or to property caused by the violation by any of its officers or forces of the provisions of this article.5

These rules represented no more than a draft and were never embodied in an international convention. No one of the powers represented at The Hague meeting of 1922-23 ratified the rules. So the early attempts to reach some workable agreement for the limitation of air power and the regulation of aerial bombardment came to naught.6 Just as before 1914, by 1930 the "only conventional restrictions in force applying directly to aerial bombardment" were the 1907 Balloon Declaration and Article 25 of the Rules of Land Warfare adopted by The Hague Conference of 1907 and described at the beginning of this study.7

In view of this absence of concrete, legalistic prohibitions on the use of aircraft for bombardment, one commentator, writing in 1928, looks into the future in these words:

5Ibid., pp 213-214. For an analysis of these paragraphs see ibid., pp. 214 ff.

6For the possible reasons of this failure see ibid., pp 235-236 and 237-238. Consult also J. M. Spaight, Air Power and the Cities, 1930, pp 212 ff.

7See p 2, above.
Social sanction defines and limits permissible violence and remains the only provision for enforcing observance of the minimum standards of a society or civilization. A check against ruthless practices is said to lie in the fear of reprisals. The deterrent effect of reprisals or the threat of reprisals is at best doubtful, and the practice opens wide the road to legitimatized savagery. Whatever its value, the practice of reprisals also rests ultimately upon social sanction, since the only tenable pretext for carrying out reprisal measures is the violation by the enemy of some minimum standard of conduct.

Nations will employ an effective weapon to its utmost extent, checked only by social sanction as manifested in the accepted minimum standards of the time. . . . With the preparations going on almost universally in aerial warfare, it is hard to believe that an international social sanction exists as yet against aerial bombardment. It cannot be reasonably affirmed to-day that it is wrongful or illegal to bombard a military objective, fairly regarded as such, by all available means of attack; nor does a military objective lose that character merely because it is situated in the midst of a crowded city remote from the immediate zone of land operations. Military objectives are likely to be hunted down and attacked, and the fact that incidental harm may fall upon non-combatants and that the incidental destruction of property may at times approximate devastation probably will be accepted, as heretofore, as an unavoidable incident of warfare. The problem of regulation and its discussion will, as heretofore, hinge upon the question of what may properly be regarded as a military objective, and the question of the military importance of its destruction, viewed in relation to its situation and the probable effects of an attack upon it. In other words, the test in the future, as in the past, will be purely utilitarian.8

A less realistic conclusion is presented by a British authority on air warfare. He saw, in 1930, the possibility that air power would be "the great potential disarmer, the great potential war-breaker." Through air power, he wrote,

The fire of war will be smothered at or soon after its outbreak. Air power will be the instrument of the international fire brigade of the future. It will serve the same purpose in "private" wars so long as they endure. It will go far towards killing war. How can war go on when air power can leap upon it, smother it, smash it? That would be bad work for civilisation if it meant smashing the cities; but it need not mean that. Indeed it cannot mean that unless air power is to be mishandled, misdirected, grossly misapplied. Used aright... it will be kept for smashing the nests and breeding places of armament, not the cities.9

In reaching this conclusion, Spaight asks with respect to air power, "Will it smash the cities?" His answer, in part, is:

That is the great problem. Arguments for smashing them are not lacking. It is the sovereign people who will war to-day, and it is their nerve and moral that must be broken. The great cities are convenient assemblages of the sovereign people; therefore smash the cities, and you smash the will to war.

The difficulty is that you may not smash the will to war. You may only harden it, intensify it. You may only fan into fiercer blaze a flickering flame of national determination. To destroy even a capital city will not necessarily end a war. Governments may pack up and go elsewhere. A nation can always resist while it has arms.

Besides, air power does not particularly wish to smash the cities. If it has the impatience it also has the chivalry of youth. There are other things to smash: things the smashing of which exhaustively is certain to produce a far greater effect, moral as well as military, than the smashing of more cities ever could.10

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10Ibid., p 230.
of "killing" the machines which "forge and fashion the instruments of destruction" and leave the cities and their citizens alone. Spaight makes a good case for the fact that bombardment of cities will not accomplish this objective, for, he writes, "The big marks, the profitable marks — arsenals, war factories, aerodromes, dockyards, iron works, steel works — lie outside the cities." This may have been true of Spaight's dream world of 1930. It would have been difficult for a realist, even then, to separate many legitimate targets from the cities which incorporated or surrounded them then or a decade later.

The Geneva Protocol of 17 June 1925 attempted to "prohibit the use in war of asphyxiating, noxious or similar gases, and of bacteriological methods." While the dissemination of these weapons from aircraft was not specifically mentioned in the Protocol, in popular belief such spreading of dangerous chemicals was implied, since speculation had long envisioned the sowing of destruction in this manner in the war to come. The Protocol was signed by thirty nations, but by 1931 had "only received eight ratifications and fifteen adhesions."

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11 Ibid., pp 231-233.

12 See Spaight's somewhat more realistic discussion of the air war to come in his book Air Power and the Cities, especially pp 3-5.

13 Interparliamentary Union, What Would Be the Character of a New War?, 1931, pp 399-400.

14 Ibid., p 400.
Following the adoption in 1928 of the Briand-Kellogg Pact, whereby the majority of the countries of the world renounced war as an instrument of national policy, the Geneva Protocol of 1925 was reconsidered by the Preparatory Commission for the Disarmament Conference to be held in 1932. However, the Preparatory Commission "refused" to apply the prohibitions in the Protocol respecting chemical and bacteriological warfare to the field of aerial bombardment. This refusal was based upon two reasons:

1. "that the Commission which had been appointed to draw up a plan for the reduction and limitation of armaments was not competent to regulate their use."
2. "that aerial bombardment is exclusively a means of aggression. . . ."15

So much for the attempts of the 1920s to regulate and limit the aerial weapons of war. As has been seen, most efforts to remove aerial bombardment from the realm of future probability accomplished little. The nations of the world had a new toy and would resist any program to take it away from them before they had had a chance to play with it. For all the talk of peace, disarmament, renunciation of war, and international amity, this was the scientific age and new

15Ibid., p 402. "The explanation of the difference in the attitude of the Commission in the two cases is perhaps that, remembering the inefficacy of the Hague declaration on aerial bombardments, it believed that a new prohibition of this kind would have practically no effect, whereas with regard to the possibility of prohibiting chemical and bacteriological warfare it was able, for want of experience, still to have some illusions." Ibid.
developments were more important than old aspirations. Human life and human dignity had their price, but human ingenuity for destruction was a far safer and more profitable investment.

As the world moved into the 1930s, its citizens became more cynical toward the attainment of disarmament and peace. Economic dislocations in the major industrial nations tended to benumb the thinking processes or to turn them from the thoughts of international brotherhood to the nationalistic struggles for individual and domestic survival. Prophets of doom were not wanting who could conjure visions of wholesale destruction from the air at the drop of an advance against royalties or at the odor of printers' ink. But the existing evils of hunger, unemployment, and poverty were more real than the future threats of bombs, gases, and germs from the skies. Some minds could see in the marching of armies and the forging of armaments a release for the masses from the boredom of idleness, or the famines of depression. The great numbers of individuals, however, were not anxious to look into the blackness; the grayness enveloping them was dispiriting enough.

A group which did look ahead saw little encouraging. The Security Committee of the Interparliamentary Union, in 1930, instituted "an Enquiry into the nature of a future war which should place before the public the opinion of qualified
experts on this disturbing question.”

The general design was to have the results of this enquiry ready for consideration at the Geneva Conference for the Limitation of Armaments in 1932. The contributors to the enquiry numbered nineteen individuals from nine nations, the United States, Great Britain, France, Germany, Japan, Denmark, Sweden, Greece, and Switzerland. They examined the military, financial, chemical, psychological, industrial, demographic, and legalistic implications of a new world war and published their findings in a symposium issued simultaneously in English, French, and German. The English edition is the one already referred to here. While most of the chapters have significance for the subject at hand, it will be sufficient to single out a few of them, or to point to pertinent observations in the remainder.

General E. Réquin, of France, discussing modern developments in methods of warfare, says:

... aviation has opened the way for offensive and defensive aerial operations. "As regards the combat, it will be more and more able to direct its blows not only against the combatants, but also against the rear-lines and against the entire country." General von Metzsch, a German, echoes this statement in his consideration of the new tendencies in warfare, but he qualifies his acceptance with the thought that "apart from any material damage they may succeed in inflicting, attacks

\[16\text{Ibid., pp viii-ix.}\]
\[17\text{Ibid., p 18.}\]
of this kind upon the interior of the enemy's territory are not likely to have any permanent effect."\(^{18}\) He admits that the destructive power of surprise air attacks is enormous and may completely disorganize a country and demoralize its people. But he says that unless these attacks are bolstered by a large reserve of supplies, replacements, and the actions of ground troops they are not likely to be undertaken, especially early in a future war.\(^{19}\)

The Enquiry's authorities on air warfare, Major K. A. Bratt and Lieutenant G. B. R. Sergel, both of Sweden, deal with the large questions of aerial weapons and future wars.\(^{20}\) But they find time to include a number of observations on the matters of aerial bombardment of cities. Among these are the following:

Most European States to-day are industrial; it is generally the people themselves who have the democratic political power. As industries and population tend increasingly to be concentrated in zones open to enemy air-raids, and as the power of enemy aerial weapons is developed, the threat of aerial bombardment will be no less decisive than any occupation.\(^{21}\)

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\(^{18}\)Ibid., p 24.  
\(^{19}\)Ibid., pp 25-27.  
\(^{20}\)One of these men, Major Bratt, wrote a book in 1931 which went into considerable detail to assess the possibilities of a new war. It is, in the main, a plea for a world federation to prevent war, but, in passing, it discusses many phases of air warfare as it appeared in prospect at the time. Bratt, op. cit., especially Chapters IV-VI.  
\(^{21}\)Interparliamentary Union, op. cit., p 90.
The victorious air forces must endeavour to break the enemy's power of resistance, his will to war, by bombing his centres of population. . . . Respect for public opinion in other countries or the fear that bombardments might stimulate the enemy's resistance instead of breaking it, are the only factors that would have any practical restraining influence.  

The ultimate effect of continued threats of bombardment . . . cannot yet be estimated. Only one thing is certain, namely, that the population of the more important towns must inevitably be drawn into the struggle.  

General Max de Montgelas, of Germany, writing on the "War Potential" remarks that:  

Battles in the air and attacks from the air will certainly play a great part in a future war. As to the use of poison gases against civilian population, public opinion throughout the world is unanimously agreed that such methods of warfare must be forbidden by international agreement. The suggestion that such an agreement would be violated is unfounded.  

Another German general, Hans von Haeften, describing the methods of protection and defense against the new types of warfare, observes:  

One of the most difficult tasks is to make the people realise the nature and degree of the danger from the air and to educate them in the proper conduct to be maintained during air-raids. Until this is done the whole air defence system remains negative. . . . Aerial warfare . . . is no longer confined to the army alone but is also directed against the civilian public.

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22 Ibid., pp 92-93.  
23 Ibid., p 94.  
24 Ibid., p 142.
population. Just as a badly trained or entirely untrained army would be exposed to overwhelming losses, so would a civil population that was unprepared for the dangers of air-raids have to pay for its ignorance with greater loss of life. Therefore the enlightenment, instruction and education of the entire population forms one of the most important means of civil air defence.\textsuperscript{25}

In strengthening his point, as set forth in the paragraph above, General von Haeften concludes:

There can be no doubt whatever that air defence has become an indispensable factor in the defence of a country and the protection of the populace in case of war. \ldots the dropping of any kind of munition from the air \textit{must} be strictly prohibited by international law. Until this is done, there can be no end to the sufferings of a defenceless and unprotected people exposed to the horrors of aerial warfare.\textsuperscript{26}

Professor André Mayer, of France, writing on another phase of the same subject, agrees that any future war would bring violence to civil populations to a degree unexperienced previously. He develops his argument by pointing out that the civilian populace will in every sense become a part of the national war effort, whether it labors in munitions factories, works in laboratories or mills, serves in the transportation and communications industries, or raises foodstuffs on the farms or the raw materials of textiles on ranches. "Thus \ldots every working element in a nation may, on one ground or another, be useful to the combatants and become directly threatened." It is evident that

\textsuperscript{25}\textit{Ibid.}, p 217. The italics are in the original.

\textsuperscript{26}\textit{Ibid.}, pp 224-225.
for material reasons due to the technical progress which has made a war a great industrial enterprise, and for moral reasons arising out of the democratic Organization of States which has made war an affair between peoples, it may have become a matter of indifference to a belligerent whether or not his attacks touch the civil population. It may even seem advantageous to him to resolve deliberately to attack them.27

Turning to the subject of chemical warfare, Professor Mayer says:

One can . . . imagine a case in which a very poisonous substance, secretly discovered in a laboratory, manufactured in large quantities, loaded on transport aeroplanes of a commercial type and poured out upon an unprepared population would constitute a terrible means of aggression and might perhaps destroy all inclination towards resistance.28

It is evident that an unexpected attack by the chemical arm may, in the large agglomerations, have a moral effect sometimes more terrible than its material effect — for instance, if it produces panic.29

Looking once more at the question of aerial bombardment of cities, Professor Mayer concludes:

. . . if we take account of the technical progress of the last fifteen years which has rendered these . . . [explosive and incendiary weapons] still more destructive, what a danger now threatens the peoples! It does not call for much imagination to realise what war will henceforth bring in its train in the way of suffering and misfortune when we think that it will affect not only men, but women, children and old people.30

27Ibid., pp 226-228.
28Ibid., p 231.
29Ibid., p 235.
30Ibid., p 247. "It cannot be doubted that even European civilisation is a fragile thing. It might disappear. It is
The Danish professor, Joerg Joergensen, whose field is the effect of a future war upon the spiritual and mental attitudes of the civilian populations and the fighting forces, makes some interesting contributions to the symposium. In speaking of the nature of a future war, he writes:

... what is of special importance ... /is that/ there is no doubt that in a future war operations will deliberately and with the utmost pressure be directed not only against the military fighting forces, but also and particularly against the civil population, whose will to war is to be broken. The air force seems to be a new and specially suitable arm for the purpose, because it can hardly be possible effectively to protect large centres of population from air-raids. 31

In a long passage, Professor Joergensen pictures the scenes upon the outbreak of another war. At the risk of tedious repetition, his observations as to the character of the events are reproduced here.

If war breaks out under the influence of war psychosis both sides will immediately begin to make air-raids upon the important towns, industrial centres and lines of communication of the enemy. This phase of the war will produce the greatest panic and be characterised by the utmost barbarity. All moral principles, all education and discipline will be forgotten. Each individual person in the attacked area will only have one idea — to save himself and his family at all costs.

important that the men and women of Europe should know this. They hold in their hands now, and will hold to-morrow, means of destruction sufficient to shake and perhaps to destroy it. Neither the science nor the technical advancement of which they are so proud will remove the risk — quite the reverse. These are daily putting greater means of power into their hands. It is for them to decide whether they will turn them against themselves and use them to commit suicide. 31 Ib1d., pp 248-249.

