XI

Terror by Fire

FOR more than three years my small nephew Kozo Ishikawa, who was about five years old when the war began, held an unshakable faith in Japanese victory. To his small world (it was not much narrower in its horizons, at that, than was the adult Japanese domain) it was unthinkable that the Emperor's armies could suffer defeat or that the Japanese Navy should endure any fate other than glorious victory.

After his home was burned to the ground during a B-29 raid, destroying almost every familiar material thing that had made up his existence, he told me with great gravity: "We cannot beat the B-29." The psychological effect of the loss of his home went deep. He had been one of the happiest and most carefree of children. He became thoughtful and serious and it was seldom that he laughed. He became ill and died shortly after the war was over. A nervous breakdown, the doctor called it.

The B-29's had brought the war to the Japanese people in a real and personal sense, and each man had begun to form his own opinion on whether Japan was losing or winning. My nephew's experience was repeated many thousands of times in every part of Japan. Toward the end, whenever two or three men gathered in a city such as Tokyo, at least one among them would have lost his home in the air raids. To each family that watched its home and belongings go skyward in a rush

of smoke and flame, the news from Okinawa, true or false, meant little. For them, their personal war was already lost.

Exclusive of Korea and Formosa, Japan had a wartime population of 73,114,308, of which about 10,000,000 were abroad in the Army and Navy, leaving about 63,000,000 at home. American raiders dropped an estimated 117,256 high-explosive bombs and 4,760,041 incendiaries on Japan during the war, for a total estimated officially at 4,877,297 missiles, or about one for every 15 people in Japan.

Official casualty estimates, which I am certain were far below the actual casualties because of the Government's policy of concealing bad news, even within official agencies, listed 280,000 killed and 420,000 injured. Competent unofficial estimates, probably far nearer the truth, which will never be known with accuracy, would place the death toll for two raids alone almost as high as the number of the official total estimate for the war. These two raids were the March 9–10 Tokyo fire raid and the atom bombing of Hiroshima.

Official figures showed 2,300,000 homes totally destroyed during the war, and 950,000 others about half-destroyed. An estimated 9,500,000 persons were made homeless. Of 206 cities in Japan, 81 were destroyed or badly damaged. In all, more than 120 cities and towns in Japan proper felt the weight of Allied air power.

Of the six largest cities in Japan, 50 per cent of the homes in Tokyo, Kobe, and Yokohama were destroyed; in Osaka and Nagoya, 40 per cent. The percentage for the sixth, Kyoto, a center of shrines, monuments, and art treasures, was six tenths of 1 per cent.

Of the middle-sized and small cities, it is unofficially estimated that the hardest hit of all was Aomori, in the extreme northern part of Honshu, where there is a connecting link with Hokkaido, northernmost of the main islands. About 90 per cent of Aomori was destroyed. Official figures list the percentage of destruction for Hamamatsu at 80 per cent; Shizuoka, 70 per cent; Toyohashi 60 per cent; Yokkaichi 60

per cent; Kawasaki, 50 per cent; and Kagoshima 80 per cent. Destruction at Hiroshima was close to 100 per cent, and at Nagasaki, the site of the second atom bombing, the figure was somewhat smaller.

Such statistics are difficult to translate, perhaps, for one who has never undergone the stark terror of an air raid. There is no Japanese, however, who does not understand them in terms of suffering and personal loss. Within our small organization at Domei alone several staff men were killed and several others lost their families. More than half of the staff were made homeless. It became almost embarrassing to enter into casual conversation on the street if your own home had not been burned. I often felt apologetic because my house had survived the raids. "It will be my turn next," I was in the habit of saying by way of apology for my relative good fortune.

The case of a thirteen-year-old errand girl in our office was typical of many. She was a bright, likable girl, and after the Tokyo raid of March 9 we were worried about her safety, because she did not return to work for several days. When she did appear, she told us, tearfully, of the fate of her eight brothers and sisters. Her mother was dead and she had been adopted by a relative, with whom she was living. Her brothers and sisters were living with their father in the Honjo district, which was heavily hit in the big March raid. As the flames swept through the district, the father gathered his eight children together, each of them carrying a few prized possessions, and led them to refuge in the near-by primary school, where several hundred of the neighborhood had sought shelter. Just as they reached the school building, the father remembered that no one had brought the family's prized picture of the Kannon Goddess. This was a most valuable property, because the likeness of the goddess was thought to have great healing power in the event of any illness in the family. Telling his brood to await his return, the father hastened back home to rescue the goddess's picture. By the time he reached the school building a second time, it had been