31 Ib1d., p 269.
The instinct of self-preservation will involuntarily oust all other emotions, and human existence will degenerate into wild chaos. Those with a high moral sense will have the opportunity in such circumstances to display an extraordinary amount of self-control, courage and unselfishness. But apart from these finer spirits, a complete moral collapse is to be expected, for the majority of people are neither heroes or saints, and it would be a serious mistake to judge the many by the few. It is unlikely that the average person could bear such a severe nervous strain, but would fall a prey to his instincts and be seized with the greatest panic. Individual deeds of heroism and self-sacrifice will be useless and will be lost in the general confusion. It may be that the disorganisation will make the immediate termination of the war compulsory, in which case the damage done by the war may be restricted to the actual damage done during the fighting. However, it seems probable that the general panic will lead to internal conflict, each fighting for himself, with the result that in a short time revolution or civil war will break out, the course of which cannot be predicted. But the consequences will certainly be calamitous, involving general demoralisation, social disaster and destruction of property until some means is found of restoring peace and order. There is another possibility that the authorities may succeed in overcoming the panic caused by the first attacks or preventing it from spreading.  

The second phase of the war will then ensue, a phase similar to that of the trench warfare of World War I, Professor Joergensen predicts. How long this will last can not be foreseen. Sooner or later one or both sides would seek to end the stalemate. "In short," says the writer, "it seems that the way to bring about a speedy termination of the war is to concentrate upon the civilian population, attacking them with the most terrible weapons available. At the same time, however, the danger of a general panic  

\[32\text{Ibid., pp 270-271}\]
and internal warfare arising from it will be proportionately greater, so that this type of warfare will probably only aggravate the situation."

It is unlikely, in Professor Joergensen's view, that the victorious powers will escape raids upon their civil populations, however successful they may be in either the first or second phases of the coming war.

For this reason military operations will most probably be undertaken behind the front of all the countries involved. These attacks will produce the same panic in the civil population everywhere and the same state of chaos that inevitably follows. Everywhere the social order and organisation of every kind will be destroyed, and it is very doubtful whether the military conclusion of peace will also lead to the restoration of internal calm. It seems more likely that here again there will be risings, revolution and devastation, until the general weariness and exhaustion are so great that the fighting between individuals, groups and classes can no longer be continued.

This dismal picture of the fate of the world in case of another war was one which was shared by many observers of the 1920s and it is mentioned here not only in a conclusion to Professor Joergensen's chapter but also as being representative of much writing and thinking being done in those years.

The Swiss scientist, Dr. G. Woker, further examines the questions of chemical and bacteriological warfare, already

33 Ibid., pp 271-272.
34 Ibid., pp 272-273.
touched on by Professor Mayer. Concerning the potentialities of spreading such warfare from the air, Doctor Woker has this to say:

... in any future war large cities and extensive areas, with men, women and children, would be annihilated. Millions of human lives would be lost in a few hours by a gas-bombing attack... nothing yet seen is at all comparable to the destruction of industrial centres and the mass murder of the civilian population which would be possible in a future conflict...  

Doctor Woker uses the same technique, quotation and summarization of scientists and military experts from several countries, to point up his discussion of bacteriological warfare and its threats. In conclusion, he warns, "War mania knows but one aim — the complete and unscrupulous destruction of the enemy."

From this comprehensive examination of the findings of the Interparliamentary Union's Enquiry, it is clear that nearly a score of leaders believed in 1930 that war was not

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35 Ibid., pp 358-359. "Let us imagine the consequences of a gas attack on a densely populated town: panic, the most terrible lung diseases, the secret terror of the population, the various types of poison resulting from different gases, which might only show their effects after days or even weeks. Such principles cannot fail to lead to catastrophes which it is beyond the human imagination to conjure up." Ibid., p 359, quoting a letter from Lt Col Bölke to Prof. Haber, the German originator of gas warfare, printed in Berner Tagwacht, 25 Oct 1930. Further quotations from experts on gas warfare are summarized throughout this chapter.

36 See ibid., pp 384-390.

37 Ibid., p 391.
only possible, but that it would be terrible in its impact upon the civilian populations. In their fear of a future war these experts mirrored the thinking of their countrymen. In their generally sober approach to the nature of the war to come, they were ahead of their times. But their warnings largely fell on deaf ears for reasons already indicated, as well as for others too involved for discussion here. Whether the Enquiry would have had more influence at an earlier date is doubtful; surely later publication would have caused it to be ignored by a world already rushing into war.

Before considering the examples of the "small wars" of the 1930s, it may be well to conclude this chapter with some excerpts from writers who were speaking of the future of aerial bombardment without references to incidents which took place in the Orient, in Ethiopia, in Spain, and in other scattered areas of combat as the world approached the conflict of 1939-1945.

A leading American authority on international relations and the cause of world peace, James T. Shotwell, introduced a sincere and thoughtful book on the subject of the menace of air power with these words:

*If there is to be another war, we know only one thing about it -- that is, how it will be begun. No one can tell what will happen after it gets started, nor how much of civilization will be left at the close, but the one sure fact is that it will begin in the air.*

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In consonance with this introduction, the author, one of the four delegates of the American National Committee on the Cause and Cure of War at the Geneva Conference on the Limitation and Reduction of Armaments in 1932, remarks:

... the civil population, far from being immune, will rather be the main objective ... especially in towns, cities, and industrial centers. "They will be massacred by gas bombs from thousands of airplanes (the number of planes necessarily decreasing as the deadliness of the lethal burning phosphorus and smoke released increases) and peace will be concluded only over the dead bodies of the enemy nation."

The conclusion leads us to face the facts squarely. Concentrated poison gas attacks from the land, sea, and air are not going to be modified for the sake of humaneness. The art of the military demands the attainment of the goal, regardless of the sacrifice. The goal is to cripple the will of the enemy as thoroughly and as quickly as possible. The "will" depends on the soldiery plus the people back home who manufacture the implements of war. Poison gas must be used, for it is ideal for mass destruction. Mass destruction means you and me.\[39\]

Discouraged by the failure of nations to come to some agreement with a view to limiting armaments and outlawing the use of aerial bombs against civilian populations, Mrs. Fradkin states:

... facing the fact squarely, there is no protection for the civilian non-combatant against aerial warfare from either aerial disarmament (which is impossible because of the inseparable connection between commercial and military aviation) or from air rules of warfare which aim to regulate the bombing area. Disarmament conferences and committees of jurists, in trying to make war more humane by limitation, have only sanctioned the use in turn of each new weapon

\[39\]Ibid., p 40.
Frank Morison, the British writer, as late as 1937, doubted that "wholesale and ruthless employment of chemical and bacteriological weapons against vast civil populations" was likely to be used by warring powers, except in great extremities. However, he agreed that bombardment by high explosives and incendiaries would be a common practice in future warfare. In the light of this prospect, he examines the possible effect upon London of such attacks. He forsees major conflagrations and pictures the confusion which will ensue from explosion, fire, and the possible threat of gas attacks upon the British capital. He demands that defensive action be taken to protect the civilians, to carry on the functions of government, and to lessen the weakening of national morale which might well follow the devastation of such an important area as London’s metropolitan district.41

40 Ibid., pp 169-170. "There is no safeguard against the aerial menace as long as civil and commercial aviation develop unchecked by any form of international supervision and control. Neither can the non-combatant expect any immunity from the observation of rules regarding aerial bombardment, for we have shown how inadequate these prove under modern conditions of warfare, and how, by accident, or in connection with a supposedly legitimate attack on some military objective, or even in the attempt to break a nation’s morale, the civilian will be the principal sufferer." Ibid., p 189.

41 Op. cit., pp 181-206. "It is the generally accepted view of competent observers in all countries that one of the first acts of a belligerent Power will be an attempt to strike a paralysing blow at the most vulnerable point of the opposing war machine — the administrative heart of the enemy.
Writing a year earlier than Morison, Air Commodore Charlton includes "A Short History of the Next War" in his book *War Over England*. In this fanciful, yet prophetic, account, Charlton develops a convincing portrayal of the impact of a surprise air attack upon England. After a series of disasters resulting from the fires and explosions, and after France has been attacked by the same enemy (Germany abetted by Italy) both nations are forced to sign an armistice which gives the Germans and Italians much desired colonial territories. Following twenty-five years of armed peace and reconstruction, England is (in Charlton's estimation) once again strong enough to strike an air blow at Berlin and at other cities of the Reich. Britain's defenses have been so improvod, by adopting suggestions similar to Charlton's own, that she can hope to withstand any reprisal by the Germans. But the surprise and destruction of the RAF raids are so great that Germany lies prostrate for the time being. Her air force almost intact, England then is able to stand aside while the continents of Europe and Asia become a turmoil of wars of revenge. Holding the balance

A few well-directed bombs in Whitehall or the neighbourhood of the French ministries, causing immense havoc and confusion, would be more truly demoralizing during the critical days of mobilization than many a great battle under the old regime." *Ibid.*, p 8. Italics in the original.

of power in the form of the RAF, Britain dictates the peace and virtue triumphantly, if belatedly, wins its reward. The implications are obvious. Charlton wrote with Hitler and Mussolini in the ascendancy and he did not spare the colors when he painted his canvases of "The Short War" and "The Last War." His imaginings of the effects of modern war on the civilian populations of the great cities are not too exaggerated; they are more realistic than the plot. And they bear reading both in the light of what has been said in this chapter and of what happened when real war broke out in 1939.43

In an earlier book, War from the Air, published in 1935, this same author is more inclined to speak theoretically, but his prophecies come to the same thing. Undisciplined flight from London, and from every other large city in the war zones, complete disruption of civilian life and morale when the bombs begin to fall, and uncounted new methods of destruction if technical advances keep pace with man's inhumanity to man are all envisioned by Commodore Charlton.44

And, in all the flood of books which reached the public in those years preceding World War II, Charlton's writings are among the more restrained and soft-spoken; strident alarums

43See especially pp 201-218, ibid.

44See especially pp 172 ff.
are not Charlton's stock in trade, however vivid his imagination may be.

While Charlton does not cry havoc, another author of the time constructs an imaginary picture of the war to come and calls it "Havoc; A Drama of Twenty-four Hours." Its scenario is quite like Charlton's, although not so detailed. England is attacked, but so is Berlin within the first hours of an undeclared war. The scenes of civilian panic are the same, and the inference Murphy draws is that unrestricted air warfare is likely to mean the end of civilization.

Still an earlier writer, Major General Ashmore, assays the lessons of the 1914-1918 war and comes up with some speculations on the kind of aerial warfare likely to mark a future conflict. His book, issued in 1929, says that "London would suffer terribly, perhaps intolerably, long before any counter-bombing could save her." And he makes a good enough case to give considerable validity to the recommendations he outlines for the defense of the British capital from attack by the air route.

One of the more bombastic German writers of the period following World War I, Baron von Buttlar, drew, in a book published in 1932, a picture of the war to come. He based

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45 Murphy, op. cit., pp 72-102.

his predictions upon his experiences as a Zeppelin officer in the campaigns of 1914-1918 against England. Among his observations, the following have some pertinence:

An air attack should have, and naturally does have, a considerable effect upon the civilian population. I might almost say that the inhabitants of a city exposed to bomb attacks are much more disturbed by the flashing of their own searchlights and the roaring of their own guns than the whole affair is worth. If such a battle between airships and aeroplanes is conducted silently, without a chorus of defence-batteries from the ground, a great portion of the population would certainly not be wakened out of their sleep and frightened by the humming of propellers at a great height.47

However, the Baron continues, gas will likely be used in greater amounts and in more terrifying ways than it was in 1914-1918. Then "the flyers can carry fewer bombs. But less will be necessary; the poison is surer."48

Two British authors, in a 1937 publication, speaking of the dangers of gas attacks from the air in a future war, observe that:

The possibility of causing widespread panic among the civil population is ... a very real one, more particularly when the mass of people are uninstructed and not subject to organised control.49

Their joint study goes thoroughly into the known and expected agencies of destruction and sets up requirements for civilian

48Ibid., pp 310-312:
49Hyde and Nuttall, op. cit., p 78.
defense in the form of warning services, shelters, gas protection, and decontamination, among other safeguards which should be planned before war becomes a reality.

And, as a further commentary, these same authors point out that in a new war the men in the fighting forces may have to carry with them in their forward positions the unnerving fears of disaster at home. As they say, in quoting Sir William Beveridge, "'In the last war families waited for bad news about their fighting men in the trenches; in a new war fighting men may wait for bad news about their families at home.'"\(^{50}\) The strain on those at the front could not help be materially increased by the knowledge that those they had left behind were being subjected to the same, or even greater dangers. However such knowledge might tend to unify a peoples, the disturbing effects upon individuals could not be dissipated.\(^{51}\)

\(^{50}\)Ibid., p 226, from an article in The Times (London), 22 Feb 1937.

\(^{51}\)In this connection, it might not be inapropos to quote a poem inspired by an incident in the bombing of England in the war of 1914-18. A young woman, killed in the raid of 19 May 1918, carried in her handbag a clipping which read:

> My girl is dead; that's all I know;
> I came out here to take my chance
> In the uncommon lively show
> They're running out in Northern France
> I thought I left her safe behind.
> What call had I to feel afraid,
> I didn't even call to mind
> The chances of a Zeppelin raid.
Among the most notable prophets of the "air war to come" was an Italian general, Giulio Douhet, who died in 1930. He had served in the Italian military air branch from 1909 through the first World War and continued to be connected with Italian aviation until his death at the age of 61. He is best known for his writings on the subject of the command of the air, and for his advocacy of an "independent air arm."

However, here we are only concerned with his ideas of the air war of the future insofar as civilians would be affected.

Briefly, Douhet's theories can be summed up as follows:

1. Wars between great nations may be expected to become conflicts of exhaustion unless some way of reaching a speedy conclusion is found.
2. The war of 1914-1918 became a war of deadlock in which victory came only with the breaking of national morale behind the front lines.
3. An intelligent nation will avoid this stalemate in the future by concentrating his hitting power where the enemy is weakest — in the cities and industrial areas where undisciplined civilians would be quicker to break, in a morale sense, than trained soldiers.
4. The only way to hit these weak spots is to fly over the defense lines.
5. Once command of the air is achieved — by heavy bombers destroying the enemy air force and its

"Be careful, won't you, Bill?" she said; And if I tried I couldn't tell How dear she looked — and now she's dead, And I'm out here alive and well. I think they might have took more care Of her, my girl, and me away, But mine's the bitter grief to bear, And mine, by God, the debt to pay!

C. E. B.

bases, and fighter planes defeating the combat air forces of the enemy — the enemy nation lies at the mercy of the attacking air force which can then blast cities and industrial centers without opposition.

6. The enemy, unable to hit back, will realize the hopelessness of his position, morale and the will to resist will collapse on the home front, and he will be forced to ask for peace even though his army still is intact and his navy undefeated.52

It may be seen, therefore, that Douhet was not an advocate of frightfulness for the sake of terrorization; he believed that intense air action against the enemy's civilian centers would shorten the war and lead to an earlier peace, with less sacrifice of life. He writes, for example:

Mercifully, the decision will be quick in this kind of war, since the decisive blows will be directed at civilians, that element of the countries at war least able to sustain them. These future wars may yet prove to be more humane than wars in the past in spite of all, because they may in the long run shed less blood. But there is no doubt that nations who find themselves unprepared to sustain them will be lost.53

Everything, in Douhet's belief, depends upon gaining command of the air. Then will come the bombardment of the rear areas, probably with chemical and biological warfare, as well as with explosive and incendiary bombs. Civilians

52 This is a summary of the views expressed by Douhet in his book The Command of the Air, especially pp 3-207. See also C. Caldwell, Air Power and Total War, 1943, pp 95-104, for a good discussion of the Douhet theory; and L. A. Sigaud, Douhet and Aerial Warfare, 1941, which devotes a great deal of attention to an examination of Douhet's writings in the light of later developments.

will be forced to flee their homes if they survive the initial assaults. As Douhet says:

An aerial bombardment which compels the evacuation of a city of some hundreds of thousands of inhabitants will certainly have more influence on the realization of victory than a battle of the kind often fought during the last war [1914-1918] without appreciable results. A nation which once loses the command of the air and finds itself subjected to incessant aerial attacks aimed directly at its most vital centers and without the possibility of effective retaliation, this nation, whatever its surface forces may be able to do, must arrive at the conviction that all is useless, that all hope is dead. This conviction spells defeat.54

Douhet "saw clearly and stated candidly that with the entire nation at war the objective was the stifling of the enemy's will to wage war... It appeared to Douhet that the best way to negate this will-to-war was to blast every key city to pieces, at once destroying industry, killing the workers, and spreading fear broadcast over the entire nation," one of those who sought to explain his doctrines wrote.55

As Douhet himself foresaw the future war, the battlefield would be limited "only by the boundaries of the nations at war, and all of their citizens... would become combatants." There would no longer be any distinction between soldiers and civilians.56 Air war would really become total war.

54Ibid., p 140.
56Douhet, op. cit., p 10.
From those materials readily available, this chapter has been constructed to show the temper of the times between 1920 and the middle thirties. Further examples could be cited were a more vast literature of contemporary writings in the press, the periodical journals, and in book form within easy reach. However, additional examples would serve mostly to reiterate the observations set down here. The twenty years between the two world wars was a period of speculation. Until fighting broke out in the limited areas of Morocco, Abyssinia, China, Spain, Manchuria, and the Gran Chaco, speculation was mostly a matter of academic discussion in printed form and through the spoken word. If the speculation pictured the horrors of a future war, as influenced by air power, in terms which may have seemed sensational and startling, thoughtful persons could reply that imagination frequently lagged behind technical advances and the unknown future held terrors for which the experience of mankind could give no guides.

If, as has been intended, the facts of these speculations during the 1920s and early 1930s reveal that the world was only too well aware of the least that aerial bombardment of cities could mean, the extended presentation is justified. It now seems pertinent to inquire as to the lessons taught by the dress rehearsals conducted in the "small wars" of the years just before the conflagrations of 1939-1945.
CHAPTER III

AIR WARFARE IN THE GRAN CHACO AND ABYSSINIA

Aerial bombardment of civilian populations played a minor part in the Italo-Ethiopian War, and even less of a role in the Gran Chaco War, both of which might be called "little wars." These struggles are termed little in that they were confined to restricted areas, and, while they had many international complications and repercussions, they were not what might be regarded as major episodes in the same sense as World Wars I and II. Although such a designation as little is arbitrary, it can be agreed that the China incidents of 1931-1932 and of 1937 were of importance and scope beyond this classification, and so, also, was the Spanish Civil War of 1936-1939. These conflicts will be discussed in subsequent chapters.

In both the Chaco War, which stretched from the late twenties until 1935, and the Italo-Ethiopian War of 1935-1936, the fighting took place in comparatively unsettled areas where large towns were rare. Employment of aircraft had some significance in each of the wars, especially in the campaigns in Abyssinia, but it was used against the small number of populated towns or villages on only a few occasions.

While it is easy to generalize, an examination of the contemporary periodicals and of books written after the events
bears out the contention that both of these now almost forgotten wars contributed signs and portents of things to come in respect to the effects of aerial bombardment as they might be expected to operate upon civilian concentrations in the highly developed nations of the world. An Ethiopian tribesman killed in his rude hut by a bomb fragment from an Italian missile was just as dead and just as much a victim of modern war as a Londoner caught in the blitz, or a German wiped out by either the RAF or the AAF. So, too, the family of a Bolivian Indian or of a Paraguayan cadet eliminated in the Chaco badlands by aerial gunfire could gain no great consolation from the knowledge that death there was not much different from that suffered by the inhabitants of Hiroshima or Nagasaki ten years later. As Haldane says: "... a baby with a bomb splinter in its stomach suffers equally whether its father happens to believe in Christ, Mahomed, Bakunin, or merely hard cash." At every step in these little wars the scale was small, and the circumstances limited, but the implications for the world loomed great.

Between 1918 and 1932 aerial bombardment was often discussed in an abstract way, but very little notice was given to the few instances of its actual employment. The so-called "police bombings" of the RAF along the northwest frontier of

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India may have killed civilians in the isolated villages of that region, and similar methods used in Southern Arabia might have erased some non-combatants along with a few stub-born tribesmen. The French Air Force was reported as having killed and wounded 800 persons in a few minutes' raid on a Moroccan village during the Riff troubles which plagued both France and Spain in their colonial empires through the twenties and thirties. And Spanish military planes are also said to have used aerial bombs upon the Riffs during the same period. However, all these aerial activities failed to excite the interest of the world to such an extent that they received much attention from the press or the public.

In the case of the war between Paraguay and Bolivia in the Chaco Boreal, or Gran Chaco as it was called, certain factors, mostly involving the work of the League of Nations, brought the conflict into worldwide notice. Although hostilities began in December 1928, actually the main fighting took place from July 1932 until peace was proclaimed in

2 Of this raid Capt Breyton says, "The effect on the natives was highly gratifying." Between 9 Feb and 27 Mar 1933, according to him, nearly 600 bombing missions were flown by the French against the Riff areas; 12,000 bombs were dropped, mostly 22-pound fragmentation bombs. Capt Breyton, "L'aviation du Maroc et l'affaire du Sahgo," Revue de l'Armée de l'Air, VI, Oct 1934.

3 Haldane, op. cit., pp 42-44. "It is important to realize when we describe aerial bombardments as barbarous, that they aroused very little protest when they were used against 'inferior' races," he says. P 44.
June 1935. It was, as John Gunther described it, "one of the bitterest and most sanguinary [wars] ever fought anywhere." At the close of the struggle approximately 250,000 casualties had been recorded. Since both contestants were small nations this casualty figure is noticeably high. Bolivia, with a population of 2,911,000, had 55,000 killed and 83,000 wounded or otherwise disabled by the fighting. Paraguay, out of a population of 2,050,000, suffered 45,000 deaths and 67,000 other casualties. How many of these casualties resulted from aerial action no one mentions, and the division between civilian and military deaths and injuries is not given.

Both sides employed aircraft and engaged in aerial

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5J. Gunther, Inside Latin America, 1941, p 232.

6Ireland, op. cit., p 94.
bombardment. However, since the bulk of the fighting was in a region devoid of inhabitants, and the practice of bombing populated areas had not the vogue it later achieved, instances of attacks upon the civilian populations from the air are few indeed.

On 1 December 1932 the Paraguayan government protested to the League of Nations "against alleged bombing of a hospital at Isla Poi by three Bolivian planes." No mention was made of any casualties there, or at Fort Boquerón where the Paraguayans charged the Bolivian air forces had also bombed a hospital. In January 1933 occurred the only case in which

The planes were usually piloted by American or European "soldiers of fortune" hired by the belligerents because of a lack of trained airmen in their own forces. Many of these pilots had flown in World War I, and a few, after flying in China and Spain, survived to take part in World War II. The OC of the RAF base at Wadi Halfa, Anglo-Egyptian Sudan, in 1944, for example, was a former pilot in the Gran Chaco War. He was a Texan who had joined the RAF before the United States entered World War II and had seen service in the "Battle of Britain" and in the North African desert campaigns of 1942-43.

"In Latin American hostilities since the World War, there have been just sufficient success from aviation and poison gas to induce these impoverished countries to begin specialization in these lines, despite the handicaps of having no independent chemical industry, no trained personnel, and slight development of aviation." Fradkin, op. cit., p 19.

H. G. Doyle, "The War in the Chaco," Current History, XXXVII:469; Jan 1933. At the battle for Fort Saavedra, on 1 Dec 1932, Bolivian planes machine-gunned Paraguayan troops in their trenches, "... accompanied by the screams of dying men and the shouts and curses of those who were sure one more kind of noise would drive them insane. And then it would come — the diabolical, taunting scream of a siren which one of the Bolivian aviators had attached to his exhaust." See
an air raid's effect upon a civilian area is noted. According to Henry Grattan Doyle, "newspaper reports indicated that the air bombardment of Bahía Negra, far to the north and remote from the active fighting, inflicted serious damage and had a bad effect upon the morale of the Paraguayan civilian population."10

Whether as a consequence of this raid, or of later ones unlisted by writers on the Chaco War, President Eusebio Ayala, of Paraguay, issued, in early May 1933, what Time called a "dangerous statement." It announced: "If the aerial bombardment of civilian centres continues, enraged Paraguayan public opinion may kill Bolivian prisoners of war." The Bolivian government's reply to this message was a threat to blow off the map the Paraguayan capital at Asunción.11

Shortly after this date the air advantage shifted to the Paraguayans, but this apparently related only to operations over the fighting fronts.12 The only other instance of an


11"South American War," Time, XXI:23, 22 May 1933. For examples of the killing of prisoners of war as a result of angers aroused by aerial bombardment, see accounts of the bombings of Ibiza, Malaga, and Bilbao during the Spanish Civil War, pp 151, 161, 162 below.

aerial bombing of a civilian area which received mention was a Bolivian attack upon Puerto Casado, a town on the Paraguay River just inside the Paraguayan-Brazilian border and 215 miles north of Asunción. No casualties are indicated as a result of this raid, but the properties of Argentinian and American firms were damaged by the bombings. It is disappointing that more information is not available upon the subject of aerial bombardment of civilians in this bloody, but remote, war. The experiences of the Gran Chaco disputants in bombing and strafing jungle villages and isolated towns might provide an interesting preface to the Pacific air war in the years between Pearl Harbor and VJ Day.

We pass now to the other side of the world and to a discussion of the use of aerial bombardment in the war between Italy and Abyssinia which resulted in the annexation of the ancient kingdom of Ethiopia to the Italian colonial empire. Here the circumstances differed from those in the Gran Chaco, but the use of bombs and poison gas, dropped from airplanes, was as savage as the world had yet witnessed, save for the Shanghai incident of 1932. Again the military, political,

13Ibid., p 601. A Bolivian reply to claims for damages on 6 June 1933 rejected the appeals.

14Neither the Tacna-Arica dispute of 1920–29 between Chile and Peru, nor the Leticia affair between Colombia and Peru in 1932–35, led to sustained hostilities, and no air warfare was involved. See Wilgus, op. cit., pp 662–664, and 671–673.
and international events of the war are beyond the province of this study. Of all of the wars of the 1930s, except the Spanish struggle, the Italo-Ethiopian conflict was the most publicized and the literature on it is exhaustive. A few of the better overall accounts are noted here for the convenience of those who would care to follow the larger factors which made this so important a prelude to the greater war of 1939-1945.\(^{15}\)

From the time of the clash between Ethiopian and Italian East African troops at Walwal, or Oual Oual, an oasis well within the territory of Abyssinia, on 5 December 1934, until the end of the war on 5 May 1936, when Italian troops under Marshal Badoglio entered Addis Ababa, the capital of Ethiopia, the use of air power by the opposing sides was a lively issue. The Italians early in the fighting, which actually began at the river Mareb, the borderline between the Italian colony of Eritrea and northern Ethiopia, on 3 October 1935, established overwhelming air superiority. The Ethiopians at the time of the Walwal incident had a few planes, but they were "hardly adapted for combat

purposes." The Italians, on the other hand, had large, and by 1935 standards powerful, military air fleets which they were anxious to test against such weak opposition. During the course of the war the small Ethiopian air arm never became a threat of any consequence to the Italians, and there is no instance of record in which an Ethiopian plane attacked Italian troop concentrations or supply lines. So, all the

16 R. G. Woolbert, "Feudal Ethiopia and Her Army," Foreign Affairs, XIV:73, Oct 1935. "The few aircraft owned by the Abyssinians were used entirely for intercommunication. There were a few anti-aircraft guns but the working of the apparatus on which their efficacy depended proved to be beyond the mental capacity of the Abyssinian." H. P. Lloyd, "The Italo-Abyssinian War, 1935-36," Royal Air Force Quarterly, VIII:357, Oct 1937. "For all intents and purposes Ethiopia had no airplanes. True, there were 12 airplanes in the country, all owned by Haile Selassie personally, and five available pilots, three of these natives, and none of any ability to speak of. Of the planes, all were obsolete or obsolescent — 4 Potez 25 A 2's, badly in need of overhauling and 3 Fokkers in fair condition which were really passenger airplanes and not designed for military use. Planes were used for courier or passenger service only. The Italians bombed and destroyed 6 planes on the ground, others were lost due to accidents, and at the end of the campaign there were left only two planes intact, one of which was serviceable." U. S, War Dept, General Staff, Certain Studies on and Deductions from Operations of Italian Army in East Africa, 1937, p 33.

17 In the northern operations, for example, the Italians had 80 planes until the middle of January 1936, and approximately 200 thereafter. On other fronts some 60 planes were used. Of the 200 craft, 60% were heavy bombers with a range of 1,200 miles and a load of 1,000 lbs. at 170 mph. Thirty planes were fighter types of similar performance qualities to the British Fury; the remainder were reconnaissance bombers similar to the British Hart. Lloyd, loc. cit., p 357. See also, U. S. War Dept, op. cit., pp 31-32.

18 "The Italian Air Force operated without opposition in the air..." U. S, War Dept, op. cit., p 33, italics in original.
aerial activity during the conflict was of Italian origin, and there is no question of which side dropped the bombs, which side machine-gunned soldiers and non-combatants from the air, which side disseminated poison gases from planes upon troops, civilians, livestock, and the surrounding scenery. In each instance it was the work of Italian aviation.

Because of the nature of the country through which they were fighting, the Italians perforce had to be innovators in the matter of employing air power. There were no large cities in Abyssinia,19 most of the people lived a nomadic life or cultivated small agricultural clearings in the valleys among precipitous mountains. Automobile highways and bridges were few. The only railroad in the Ethiopian kingdom ran between Addis Ababa and Djibouti, the chief seaport and capital of French Somaliland on the Gulf of Tajura, across the straits from Aden.20 There were no precedents for the Royal Italian

19 The 1935 population of Addis Ababa was estimated at 70,000, and the total for Abyssinia as 10,000,000. World Almanac 1935, p 637. The town of Harrar had an estimated 40,0000 in 1932, and Diredawa approximately 30,000. No other towns approximated more than 6,000-10,000 population. Statesman's Yearbook 1933, p 640.

Air Force to follow in campaigning in Ethiopia, save those of the French and Spanish against the Riff tribes of Morocco. 21

Before the examples of actual hostilities were available for analysis, it was believed that the Italians would use their aircraft mainly for terrorizing small bodies of troops and for scouting and communications operations. As one writer put it, the usefulness of the Italian bombing planes would be

. . . considerably impaired by the fact that they will lack important objectives. They cannot hope to surprise large bodies of Ethiopian troops, since these will presumably form only at night. There are no large cities or other fixed centers offering easy targets for aerial attack. . . . Doubtless the Italian command expects that the explosion of bombs dropped from the sky and the raking machine gun fire of Italian pursuit planes will seriously undermine the morale of troops unaccustomed to the latest methods of warfare. The civilian population will also presumably be impressed by the sight and sound of vast air fleets. 22

A German military commentator at about the same time observed that Italian

. . . airplanes may destroy buildings. Yet this would have little effect upon the morale of the population. Semi-barbarians do not differentiate between combatant and non-combatant. To them an enemy is an enemy, regardless of whether the same carries a weapon or not. It is not at all unusual for the Abyssinians to destroy their enemy's towns and thus inflict heavy losses upon

21 Waugh, op. cit., says that the South African Air Force massacred a primitive race, the Bondelzwarts, in the former German colony of Southwest Africa in 1923 by air bombing "on the grounds that 'they could not or would not pay a tax on their dogs.'" The matter was brought before the League of Nations in 1923, but no reproof or compensation resulted. P 11.

22 Scaetta, loc. cit., p 69.
them. True, airplane attacks might strike terror into the hearts of the natives.

However, he concluded, airplanes were no novelty to the Ethiopians and they were not likely to be frightened merely by seeing them approach. This view was echoed by an American periodical which noted that "air bombs will create but little effect in the sparsely settled country, certainly not in proportion to the expenditure of ammunition."

The events of the war bore out these predictions to a certain extent, but aviation proved far more effective than had been expected. It is granted by most observers that the power of the Italian air arm, while it did not win the war for the Fascists, did contribute decisively to shortening the conflict. However, because of the primitive nature of the country, the effects of aerial attack upon civilian populations were far less important than was the use of aviation in supporting and furthering purely military operations in achieving this result. Accounts of aerial bombardment are frequent in writings on the war, but they are almost entirely devoted to assaults upon Ethiopian troops in the field and upon supply centers or routes of communication. In almost every battle, especially in the campaigns in the mountain regions of the kingdom, aerial activity played an


important part.

At the opening of hostilities on 3 October 1935, the Italians bombed Adowa and Adigrat from the air with a force of 60 planes, capturing the latter town on 4 October and the former settlement two days later. Lieutenants Bruno and Vittorio Mussolini flew over the enemy lines in these engagements and it may have been on this occasion that Bruno Mussolini, "callously describing how he had bombed a group of hopeless Ethiopians, wrote: '... the group opened up like the flowering of a rose. It was most entertaining.'" However, the entertainment features were not so good as his brother Vittorio had expected.

Fond of American movies, Vittorio confesses that he was a little disappointed to find that aerial bombardments in Ethiopia were less spectacular than some he had seen in films. "The little huts in Ethiopia, built of mud and timber, did not give much satisfaction to the bombers," he remarks. 25

The Abyssinians accused the Italians of bombing a clearly marked Red Cross establishment at Adowa, but Count Ciano, son-in-law of Mussolini, said that he had not struck a

25 Lloyd, loc. cit., p 359. See also M.-E. de Bonneuil, "La Prise d'Adigrat et l'occupation d'Adoua," L' Illustration, Nov 1935, p 95. This and other dispatches to the French publication were collected and published in a single volume, with excellent illustrations, as La Guerre Italo-Ethiopienne, 1936.

26 H. B. Henderson and H. C. Morris, War in Our Times, 1942, p 33. See also Davy, op. cit., p 121.

hospital with bombs dropped from his plane. And, upon entering Adowa, the Italians asserted that no evidence of the destruction of a hospital by their forces was to be found.  

Before the village of Gorahai, on the southern or Somaliland front, was taken by the Italians on 7 November, it was severely bombed from the air. An American correspondent, William Chaplin, saw the devastated settlement six weeks later and reported that the area had been evacuated by those who survived the attack. "Little effect of consequence resulted" from these early bombardments according to military authorities, although it is noted that "the civilian population, taken by surprise, suffered numerous casualties." During the battle for Makalle, on the northern front, Italian aircraft scattered an Ethiopian column in a gorge north of Amba Allagi and went on to capture Makalle on 8 November. "The moral effect of these attacks was considerable ... One leader sums up the problem by writing 'they chain us up like prisoners.'" This sort of reaction on the part of the

28 "Roman Eagle Strikes; Ethiopian Lion Roars," Literary Digest, CXX:12, 12 Oct 1935. The Italians charged frequently during the war that the Abyssinians were using the Red Cross emblem for the protection of troops and military stores. There were debates upon this issue throughout the conflict and no completely irrefutable evidence is presented on either side. See Toynbee, op. cit., pp 410-411.

29 W. W. Chaplin, Blood and Ink, 1936, p 144.


31 Lloyd, loc. cit., p 361.
Abyssinian troops is mentioned by several other writers who discuss the first months of the war. "By the bombing attacks on troop columns and supply caravans, the power and morale of the Ethiopian forces was being constantly reduced during the period of ground inactivity preceding the relief of General de Bono." 32 This device was continued by his successor, Marshal Badoglio, who writes: "I also relied upon a continued and persistent air bombardment varying in intensity at irregular intervals of time . . . which I entrusted to the Air Arm, and which was to be employed during the days before the battle. By this means I expected to affect especially the morale of the enemy and to lower his fighting spirit." 33

At Dessye, then well behind the lines, seven and a half tons of bombs were dropped on 6 December by the Fascist planes. A hospital operated by the American Seventh Day Adventist Mission was almost completely destroyed by bombs. The attack on the hospital, marked by a Red Cross emblem, apparently was deliberate, or so an investigating commission of the International Red Cross decided after an examination of the scene, following upon a protest to the League of Nations by the Abyssinian government. 34 The obvious target, however, was


33Badoglio, op. cit., p 78.

34Toynbee, op. cit., p 411. See also Lloyd, loc. cit., p 361. P. I., "Le Bombardement de Dessie," Illustration, Jan 1936, pp 138-41, has a good account of the bombing and fine photographs taken at the time.
the Emperor Haile Selassie who had established headquarters in Dessye, a town of 2,000 about half-way between the capital of Addis Ababa and the Eritrean border.

Linton Wells, an American correspondent, had arrived at Dessye on 24 November in company with his wife and other foreign correspondents. He remained in the town through the bombardments and has written a vivid account of the episode. Wells anticipated an aerial attack upon Dessye because the village was "so situated, and tens of thousands of troops so stupidly concentrated in white tents grouped in the valleys and along the hillsides, that they couldn't possibly be missed by the worst pilot who ever pulled a bomb release or played a rhapsody of death with a machine gun trigger, and the slaughter consequent to an air attack would be disturbing to say the least." 35

When the raids came on 6 December, Wells reported "we witnessed the most contemptible, disgusting and inhumane act of warfare it has ever been my misfortune to watch in twenty-odd years' experience with war — namely, the bombing of Dessye generally, and the American Mission Hospital in particular, by ten Italian vultures between eight and nine o'clock this morning . . . the casualties so far known being 210 wounded and 55 dead." Actually, 363 were wounded and

From Wells' description of the raid a rather liberal quotation is made because it is one of the few examples of an eye-witness report of bombings of civilian populations during the course of the war. Wells says:

... Fay [Mrs. Wells] raised her hand, pointed, and said casually:

"Well, look who's here — Italian airplanes."

Looking toward the north I made out five Italian three-motored Capronis limned in the sky. As the roar of their engines reached our ears pandemonium broke loose around us. Natives began to scatter in all directions, firing their guns indiscriminately. I have never seen such panic. To me it was obvious that our move was to reach the American hospital compound, which was marked with twenty big Red Crosses.

Turning, I raced toward the compound and soon rejoined Fay in the doorway of the main hospital building. By now the five Capronis were circling overhead at an altitude of about 6,000 feet and dropping clusters of incendiary and 100-kilogram high explosive bombs on the town, hoping, of course, to blast the Emperor beyond any further hope of annoyance. Simultaneously, the few anti-aircraft batteries were pounding away ineffectually and the natives continuing to fire rifles and pistols with careless abandon. It sounded like a spectacular Fourth of July celebration, but after the first few minutes we hardly heard it, being too busy trying to pacify frantic native patients and women hospital attendants.

36 Ibid., p 117. According to another account, 10 Caproni bombers dropped 700 bombs and the casualties numbered 53 killed, 200 wounded. "Dozens of women and many children were wounded or killed, while survivors sobbed and beat their breasts in terror." "War in Africa," Literary Digest, CXX:12, 14 Dec 1935.
After a sixteen minute bombardment, moderate quiet was restored as the five planes disappeared. No bombs had dropped in the compound, but it was apparent that the village outside had taken an awful licking.

Before we could ascertain the casualties, someone shouted, "Here they come again," and we looked up to see and then hear the roar of ten planes, five other buzzards having joined the first five after raiding the airport and troops in the valley. Now hell did pop, for instead of directing their attentions on the town, they seemed to concentrate on the hospital compound. Fortunately, the high explosive bombs landed on the edges of its twenty acres, but the two-pound incendiaries burst all around us and ignited.

The next fifteen minutes were a repetition of the previous sixteen and then comparative quiet descended upon the community as the warbirds flew away.

"Well, that's over for today," I remarked. But it wasn't. Those scum had simply slithered out of sight to give us a chance to come out in the open and within seven minutes they were back overhead raining death and destruction upon us again. This time bombs hit Red Cross tents and the hospital. By the time the fires were under control, the Italians had called it a day and disappeared into the north. Then we set to work to inspect the damage.

Dessye was a shambles and there was no quieting the natives who were fleeing in wild confusion from their wrecked homes toward the safety of the distant hills. It was unsafe for anyone to venture outside the compound but two correspondents among those who did were shot at, one of them wounded both being the targets of angered Ethiopians.

Mangled dead and wounded men, women and children were lying everywhere about and the latter were receiving treatment as quickly as the missionary doctors and nurses and International Red Cross representatives could give it to them. Before long, the compound resembled an
abattoir and the agonized screams of the suffering could be heard from one end of it to another.

As the sad-eyed Emperor expressed it an hour later . . .
"We cannot understand that a people who wish to bring to others a highly advertised 'culture' should violate in this manner the most elementary rules of humanity and civilized conventions."^7

As a military move, the bombings of Dessye "undoubtedly hampered considerably the Ethiopian concentrations, but were not able to hold back or disperse their advances toward the ground lines of contact."^8 However, the effect of the raids upon the morale of the Ethiopians was remarked by several correspondents, among them the French observer, Pierre Ichac, who had left Dessye four days before the bombings, but who was able to reconstruct the events from information he received from natives and other correspondents.^9

Just before the close of 1935, Italian planes twice attacked a Swedish Red Cross unit at Dolo, a village on the Somaliland frontier.^10 The first bombing, on 22 December, was a light one, but the second on the 30th wounded two Swedish doctors, one fatally, and killed a large number of

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^7Wells, loc. cit., pp 118-121. Italics in original.

^8U. S. War Dept, op. cit., p 37.

^9See note 34, p 88, above, for references.

^10They had bombed an Abyssinian Red Cross unit at Negelli on 15 Dec 1935. Toynbee, op. cit., p 411.
patients.41 "The evidence of members of the unit appeared to leave little doubt that the act was deliberate, and their opinion was again confirmed by investigations conducted on behalf of the International Red Cross." The Italian government denied that the planes had purposely attacked the Red Cross unit, "but described the bombardment which it was admitted had taken place near Dolo as an act of revenge for the alleged decapitation of an Italian airman who had crashed at Daggah Bur a few days earlier."42

Protests by the Swedish government, the International Red Cross, and the Abyssinian Red Cross were made, but the Italians continued their attacks on hospital units. They bombed Egyptian Red Crescent ambulance units near Bulale on 30 and 31 December, and destroyed an Ethiopian unit near Daggah Bur on 4 January 1936.43 Later attacks occurred on

41R. de Beauplan, "Autour de conflit," L'Illustration, Jan 1936, p 142, says 30 were killed, 50 wounded, by bombs and machine-gunning from the Fascist planes. See Steer, op. cit., pp 242-243, for a good account of the raids.

42Toynbee, op. cit., pp 411-412. The Abyssinian government admitted that the Italian pilot had been decapitated "by nomads whose flocks had suffered from Italian air attacks." Ibid., p 410. Steer, op. cit., pp 243-244, has a mention of the incident, saying that Somalis caught Flt-Lt Minniti Tito after he was forced down by engine trouble. "He was killed, decapitated and mutilated: his head was taken by the Somalis to Daggahbur, as evidence of their loyalty to Ethiopia. The rest of him was divided among a large number of these simple nomads."

43P. Ichac, "Une Promenade vers le front sud," L'Illustration, Mar 1936, p 171. Steer, op. cit., p 243, notes a raid against a hospital run by English missionaries at Daggahbur on 5 Jan, possibly the same attack mentioned by Ichac.
15 January against an Ethiopian Red Cross camp at Waldia, and
against another unit of the same service near Makalle on
18 January. The Egyptian Red Crescent suffered under raids
again on 11 and 12 February, while an Abyssinian Red Cross
plane was bombed on the ground on 9 February. Another Ethio-
pian hospital plane was destroyed on 17 March. A British Red
Cross unit, near Kworam, was bombed repeatedly on 3 March and
for several days thereafter, while on the 17th a Swedish unit
in the south underwent an attack from the air. Near Chilga,
on 20 March, a British ambulance unit was fired upon from the
air. This catalogue of aerial assaults upon clearly marked
hospital units evidences a pattern which the Italian Air Force
obviously used to terrorize the Ethiopians and those who
sought to aid them in a humanitarian fashion. While there is
no actual record of the effects of this method of intimidation
upon civilian populations, it may be presumed that the non-
combatant natives learned to mistrust the safety of the Red
Cross emblem and to withhold from the relief units whatever
support and assistance they might otherwise have contributed.
There is also the possibility, for which no documentation is
reliable, that the Italians carried out attacks on hospital
units to destroy evidences of relief given by the Red Cross
and other agencies to victims of Italian gas warfare. The
international repercussions were noticeable, however, and

44Toynbee, op. cit., p 412.
Italy was denounced in the press of the neutral countries for the inhumanity of its actions in attacking hospital installations.

Meanwhile, the two most obvious targets for aerial attack had been neglected by the Italians — the Ethiopian capital at Addis Ababa and the vital railway from the French Somali coast to the highlands of the capital city. During the first three months of the war the Italian planes "seemed contented to wreak vengeance upon unimportant little villages of six and eight mud tukuls, dropping bombs and poison gas and occasionally machine-gunning them. Perhaps they thought this would terrorize the people into submission, but if so they were mistaken, for after a time the Ethiopians simply escaped to safety at the first sound of an airplane motor."\(^4^5\) One estimate of the war declared:

The subject of bombing Addis Abeba \(\text{sic}\) must have been carefully debated in Italian G.H.Q. The world powers with legations situated there jointly requested the Italians not to bomb the capital, and the latter felt that no very great advantages would accrue from so doing, while on the other hand, a misplaced bomb, particularly on the British Legation, would have had far-flung consequences. As far as the railroad is concerned a compromise had evidently been arranged with its French owners, wherein, by granting it immunity from bombing,

\(^4^5\) Wells, loc. cit., pp 115-116. "During the first few months of the war, we estimated that it required about one hundred bombs to kill one Ethiopian and destroy a cheap, unimportant mud hut, which was pretty expensive warfare in any nation's money." \(\text{Ibid.}\,\text{p 116.}\)
its use was assured after the capture of Addis Abeba. 6

Throughout the early months of 1936, these attacks upon small villages continued. As to the effects of the attacks there was some debate.

If its mission was simply to terrify the people, troops and non-combatants, it is believed it failed. The people certainly had fear instilled into them, but the novelty of the bombing attack wears off in time and fear decreases accordingly. On the other hand, it certainly wore down the Ethiopian will to resist and it was certainly responsible for large numbers of Ethiopian casualties. Our military observer watched the bombardment of at least a dozen native villages. The inhabitants dispersed and not one village was destroyed or even badly damaged, which is surprising in view of their flimsy construction and thatched roofs.

Although the first attacks produced panic among the Abyssinian troops and the villagers, later these primitive peoples became more accustomed to the bombings and, in the words of Pierre Ichac, adapted themselves with admirable facility to these new and unusual circumstances of life. However, as Liddell Hart says, "Air bombing ... began to produce some ominous symptoms of nerve strain in the interior,"

46U. S. War Dept, op. cit., pp 37-38. A. Bronzuoli, "Guerra passate e guerra futura," Rivista Aeronautica, XV:396, Dec 1939, says that Addis Ababa was a small and militarily unimportant town, the presence there of foreign diplomats complicated the situation, and destruction of the capital, although it could easily have been accomplished, would not have affected the ultimate outcome of the war to any extent.

47U. S. War Dept, op. cit., p 38.

despite the unfavorable conditions in which it had to operate — the wild nature of the country and the scattered population." 49

Before closing the discussion of the Italo-Ethiopian War it might be well to review the use made by the Italians of gas warfare. Since most of the employment of chemicals was carried on against the Abyssinians by aircraft, and since this technique was relatively new in a war against primitive peoples, its effects were extremely interesting to military observers and correspondents. 50 According to reports from the Abyssinian government, Italian planes bombed or sprayed towns, many of them outside the fighting areas, with poison gas on 18 separate occasions between 22 December 1935 and 7 April 1936. 51

The 22 December gas bombing took place where there were concentrations of an advance party of the forces of the Ethiopian chief, Ras Imru. "For the first time in the history of the

49L. Hart, "The Abyssinian War," Army Ordnance, LXVII: 327, May-Jun 1937. "Their attacks on villages and towns were on the whole ineffective, and yet they were made under exceptionally favorable conditions," i. e., lack of opposing air power. U. S. War Dept, op. cit., p 51.

50 Fuller, op. cit., p 79, says that the French and Spanish used mustard gas against the tribesmen in Morocco, and implies that it was disseminated from airplanes.

51 Toynbee, op. cit., pp 413-414. This volume says that the first use of gas against troops in the field was on 23 Dec 1935 on the northern front and on 30 Dec 1935 on the southern front. Ibid., p 414. Steer, op. cit., p 233, notes the 30 Dec gas bombing at Bulale.
world," writes Steer, "a people supposedly white used poison
gas on a people supposedly savage." The effect upon morale
according to his observations was immediate. "Bombing had
never shown such fine aesthetic results." Imru's troops broke
and fled and the Italians "with a sudden taste for gas . . .
poured the residue . . . on the reserves . . . in the Takkaze
valley." 52

At first the gas was contained in rather crude bombs
which broke on contact with the ground and released the
chemicals, commonly yperite, or mustard gas. Later, although
some authorities dispute this, the gases were sprayed from
planes fitted with special apparatus. 53 Whatever the method,
the chemicals were widely used with telling effect. General
Fuller believed that the gas was used "not to terrorise the
villages or directly to inflict casualties; but instead in
order to protect the flanks of the [Italian] columns as they

52 Steer, op. cit., p 233. Cedric Salter tells of meeting in Barcelona, in Jan 1939, a group of Italian aviators,
among whom was "a rouged and scented gentleman of about
forty" who "was the Ace of Aces, which lost something of its
impressiveness by being pronounced in Spanish as the Ass of
Asses. . . ." This "superb being" told "of the amusing antics
of the Abyssinians when he dropped the first gas bomb on one
of their camps. . . ." C. Salter, Try-Out in Spain, 1943,
pp 252-253.

53 U. S. War Dept, op. cit., p 43, says, "No spray tanks
were seen on planes in either theater of operations." But
most accounts assert that spraying from planes was a common
method of disseminating the gases in the later phases of the
war. See Davy, op. cit., pp 120-121.
advanced through the defiles. . . ."54 But Emperor Haile Selassie, in an address to the League of Nations Assembly at Geneva, on 30 June 1936, held differently and said so in the following terms:

It is my duty to inform the Governments assembled in Geneva of the deadly peril which threatens them by describing to them the fate which has been suffered by Ethiopia. It is not only upon warriors that the Italian Government has made war, it has, above all, attacked populations far removed from hostilities. Towards the end of 1935 Italian aircraft hurled upon my armies bombs of tear-gas. Their effects were but slight. The soldiers learned to scatter. The Italian aircraft then resorted to mustard-gas. Barrels of liquid were hurled upon armed groups, but this means also was not effective. The liquid affected only a few soldiers, and barrels upon the ground were themselves a warning to troops and to the population of the danger.

Then . . . the Italian Command followed the procedure which it is now my duty to denounce to the world. Special sprayers were installed on aircraft so that they could vaporise over vast areas of territory a fine death-dealing rain. Groups of nine, fifteen, and eighteen aircraft followed one another so that the fog issuing from them formed a continuous sheet. It was thus that as from the end of January 1936 soldiers, women, children, cattle, rivers, lakes, and pastures were drenched continually with this deadly rain.

In order to kill off systematically all living creatures, in order more thoroughly to poison waters and pastures, the Italian Command made its aircraft pass over again and again. That was its chief method of warfare. The very refinement of barbarism consisted of carrying ravage and terror into the most densely populated parts of the territory. The object was to scatter fear and death over a great part of the Ethiopian territory. These fearful tactics succeeded. Men and animals succumbed. The deadly rain that fell from the aircraft

made all those whom it touched fly, shrieking with pain.\textsuperscript{55}

On the subject of the use of gas, Liddell Hart agrees more with the Emperor than with his fellow-Britisher. Gas was used, he says, for covering flank movements of the Italian troops "as well as in demoralizing the enemy's reserve and his people behind the front. The effect of this new weapon on a primitive race which had no protection was dramatic," he goes on. It was not so much the physical damage as it was the nerve shock which accompanied the attack by gas which undermined the morale of the Ethiopians, according to Hart.\textsuperscript{56} Wells estimates that the fatalities, mostly non-combatants, from mustard gas totaled more than 250,000.\textsuperscript{57} This figure seems unduly high and is not mentioned by other writers. And Fuller specifically states that the killing power of mustard gas is low.\textsuperscript{58}

Extravagant claims were made at the time that "gas won the war for the Italians." However, most observers discount this assertion. All agree that it had a considerable effect upon the troops against which it was used, and some admit that it contributed materially to the weakening of the morale of the non-combatants. Steer, for example cites the fear of gassing

\textsuperscript{55}Fuller, \textit{The First of the League Wars}, pp 79-80.
\textsuperscript{56}Hart, \textit{loc. cit.}, p 329.
\textsuperscript{57}Wells, \textit{loc. cit.}, p 123.
\textsuperscript{58}Fuller, \textit{The First of the League Wars}, p 80.
and aerial bombardment as a direct cause of the flight of the Emperor, his family, and his closest supporters from Addis Ababa in May 1936. And he says, "It was the threat of gas from the air that demoralised its Addis Ababa's people." Another writer remarked that British and Abyssinian Red Cross officials in Ethiopia "seemed to think there was no doubt that... gas had played a definitive part in the campaign and had shortened the war. They rated its demoralising effect as far higher than that of high explosives."

On the other hand, American military observers noted that "a fair estimate does not place the use of gas as a decisive factor in the campaign, although it unquestionably was used with... much effect." Herbert L. Matthews, who accompanied the Italian forces on some of their most extended campaigns in Abyssinia, makes these observations:

Of course, the Italians employed some poison gas, but I cannot conceive how any thoughtful person, using the available facts, could reach the conclusion that the Italians broke the Ethiopian resistance with it. It was not employed in any of the great battles, and at best several thousands of peasants and soldiers were burned more or less badly by mustard gas. However, I met

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59 G. Steer, "Exit the Emperor," in W. Hindle, ed., We Were There, 1939, p 222.

60 Steer, Caesar in Abyssinia, p 9.

61 P. Murphy, "Gas in the Italo-Abyssinian Campaign," Chemical Warfare Bulletin, XXIII:5, Jan 1937. He adds that Italian opinion on this question appeared "to be almost the opposite." P 5.

62 U. S. War Dept, op. cit., p 43. See also pp 59-60 in the same work.
some Englishmen just after the war who admitted that the material damage done by Italian gas was small, but claimed that the psychological effect was so terrifying that it completely demoralized the Abyssinians, and so made the Italian victory easy. The argument, however, did not hold water for a minute. Wherever the Italians went . . . [in March 1936] the native population welcomed them with satisfaction. . . .

This opinion is seconded by George Martelli who says, "The decisive battles were won not by gas, but by overwhelming superiority of discipline, numbers, and weapons. Mustard gas completed the work of destruction, it did not begin it." With so much difference of opinion as to the actual weight the use of gas had in turning the scales of victory toward the Italians, it would be fortunate to be able to cite many instances of the effect of its use upon the non-combatant population of Ethiopia. Examples of these reactions are rare, and it can only be concluded that gas, along with aerial bombs, showed "that the nerve shock of modern weapons had the deepest repercussions on the minds of the Abyssinians and as a result their morale collapsed."

A series of defeats in the field in the Spring of 1936 caused Haile Selassie to renounce direction of affairs at

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Addis Ababa on 2 May. He took the railroad to Djibouti the same day and left the port abroad the British cruiser Enterprise for Haifa on 8 May. The Italians had conducted a notable "propaganda raid" on the Abyssinian capital on 13 April with 13 bombing planes from Makalle and nine "raiding machines" from Dessye. The force made several flights over the city of Addis Ababa, dropping thousands of leaflets enumerating the victories of the Italians and indicating the desirability of surrender before the capital was bombed from the air. Whether this, and similar raids on later days, had any part in the demoralization of the Ethiopian military and political leaders in Addis Ababa, is difficult to say. But Steer believes that it was after the leaflet raid, which he places on 27 April, "that the movement for individual security began which was to end in the sack of

66 There is some evidence according to Steer that the Emperor, advised by his Ethiopian intimates, decided to appeal in person to the League of Nations in an effort to enlist an intervention which would save him his throne. See Hindle, op. cit., pp 230-231.

67 Hamilton, op. cit., p 124. Leaflets had been dropped by Count Ciano's squadron just before the outbreak of the fighting in 1935 when the population of the border territories was invited to surrender on 2 Oct 1935. Another leaflet raid was launched on the Takkaze district by Gen deBono's fliers after the victories at Tigré and Agame. R. Diaz-Llanos, Guerra Aérea, 1942, pp 90-91. The text of this latter leaflet is reproduced in the Diaz-Llanos book at pp 91-92, and in de Bonneuil, loc. cit., p 90, is the text of a leaflet addressed to the natives of Tigré.
In the three days between the departure of the Emperor and the entry of Italian forces under Marshal Badoglio, the town of Addis Ababa was subjected to a reign of terrorism by the remnants of Ethiopian armies who looted, burned, and killed in a wild frenzy. The neutral diplomatic representatives and correspondents defended themselves with some success, but all were glad to see the victorious Italians on 5 May.

A few minor engagements took place in other sectors of the country, but by 9 May the active warfare was over, and the role of the airplane completed. In fact, there had been little use of the bombing planes during the last months of the war, and except for sporadic attacks on Red Cross installations, the use of poison gas, and occasional bombing missions, the Italian Air Force had concentrated its efforts in the realm of transportation of troops and supplies. The Italian Air Force came out of the conflict with a good

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68 Steer, Caesar in Abyssinia, pp 8-9. He reproduces the text of the leaflet used by the Italians in the raid which he says occurred on 27 Apr. It is quite likely that the same leaflet, or nearly the same text, was used on several occasions. Fuller, The First of the League Wars, pp 43-44, sets the raid on 14 Apr and gives the number of planes as 22.

69 A graphic description of the events in the capital, together with fine photos, may be found in P. Ichac, "Sur les derniers jours d'Addis Abeba," L'Illustration, May 1936, pp 197-204. Steer, Caesar in Abyssinia, pp 371-399, has a good account of the riots and the "liberation" of the city.
reputation for efficiency and strength. How well it was to guard that reputation and further it, had to wait for a short while to be revealed — from the close of the Ethiopian War in May 1936 until the early months of the Spanish Civil War which began in July 1936.

70 Davy does not agree. He says: "The Italian Air Force was not remarkably effective ... in spite of the fact that there was practically no opposition. But it revelled in its superiority over an un-mechanized foe. ..." Op. cit., p 121.
In the Far East the Shanghai incident of January 1932 gave the world its first glimpse of what modern aerial bombs could do to a thickly populated city. But this incident, too, had a prefatory phase. Shortly after the Japanese army had seized upon a series of circumstances to begin its campaign against Manchuria in September 1931, the town of Chinchow was bombed on 8 October. Eleven Japanese planes dropped between 30 and 40 bombs "upon the unarmed and unwarned city ... killing and wounding a number of the inhabitants."¹ The American government protested to the Japanese at what Secretary Stimson called "an indefensible act." Tokyo replied with "expressions of regret which seemed quite inadequate."² Chester H. Rowell, a well known California newspaper editor and authority on the Far East, who visited Chinchow shortly after the bombings, wrote that the official report by the Japanese, claiming the bombardment had been directed against the Chinese military headquarters in self defense, did not accurately state the facts. His inspection of the city indicated that, deliberately or not, much of the Japanese bombing

²Ibid. See also Mowrer, op. cit., pp 598-599, and J. B. Powell, My Twenty-Five Years in China, 1945, pp 186 ff.
had been aimed at offices of the civil government and at adjacent railway yards. No figures are given in any of the accounts as to the actual numbers of non-combatants killed and injured, nor is there any indication of the effect of the bombings upon civilian morale.

Between the bombings of Chinchow in October and the Shanghai incident in January the Japanese do not seem to have used their superior air power to attack areas not on the actual firing lines. The events of 28-29 January 1932 at Shanghai were well publicized at the time and need not be reviewed in detail here. Briefly, Admiral Shiozawa, in command of the Japanese naval units at Shanghai, attempted to clear the Chinese 19th Route Army out of the Cha pei section of the city which adjoined the International Settlement. A force of Japanese marines, landed from the warships in the Whangpoo River late in the evening of Thursday, 28 January, met unexpected resistance from the Chinese in the streets


of Shanghai. The admiral ordered the entire complement of 60 planes of the carrier \textit{Kaga} to bomb the Chapei sector on the morning of the 29th.\cite{5} These planes attacked the Chapei quarter intermittently throughout the day. But, although the raids were "carried out with considerable effect, \textit{and} with many casualties and much loss of property on the Chinese side,"\cite{6} the Japanese failed in their initial attempt to dislodge the Chinese forces from the city. The "war" then settled down to a matter of siege, counter attack, diplomatic manoeuvering, and international tensions, until the Japanese withdrew from their occupation of Shanghai on 31 May 1932.\cite{7}

The aerial attack upon Chapei on 29 January was the most severe bombing of a civilian population by aircraft between 1918 and the Spanish Civil War in 1936. In general the

\cite{5}At 0430, Admiral Shiozawa "issued an order which must have been the act of either a perfectly ruthless or a badly excited man." Stimson, \textit{op. cit.}, p 124. Hallett Abend, the American correspondent, had spent the early evening of the 28th with the Admiral aboard his warship. He told Abend of his decision to send in the marines that night, but did not indicate that he would follow the land assault with bombing planes. H. Abend, \textit{My Life in China}, 1943, pp 186-187. Pp 188-191 of Abend's book give as good an account as is available of the street fighting of 28-29 January.

\cite{6}Newman, \textit{loc. cit.}, p 176.

attack followed this course:

Friday morning [29 January] the roof of every tall building in the International Settlement was black with gaping Chinese and "foreigners" watching the show. Every 20 minutes a Japanese squadron swooped over, dove down on the unprotected roofs of the native cities and dropped a dozen whistling bombs. With each explosion towers of dust and smoke shot 150 ft. into the air. The sky grew dark. It was a wonderful sight. Not for hours did the spectators realize what it meant. Under those roofs were women and children, coolies and their old fathers, being blown to bits. Flames began to leap from a dozen roofs. Chapei was on fire. The spectators in the International Settlement became thoroughly alarmed, retreated from the roofs. Now the flames of the burning native city, across Soochow Creek, filled the sky. Into the International Settlement poured streams of terror-stricken Chinese. Wretched, many wailing piteously, they huddled their children and baskets and stumbled on in the darkness...

Not only were explosive bombs dropped on the areas containing troops and non-combatants, but incendiary bombs were also used, so that, according to a Reuter's correspondent, "by five-thirty that morning 'Chapei had the appearance of one blazing bonfire..." Thousands of civilians were killed in this first attack and more than 250,000 refugees fled, as has been mentioned, to the comparative safety of the International Settlement. No casualties or damage from aerial bombing occurred in that zone on the 29th.

Eye-witness accounts of the Shanghai incident are plentiful and all testify to the intensity of the Japanese air attack. Edgar Snow, an American correspondent familiar

9Stimson, op. cit., p 124.
with the Orient, observed the fighting for Chapei on the afternoon of the 29th from a point in the International Settlement defended by the Shanghai Volunteer Corps — an armed organization of European and American residents of the city. He wrote:

Some giant seaplanes, whose motors droned above the rapid terrestrial fire, hovered almost directly above us. Suddenly two of them dipped low, so that you could see clearly the Rising Sun painted red on their silver wings.

... I saw the planes nose upwards then, and leave two white missiles streaking earthward. The ground under me shook and timbers flew high in the air. Then a column of smoke rose slowly from beyond the North Station, and soon a burst of scarlet flame.

Other planes joined in the deadly circus. Tons of explosives were dropped into the Station, and scattered over the surrounding area. I kept tally for 36 explosions, some of them very near.

The air raid continued for nearly an hour, the planes releasing their cargo of four or six bombs, then repeatedly returning to re-load. Incendiary bombs, carrying 50 to 100 pounds of sulphur were dropped, along with high-explosive torpedoes, and detonated over districts densely populated with Chinese civilians. Unwarned of the attack, they had no chance to escape; scores now were blown to bits, or incinerated in the rapidly spreading fires.

The Commercial Press, largest publishing house in the world, China's greatest, most modern cultural enterprise, early became the target for repeated bombing. It shot up in flames shortly before one o'clock in the afternoon, to burn for days afterward.

The Station was in flames, with great holes blown through its roof. Some six or seven square blocks
along the Chapsei front were also ablaze. Beyond North Honan Road Gate I could see Chinese civilians surging back and forth on the streets, attempting to dodge bullets and the lethal sky demons. Now and then a Japanese aviator, having released all his bombs, would fly low so that his gunner could strafe down the crowded ma-lus.

The unnecessary brutality of this and subsequent air attacks against a people with whom Japan was not formally at war, the cynical disregard for the lives of non-combatants, the wanton sabotage of the Commercial Press and other great cultural institutions, was never to be satisfactorily explained by jovial Shiozawa, who was endeavoring literally to make good his boast that he could "blast the Chinese from Chapsei in 48 hours."10

When he reached Chapsei, Snow noticed that, except where the bombs had fallen and fire had spread, "barrow men trundled over the streets and rickshas moved between shops still open for business. There was no panic behind the lines, and everyone seemed much calmer than people within the Settlement."11 Earlier in the day, Hallett Abend had seen the bombings of Chapsei. He gives this account of his observations:

A little before seven o'clock that first morning. . . .
I heard a droning sound overhead.

"Planes!" I exclaimed.

"The little yellow bastards are going to bomb Chapsei," Robertson [his companion] said in a breathless tone.

"Never!" I ejaculated. "Bomb 600,000 civilians in an unfortified city? Not even the Japs."


11Ibid., p 226. He further describes scenes around the North Station where casualties were heavy. Pp 227-228.
... the invisible planes droned along, apparently swinging in wide circles, while the sky slowly lightened more and more. At least we could see them dimly.

And then the unbelievable happened. Each plane loosed two small cylinders, pointed at one end. They dropped in parallel slanting lines. They seemed to take a very long time falling. Then, a second after they had vanished beyond the nearest roof line, the earth seemed to jar and shake, and then came the feeling of the concussion, and the blast of sound.\(^{12}\)

By early evening of the 29th the air bombardment had ceased. How many civilians were killed and wounded as a result of the raids during the twelve-hour assault is not known. According to Chinese reports, 30,000 non-combatants were recorded as casualties at Shanghai, but these included victims of gunfire, artillery and naval shellfire, and hand-to-hand combat, as well as those who were subjected to air bombardment.\(^{13}\) This figure seems somewhat high in view of later figures for the whole Sino-Japanese campaign of 1931-1932 which will be cited further on in this chapter. Nevertheless, certainly several thousand civilians met death in the flaming ruins of Chapel on that January day.

Noticeably, the air bombardment did not intimidate the

\(^{12}\)Abend, op. cit., pp 191-192.

\(^{13}\)Fradkin, op. cit., p 19. She says poison gas was used in the attack, but no other source mentions the fact, so she is probably in error on this point.
Chinese soldiery, and apparently it helped to increase their resistance to the Japanese forces which were poured into Shanghai in the following days. For once a Chinese army stood up to the Japanese assaults and held off the supposedly superior Nipponese for some days to come. Very little mention is made of the reactions of Shanghai's Chinese civilians to the attacks, other than the first terror-stricken flight of the survivors to the asylum of the International Settlement and to the comparative safety of the suburban and rural areas around Shanghai.

Although there were numerous air attacks during February 1932, both on Chapei and the Woosung forts, 16 miles further inland, where the Chinese defense front ended, none reached the severity of the raids of 29 January. Chapei was attacked from the air again on 5 February, but no account of casualties is given. On 6 February, Japanese planes bombed a flood refugee camp just outside of Shanghai. "Over fifty people were killed by these bombs or died of fright."  

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14 *Journal of the Royal United Service Institution*, LXXVII:392, May 1932. It was probably during this raid that the Oriental Library, with its valuable collections of ancient Chinese manuscripts, was destroyed. Snow says, "Many Chinese might have forgiven the murder of civilians, but after the bombing they became convinced that the Japanese were barbarians. To them it was incomprehensible that men could show reverence for nothing, even the originals of the Classics, which are as much a cultural heritage for Japan as for China." Op. cit., pp 218-219.

15 Stimson, op. cit., p 145. See also Geneva Research Center, op. cit., p 48.
Sir John Simon, head of the Yangtze relief commission, protested this bombing to the League of Nations saying "that besides the scores killed outright a number of ancien te women died from shock."\footnote{16} The camp had been clearly marked by Red Cross flags and its location was well known to the Japanese. The Tokyo government answered the protests by declaring that it deeply regretted the episode, "calling it a 'deplorable mistake.'"\footnote{17}

During a raid on Chapei on 11 February several Japanese bombs fell short of their targets and landed in the International Settlement. This had happened in an earlier raid, but without harmful results. On this occasion, however, the misaimed bombs hit the Wing On cotton mill, being used by American marines, in the American sector of the Settlement. Five Chinese mill workers, mostly girls, were killed and fifteen wounded in the building.\footnote{18} On 12 February, an eight-hour truce was arranged between the Japanese and the municipal authorities "in order to allow civilians and wounded to be removed from the fighting zone in Chapei."\footnote{19} During this period some 2,000 Chinese were evacuated from the "smoking

\footnote{17}Stimson, op. cit., p 145.  
\footnote{18}Ibid., p 142. See also Snow, op. cit., p 233; and Anderson, loc. cit., p 1710.  
\footnote{19}Geneva Research Center, op. cit., p 48.
ruins of Chapei, where they had somehow existed through the 17 days since the first Japanese shells and bombs set all Chapei afire.\textsuperscript{20}

Late in February, Japanese command of the air grew increasingly important as the Nipponese bombers harrassed the lines between Shanghai and the Woosung forts.\textsuperscript{21} On 24 February, a suburban area outside Shanghai was raided with 200-pound bombs by Japanese planes. An American military observer was astonished at the use of aerial bombs on this target which he deemed was more properly an objective for artillery shelling. He mentions no casualties, although he points out that the area bombed was a town, and presumably it had not been entirely evacuated.\textsuperscript{22} About the same time, a raid on the Cenju railroad station killed some civilians as well as large numbers of Chinese soldiers, the Japanese using both 250-pound high explosives bombs and incendiaries.\textsuperscript{23}

There were other bombings on Chapei and in parts of Jehol\textsuperscript{24}

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\textsuperscript{20} "China; Shanghai, China's Verdun," \textit{Time}, XIX:21, 22 Feb 1932.

\textsuperscript{21} "China: Japan Shanghaied," \textit{Time}, XIX:21, 29 Feb 1932. See also Snow, \textit{op. cit.}, pp 247-252, for accounts of this campaign.

\textsuperscript{22} \textit{Coast Artillery Journal}, LXXV:197, May-Jun 1932.

\textsuperscript{23} See Snow, \textit{op. cit.}, pp 231-232, for a vivid description of this raid.

\textsuperscript{24} Fradkin, \textit{op. cit.}, p 19, says "Japanese bombers raked the towns and cities of Jehol province with such dire effect that no living thing was left."
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during the months before the May armistice, but the greatest fury of air warfare was over by March. At the close of the "incident" the Chinese authorities reported that 8,080 civilians had been killed in the Shanghai area, 2,240 wounded, and 10,400 were missing. How many of these casualties resulted from aerial bombardment is not revealed, but whatever the total, added to the Chinese military casualties of 14,104 from all causes, the figure must have been somewhere in the neighborhood of 20,000 persons.

Chinese morale was not broken by the bombings, and Snow sums up opinion on this score by saying, "The graphic horror of the air raids increased the soldiers' hate and massed the Chinese people solidly behind the army." Japanese conduct in the assaults against the Chinese brought condemnation from the rest of the world. Especially the initial attack at Shanghai aroused the western powers to an almost universal denunciation of the Japanese. As Secretary Stimson remarks, "... the atrocities at Shanghai had occurred in the blazing publicity of a cosmopolitan city. Certainly in America the feeling excited by the bombing and burning of a crowded, unwarned city population was very strong. On that subject Japan had no defenders. None of the explanations put forth

25Snow, op. cit., p 252. For interesting figures on the monetary cost of the incident, see ibid., pp 252-254.

26Ibid., p 229. See also p 233 for further emphasis on this point.
by her carried for a minute with our press or our people." 27
The Geneva Disarmament Conference "had a timely object-lesson
of the destructive possibilities of that form of attack laid
at its very doorstep," for its 1932 meeting took place just
two days after the 29 January raids on Shanghai. It was
evident to the world leaders gathered in the Swiss city that
disarmament would be only partial until some means of regu-
lating air war against civilians could be found. 28 Japanese
protestations that the bombings in China were purely military
in character were not seriously believed by the nations of
the world. The Japanese soon retreated from the original
extreme position taken by Premier Inukai, who issued a
statement to the effect that:

"It is entirely untrue to say that any bombs were dropt
on the Chinese city of Shanghai or on the International
Settlement. The whole counter-attack was directed
exclusively against the attacking Chinese Army." 29

And even Admiral Shiozawa, who ordered the bombardment of
29 January, was able to joke about his humane attitude, as
reported by Abend in this fashion:

"Well, Abend," he began, with a forced smile, "I see
your American newspapers have nicknamed me the Baby-
Killer." He paused, in seeming embarrassment. "But

27Stimson, op. cit., p 146.

28E. P. Warner, "Can Aircraft Be Limited?" Foreign
Affairs, X:442, Apr 1932.

29"Japan Protests Her Innocence," Literary Digest,
CXII:13, 13 Feb 1932.
after all," he continued defensively, "they should give me some credit. I used only 30-pound bombs, and if I had chosen to do so I might have used the 500-pound variety."

But, on the whole, the Japanese found that the cost of bombing Shanghai — in terms of world opinion, Chinese resistance, and failure to achieve their objectives — was no joke. In 1932 a shocked world was able to exert pressure upon Japan. In 1937, with the Abyssinian and Spanish examples fresh in mind, Japan was not so susceptible to outside pressure.

The China incident of 1937 actually evolved into a part of the greater conflict which spread over the entire world in 1939-1945. However, it had a distinctive phase, from 1937 to 1940, when it was pretty well localized in and around Shanghai and other large centers of eastern China. The war began on 7 July 1937 with a clash between Chinese and Japanese troops at the Marco Polo bridge near Peiping, and the fighting was rapidly extended to other areas in the six or eight weeks following. At first, aerial activity was confined to reconnaissance, occasional attacks on troop movements, and desultory combat between the air forces of the two nations. But, ultimately it was inevitable that the use of aircraft against cities and villages would involve injuries to non-combatants and damage to civilian property.

30Abend, op. cit., pp 192-193. Shiozawa made these remarks in the course of cocktails aboard his flagship on the fourth day of the fighting at Shanghai.
Which side dropped the first bombs on civilian areas is not clear. On 25 July, Japanese planes attacked Chinese troops of the 38th Division at Langfang, and on the 28th bombarded Chinese cantonments south and west of Peiping, but no indication is given that civilians were involved in the casualties and damage which ensued. At Tientsin, on 29 July and for several days following, Japanese planes aided troops fighting to regain control of the Japanese Concession in that city which had been lost to the local Chinese forces. Again no mention of civilian casualties is made. During this bombardment at Tientsin Nankai University was destroyed. Japanese authorities asserted that Chinese troops had taken refuge in the University buildings. However, Hallett Abend who witnessed the bombings, says he "made a search of the ruins less than an hour after the bombing stopped, and found no Chinese uniformed corpses anywhere on the university grounds." The only account which says that many non-combatants were killed in the raid on Tientsin does not


32Ibid., p 192.

mention anything about the reactions of the citizens to the Japanese bombings.  

The first sustained Japanese raids on Nanking occurred on 15 and 19 August when Nipponese planes attacked the city repeatedly. According to one version, these bombings "caused little damage." But another report says that 100 were killed. "The effect," this statement continues, "was the opposite of that predicted by Douhet. Instead of the war 'no belong my pigin' it became intensely personal and increased their will to oppose the enemy." The anticipation of the dangers of the air attack was far worse, in the opinion of this observer, than the bombings themselves; "after the first bombings the people became somewhat contemptuous of the bombers." The Japanese disclaimed that they had any intention of bombing non-military objectives. In fact, one of the Japanese aviators, a lieutenant commander in the navy, who took part in both attacks on Nanking wrote:

Infinitely greater than any such considerations as the cost of planes and bombs stands the implicit order of our Imperial Navy never under any conditions whatever to bomb unarmed civilians or civilian communities. It is a matter of the honor of the Imperial Navy. And

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35 "Japan-China; Sailors Ashore," Time, XXX:21, 30 Aug 1937.

that, of course, is something more serious and precious than life.\textsuperscript{37}

A Twentieth Century W. S. Gilbert, after reading Lieutenant Commander Michitaka Hiramoto's words, might be forgiven if he remarked, "Never? Well, hardly ever."

Two days before the Japanese raids on Nanking, Nipponese marines began their landings at Shanghai. The next day, 14 August, Chinese planes attempted to bomb Japanese naval concentrations in the Whangpoo River, especially the 10,000 ton cruiser \textit{Idzumo}, flagship of the Royal Japanese Navy's China Sea Fleet. While avoiding the anti-aircraft fire from the ships, two of the Chinese planes dropped bombs on the International Settlement which lies along the bank of the river near where the Japanese ships were moored. Most accounts favorable to the Chinese say that the bombs were jarred loose in their racks by anti-aircraft fire hits and that when the planes manoeuvered to escape further fire, the demolition bombs fell from their racks.\textsuperscript{38} Less sympathetic sources suggested that the Chinese pilots had become rattled by the anti-aircraft fire and had released their bombs thoughtlessly in an effort to lighten their planes.

\textsuperscript{37}M. Hiramoto, "Our Little Visits to Nanking," \textit{Asia}, XXXVII:8, Jan 1938.

and get away. This belief was not common at the time. Other reports said that the Chinese had deliberately missed the Japanese fleet and had dropped the bombs on the International Settlement in order to arouse foreign sentiment against the Japanese. This was spiritedly denied by Madame Chiang Kai-shek. Whoever was to blame for the incident, the bombs killed 1,740 civilians and wounded 1,873.

One of the bombs landed on Nanking Road, the principal street of the Settlement, and a second close by on the Palace Hotel. John R. Morris, a United Press correspondent, described the scene from the hotel in this manner:

I ran out to the Nanking Road side of the narrow lounge, hurling overturned tea tables, chairs and prostrate forms of guests seeking the safety of the floor. Through the gaping windows on the Nanking Road I could see at least 50 persons writhing on the sidewalk and roadway. Three foreigners were trying to crawl over the bodies of dead Chinese...

Out in the street I saw a white woman crouched in the middle of Nanking Road assisting her daughter in giving birth to a child, while a hail of death pelted from the skies... Ambulance attendants pawed over bleeding figures in the street, selecting only those who had a chance to live.

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40 Time, XXX:20, 23 Aug 1937.

41 Hubbard, loc. cit., p 214. Fourteen foreigners were killed, 12 wounded. See Time, XXX:20, 23 Aug 1937, for the names of several prominent Americans killed by the bombings.

42 Time, XXX:20, 23 Aug 1937.
"Men and women were blown from the street through the windows of the 5th and 6th floors of the Cathay Hotel," according to an eye-witness. The lobby of the Palace was "filled with wounded and dying people," he continues.43

Just a minute later other Chinese bombs fell upon the "Great World" amusement park in the French Concession. The park was filled at the time with Chinese refugees and 450 of them were killed, 800 wounded, by the explosion.44 This was in mid-afternoon of 14 August, and by 18 August many of the dead had not yet been removed from the park, while signs of the carnage at the Cathay and Palace hotels still lingered to impress Abend who had just reached Shanghai.45

Nine days later than the unfortunate bombings by the Chinese planes a similar event occurred. Chinese bombs dropped on the 23rd in a crowded area near the center of the International Settlement resulted in a number of casualties.46 Mr. Abend was in the zone of bombing on this occasion and along with a companion was wounded, he slightly, the companion seriously. His colorful account of his

43 Alcott, op. cit., pp 238-239. See also Maund, loc. cit., p 600. He says that the foreigners "though calm, were clearly much unnerved." Ibid.


45 Abend, op. cit., pp 254-255.

The attacking plane was later recognized as a coverted Douglas airliner and apparently the bombs were meant for Japanese shipping in the river. Two bombs fell, but one did not explode. It was discovered imbedded in the concrete floor of an American naval warehouse and was identified as a 750-pound shatter bomb, made in Italy. Most of the casualties, many of them women and children, were persons trapped in the large Wing On department store near where the one effective bomb burst. Edward W. Beattie, Jr., an American correspondent who reached Shanghai in early October, apparently discounted the seriousness of the air attacks upon the city, at least as they affected the foreigners in Shanghai at that time. He writes:

Air raids were fun, then, because the Settlement was run by and for foreigners and therefore theoretically sacrosanct. Of course, there had been three mighty misaimed bombs (Chinese) which had killed a deplorable number of people (mostly Chinese). There were trench-mortar shells (Japanese) which seemed to overshoot astonishingly often and land on Settlement roofs, almost as if someone thought the Westerners ought to get a taste of cordite now and then. But all in all it was fun because when people aren't actually aiming at you, you don't really take guns and bomb fragments very seriously.

Amid these episodes of Chinese bombing their own peoples, as well as foreigners, the Japanese planes were

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47 See op. cit., pp 257-265.
48 Ibid., pp 264-265.
active over Shanghai. Carroll Alcott cites an instance of deliberate bombing by the Japanese when they attacked the Popular Grove Farms, an American enterprise near the city where choice Guernsey and Holstein milch cattle were raised for dairying by a Texan named McKennon. The farm was attacked on 16 August and again on the 20th, 26th, and later, although the establishment was well known to the Japanese military and flew the American flag. The Japanese said they had mistaken the place for a Chinese cavalry concentration camp. No mention is made by Alcott of civilian casualties on the farm, but the killing of cattle and damage to buildings are characterized by him as wanton and deliberate.50

A Japanese attack on Shanghai's Southern railway station on 28 August killed and wounded more than 300 Chinese civilians awaiting evacuation.51 And several raids in the last days of August caused further civilian casualties. According to one account of the Southern railway station raid, "The attacking airmen, obviously ordered to destroy the station, showed marksmanship almost as bad as that of the Chinese who bombed Shanghai the week before. Most of the bombs fell several blocks away on citizens jampacked in the section of Nantao containing the Bird Market, Willow Pattern


51 F. Oliver, Special Undeclared War, 1939, p 143. See also Federation of Chinese Cultural Associations, op. cit., p 17.
Tea House, other tourist haunts. At least 400 people, including 15 children under two years, were killed."  

Aside from the bombings within the International Settlement, both by Chinese and Japanese, the incident which created the widest international furor was the action of Japanese planes in machine-gunning and bombing the motor car carrying Sir Hugh Montgomery Knatchbull-Hughesson, British Ambassador to China, from Nanking to Shanghai on 26 August. Sir Hugh was badly injured but there were no other casualties among the party in the clearly marked British diplomatic automobile. The Japanese eventually apologized for the attack, which seems to have been deliberate. The British based their protest not on the limited grounds of offense to an accredited diplomat, but on the wider basis of unprovoked assault upon a non-combatant. Sir Hugh recovered, and the Japanese went on bombing foreigners.  

On 29 August the Chinese contributed another episode to international confusion when four of their planes dropped bombs on the American merchant liner S. S. President Hoover, 20 miles off the Shanghai coast, in the mistaken belief that the well-identified ship was a Japanese troop transport.


53 There are good accounts of the Knatchbull-Hughesson incident in *Time*, XXX:18, 6 Sep 1937; Federation of Chinese Cultural Associations, op. cit., pp 16-17; Hubbard, *loc. cit.*, pp 306-308; and Oliver, *op. cit.*, pp 141-143.
One member of the crew of the Hoover was killed and several crewmen and passengers were injured. The Chinese authorities admitted the error and apologized for the ineptitude of their fliers.54

Throughout September there were Japanese air attacks on the areas surrounding Shanghai. These raids resulted in relatively few casualties since, "after five weeks of bloody experience Chinese had finally learned that the streets are no place to be during an air raid."55 In October the Chinese and Japanese both dropped bombs into the International Settlement, but casualties were light.56 Late that month Shanghai underwent 70 hours "of the heaviest fighting and bombing . . . all completely indecisive," the city had seen during the war.57 For a month, the suburb of Tazang, just north of the city, was bombed and shelled by the Japanese as they advanced against Shanghai from several sides. Early in November the Chinese set fire to the Chapei district in an effort to stem the Japanese progress.58 Finally, on

54 Time, XXX:19, 6 Sep 1937.

55 "Fall of Chouchow," Time, XXX:14, 27 Sep 1937.


58 "War in China: 'Never Anything Greater,'" Time, XXX: 18, 8 Nov 1937. See Beattie, op. cit., pp 18-19, for accounts of Japanese raids on Chapei during this period.
8 November, the Japanese forces occupied Shanghai and that phase of the war was over.\textsuperscript{59}

In just three months of warfare around Shanghai the greatest number of casualties among the civilian population as the result of air attack had been caused by the Chinese themselves in the two "accidental" bombings of 14 and 23 August. No total figures are available for deaths outside the International Settlement, but it seems pretty accurate to say that only one Japanese aerial bomb landed in the Settlement between mid-August and the fall of the city in November. This bomb was dropped, either deliberately or by accident, "inside the defense sector manned by the American Marines," hit a street car and killed 13 Chinese passengers.\textsuperscript{60}

While the fighting for Shanghai was in progress the Japanese bombers were more active over other Chinese cities.\textsuperscript{61} Nanking, the capital, received the brunt of aerial attack in the autumn of 1937, with frequent raids from late July onward. On the 27th of August, Nipponese planes "plunked incendiary bombs on the capital's poorer districts. Three times they


\textsuperscript{60}Abend, \textit{op. cit.}, p 266. He says two bombs were dropped on this occasion, aimed at a Chinese warehouse on the north bank of Soochow Creek. The Japanese pilot's aim was poor; one bomb fell in the creek, the other near the street car. \textit{Ibid.}, p 266.

\textsuperscript{61}Oliver, \textit{op. cit.}, p 143.
returned, until the more congested quarters of the city were in flames. One hundred and fifty coolies, trapped in squalid mud huts were burned alive. 62  No further raids on Nanking took place until 19 September when 40 Japanese planes bombed the capital, but inflicted little damage. 63  On the same day the Japanese Vice-Admiral Hasegawa notified foreigners in Nanking that beginning 21 September the Japanese Air Force would "take offensive measures against the Chinese forces and establishments pertaining to military activities in and around Nanking," and warned all foreigners to seek safety "farther up the Yangtse River." 64

On 22 September the threatened mass attack occurred. In two raids, of 50 and 15 planes respectively, bombs were dropped indiscriminately upon the city, inflicting severe damage and causing some 200 civilian casualties. 65  Especially hard hit were the Chinese refugee camps along the riverside. In one account of these raids it is said that "Chinese too

62 Time, XXX:19, 6 Sep 1937. See also, Hubbard, loc. cit., p 236.


64 Hubbard, loc. cit., p 236. "... Japan prepared for a mass bombing raid aimed at the total destruction of Nanking with a dress rehearsal in which the city was bombed mercilessly for two hours..." Time, XXX:14, 27 Sep 1937.

young, too old, too poor, too sick or too ignorant to have left Nanking were slain in slews" by Japanese bombs dropped on the railway station and the Hsiakwan slums. The report goes on:

Japanese bombs wrecked and ignited their miserable huts, blew them to bits, seared the living, cremated the dead. Instead of panic or disorder, the reaction of Nanking's wretched poor seemed to be either to cower bemused and trembling or to rush into the streets with yells, curses and fists madly shaken at Japan's war birds. 66

Nelson T. Johnson, the American Ambassador to China, in telling of the Nanking bombings concluded that "bombing from the air does not win a war." However, he admitted that such attacks disrupted ordinary civilian pursuits. "Reconstruction attempts," he said, "were not of a permanent character; they were not made with any expectation that the same thing wouldn't happen again the next day." 67

The following day, the 23rd, Chinese planes turned back another Japanese attempt to attack the capital en masse. "It was plain as a pikestaff that Japan's airmen had failed either to break Chinese morale . . . or to win mastery of the air over the capital." 68 But on 25 September, 80 Japanese planes reached Nanking, their bombs killing and wounding some 700

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67O.P.Spaulding, Ahriman, 1939, p 92.
68Ibid., p 18. See also Hubbard, loc. cit., p 237. Hubbard says: "In general . . . thanks to the extent of the open spaces within the walls, the devastation caused was much less that had been expected, and if the Japanese hoped to
Chinese. Among the casualties were 150 patients and 200 staff members and others killed by two raids upon the plainly marked Central Rockefeller Hospital in Nanking. Madame Chiang Kai-Shek asserted, "I have no hesitation in saying that this was the most stupid and most brutal act of modern warfare," in accusing the Japanese of deliberately bombing the hospital. The Japanese Government were evidently alarmed at the universal condemnation aroused by Admiral Hasegawa's proclamation and the subsequent air attacks. As a probable result:

Attacks during the next six weeks were confined to military objectives, and the casualties among civilians and damage to private property which now occurred could reasonably be ascribed to erratic aiming. There were, it is true, several more mass air-raids on Nanking between the 7th and 11th of December, but these took place on the eve of the capture of the city by the Japanese forces, at a time when it was full of Chinese troops. Generally speaking, the representations of the Powers apparently had the effect of making Japanese airmen avoid dropping bombs in the central areas of cities and confine their attacks to the outskirts, where military establishments were normally situated, although there was an exception to this in the case of a raid on Canton in the month of November, when the residential districts shatter the moral of the Chinese Government and populace, they were grievously disappointed, for, so far from being reduced to despair, the Chinese showed signs of being encouraged by the severity of the losses which the raiders suffered from pursuit aeroplanes and from the anti-aircraft defences."

P 237. Italics in original.

69 Hubbard, loc. cit., p 237; Oliver, op. cit., p 145; and Time, XXX:18, 4 Oct 1937.


71 Hubbard, loc. cit., p 237.
of the city were subjected to another deadly bombing.72

On 9 December Japanese planes which had been bombing
Nanking dropped leaflets calling upon the Chinese commander
to surrender the capital. When no reply was received to the
Japanese ultimatum, the attacking forces closed in on the
city.73 On 14 December they entered Nanking and further resist-
ance against the invading Japanese in that area ceased. During
the course of the war, Nanking had been visited by approxi-
mately 1,200 bombers which dropped 500 tons of explosives,74
but there is no indication that the raids, of themselves,
led directly to the capitulation of Nanking, or that the
civilian morale was adversely affected by the bombings. The
plundering, burning, assault, rape, and other crimes in which
the Japanese soldiery indulged after the capture of Nanking
shocked the world, but they had no discernible connection
with the conduct of the capital's civilians during the air
raids, nor did the bombing of the USS Panay on 12 December.

Canton, important sea port on the south China coast, was
the next principal target of the Japanese bombers. From 31
August onward the city had been attacked frequently. In raid

72Ibid., p 239.

73Ibid., p 223. See also Powell, op. cit., p 313; and
L. S. C. Smythe, War Damage in the Nanking Area, 1938, passim.

74H. Hanson, "Humane Endeavour," 1939, p 151.
after raid, "The town suffered severely, and there was a great destruction of human life in its narrow crowded streets. ..." On 23 September, a raid killed 3,000 civilians, and one observer remarked, "whether these raids are due to the adoption of a deliberate policy of terrorism against the civil population or whether the pilots, unwilling to face the anti-aircraft barrages and defending aircraft, discharge their bombs at random, is not easy to say." Following this raid, "Canton censorship had to be clapped on tight and apparently there was some panic. Dispatches dribbling through reported 3,000 Cantonese killed, the worst air butchery of the war, and thousands of Cantonese roaming the streets, wild-eyed and deranged with terror." In November there were again severe attacks, with bombs falling on residential areas of the seaport city.

With the opening of the new year the raids on Canton increased in intensity, the city being "furiously bombed" in January 1938. But the heaviest attacks against Canton took


76 Journal of the Royal United Service Institution, LXXXII:865, Nov 1937. See also Young, loc. cit., p 374, 3 Nov 1937.

77 Time, XXX:19, 4 Oct 1937.

78 Hubbard, loc. cit., p 239.

79 "War in China: Chaos into Ruins," Time, XXXI:16, 10 Jan 1938.
place in May and June 1938.\textsuperscript{80} Beginning in late May, Japanese bombers killed 1,000 and wounded 1,500 in a series of raids.\textsuperscript{81} For twenty days following the raids of 28 May the Nipponese methodically attacked the city almost daily.\textsuperscript{82} In 18 raids they dropped 1,200 bombs — 150 tons of explosives — resulting in total casualties of 9,000.\textsuperscript{83} A British doctor, W. W. Cadbury, said of the 6 June raid which killed more than 1,000, that it was "the worst massacre in this or any other war." Another Britisher, H. V. Halward, described the scenes of the 30 May and 1 June raids with great vividness.\textsuperscript{84} In these and other accounts of the heavy raids of the early summer it is evident that the population of Canton was being subjected to even more terrific punishment than had been visited upon the people of Shanghai and Nanking the previous autumn. "Rescue workers, handkerchiefs over their nostrils, scrabbled in the ruins to


\textsuperscript{81}"War in China; Setback," \textit{Time}, XXXI:18, 6 Jun 1938.

\textsuperscript{82}"War in China: On to Chicago," \textit{Time}, XXXI:18, 13 Jun 1938.

\textsuperscript{83}Hanson, \textit{op. cit.}, p 151. He says, "The death toll was exceptionally high because Japanese planes were flying from carriers only 100 miles away, making warnings difficult. At least seven of the raids came at night, guided by moonlight and flares ignited by spies on the ground." P 151.

\textsuperscript{84}S. Hsu, \textit{A New Digest of Japanese War Conduct}, 1941, pp 232-238. See also dispatch of H. Tiltman to \textit{North China Daily News}, 3 Jul 1938, reprinted in Hsu, \textit{op. cit.}, pp 238-240.
drag out the injured, could give no account of the total casualties," which a low estimate put at 3,000 dead, 7,000 wounded. "Terror-stricken thousands fled to the safety of the paddy fields and their 'lucky hills'. . . . Thousands more surged up to the gates of Hongkong."85

Further raids on Canton took place in August. "The civilian casualties ran into thousands, great havoc was wrought upon the city and half the population fled."86 The Japanese entered the city on 21 October 1938, completing the conquest of the three major cities of China in a little over a year of fighting.

Numbers of other Chinese cities and towns were attacked from time to time in the course of the conflict. Without attempting to give a complete chronological listing of these bombing raids, a few deserve more than passing reference. Chungking, the interior capital, was raided on 17 March 1938 as retaliation for a raid by Chinese planes upon the Japanese island of Formosa.87 Chungking had been attacked before, but this was the heaviest raid directed against it.88 In May 1939, 27 Japanese planes raided the city in the "most disastrous single bombing raid in military history" up to that time. The planes dropped 108 bombs, destroying 20% of the city, and


86 Hubbard, Survey . . . 1938, p 515.

87 See p 138, below.

killing or wounding 3,750, mostly civilians. On 6 and 7 July 1939 additional attacks caused more damage and brought protests from the United States to the Japanese government. By 31 August 1940 Chungking had undergone 36 raids in the months just previous, with casualties of 1,800 killed and 2,500 wounded. According to an account of the 31 August raid, written by E. A. Broderick, 70,000 people had been left homeless by the series of raids on the city and the fire caused by this latest attack destroyed 8/10ths of the town.

Hankow, between Shanghai and Chungking, was attacked a number of times, with especially severe raids on 27 March 1938, when 50 Japanese planes caused considerable damage and heavy casualties. Soochow, west of Shanghai, was subjected to punishment by 700 bombs before the Japanese captured the town in November 1937. The farming village of Hungjao, in the Yangtse delta, was twice destroyed by Nipponese planes in 1939, and again in 1940, although the survivors of the

89 Hanson, op. cit., p 151.
92 Ibid., pp 241-245.
bombings laboriously rebuilt the village after each raid. The town of Kueilin underwent 30 raids by a total of more than 500 Japanese planes but all the bombing succeeded in destroying only 10% of the town. Hainan, the large island 300 miles southwest of Hongkong, was occasionally bombed. On 29 September 1937, five bombs dropped on the most crowded quarter of the village of Chingyuan, north of Canton, killed 200 civilians and demolished scores of homes. Changchow, in Kiangsu province, was bombed on 13 October 1937, with casualties of 30 killed and 80 wounded. Two thirds of the historic town of Shaosan, just east of Hangchow, was destroyed on 30 November 1937 and one report states, "The people that remain are stunned, for the black shadow of fear haunts them, and they live in dread of a return visit of these terrible engines of death which ride in the wind." The list of such attacks could be prolonged, but the examples are all similar — destruction, loss of life, and injury visited

95 Alcott, *My War with Japan*, p 263.
96 Hanson, *op. cit.* , p 151.
99 See Hsü, *op. cit.* , pp 246-247, for vivid details of this raid.
100 Ibid., pp 247-248.
During the course of the fighting, Chinese planes made two appearances over Japanese territory. On 23 February 1938, a number of Chinese aircraft, estimated from seven to thirty, flew over the island of Formosa and, among other targets, hit the capital city of Taihoku. Casualties among civilians amounted to approximately 40, and some material damage was done by the bombs. In May of the same year two Martin bombers flew from Chungking to Kyushu Island, southernmost island of the Japanese home group, on the 20th. They apparently carried no bombs and dropped only propaganda leaflets on the Japanese port and naval bases, as well as on the city of Nagasaki.

From the beginning of hostilities in July 1937 until 31 March 1940, the estimated total of air raids by the Japanese against civilian populations in China is given as

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101 Hsu has a great many such incidents described and documented, see especially pp 248-265.

102 Journal of the Royal United Service Institution, LXXXIII:410, May 1938, says 7 Chinese planes killed 40 persons; "War in China: 'Invigorated,'" Time, XXXI:17, 7 Mar 1938, says 12 planes made the raid and killed 8, wounded 29; Hanson, op. cit., p 156, says 30 planes were used, and does not mention any casualties.

103 "War in China: On to Chicago," Time, XXXI:19, 13 Jun 1938. See also Hanson, op. cit., p 157. Although the Chinese planes did not go near Tokyo there was some fear in the Japanese capital that the city might be bombed. Two years earlier, Tokyo had put on an elaborate air raid precaution drill as a memorial to the earthquake victims of 1923. See R. S. Rabbitt, "Danse Macabre," Asia, XXXVI:617-618, Sep 1936.
9,786. More than 142,000 bombs were dropped by 43,000 planes. About 51,000 civilians were believed killed by bombings and 65,000 wounded during this period.\textsuperscript{104} For all the accounts of incidents of bombing from the air which have been described in print, there is little mention of the effect of this type of warfare upon the morale of civilians. Such writers as Haldane and Spaight give the Sino-Japanese War only incidental attention.\textsuperscript{105} From a few expressions of opinion on the subject there is recorded here a selection which will serve to conclude this chapter.

General Spaulding, in discussing the question of what an air raid can accomplish, says:

From China we have few reliable reports, but it would appear that although cities have often been bombed the results have been inconsequential unless some real military objective was found, such that its destruction tended to have an actual effect upon the course of the campaign. Little effect upon morale was noticeable.

This evidence may perhaps be discredited by the Douhet school, on the ground that the Chinese population is so vast that anything more than a local panic would be hard to start; also that the mentality of the Chinese is not the same as that of Westerners. Perhaps this morale did not suffer so severely from the bombing, because it had already been broken for centuries. . . .\textsuperscript{106}

To Mr. Davy, one of the most important conclusions, "from the military standpoint, was that bombing, however savage, of

\begin{itemize}
\item \textsuperscript{104}Hsu, op. cit., p 265.
\item \textsuperscript{105}Haldane, op. cit., pp 57-58; and Spaight, Air Power and War Rights, 3rd ed., pp 255-256.
\item \textsuperscript{106}Spaulding, op. cit., p 83.
\end{itemize}
civilian communities does not produce a decisive moral effect or even the sort of effect desired by the attacker.\textsuperscript{107}

Commenting upon the Shanghai operations of 1937, an English writer noted that, "The people in the villages became thoroughly anti-aircraft minded, and went into hiding on the approach of aeroplanes."\textsuperscript{108} Several comments appear to the effect that aerial bombardment stiffened the resistance of the Chinese people, so, as one writer remarked, "Japan, on each occasion of the sort, is merely making her task more difficult... And as for the population which suffers under the infliction, the million on million of Chinese, they are so accustomed to calamity and have so often been driven to the shambles that, although their capacity for endurance is limitless, they possess no war spirit to break."\textsuperscript{109} But this somewhat dogmatic statement is challenged by others, for example J. R. J. Macnamara, a British military writer, who says, "The Japanese aeroplanes united her four hundred millions many times as rapidly as could have any unifying movement within. Her people stand united now to resist the Japanese aggressor to the last.

\textsuperscript{107} Davy, op. cit., pp 119-120.


\textsuperscript{109} L. E. O. Charlton, United Services Review, LXXVII: 7-8, 3 Mar 1938.
man, the last woman, and the last child.\textsuperscript{110}

In a review of the first months of the conflict, A. M. Nikolaieff writes:

It is doubtful that these raids on inhabited centers attained the psychological effect for which they were undertaken, at any rate, their results, not unlike those in the Spanish civil war, were not important as far as the opponent's morale was concerned. On the contrary, they may have even contributed to the stiffening of morale.\textsuperscript{111}

These views are seconded by the Italian writer, Bronzuoli, and seem to be held by the majority of commentators upon the subject.\textsuperscript{112} As Bruce Bliven remarks: "There has been aerial bombardment of cities on a great scale, but it has not, as was prophesied, at once destroyed the morale of the population and forced an abject surrender."\textsuperscript{113}

While it may seem somewhat arbitrary to limit the discussion of aerial bombardment of civilian populations in China to events before the fall of France in the spring of 1940, that episode would appear to mark a turning point in the scope of activity exercised by aerial warfare. Although


\textsuperscript{112}Bronzuoli, loc. cit., p 397.

the sack of Warsaw had already occurred in the autumn of 1939, the bombings of Rotterdam, London, Berlin, and later of Japanese cities were yet to come. And the experiences of the Spanish Civil War most properly should be examined as the last examples of sporadic aerial attacks on cities before the mass bombings of World War II began.
NOTE ON PART II

Because of binding problems, this study has been divided into two sections. Chapters V - VII are to be found, together with the Bibliography and Index, in Part II which forms a separate volume.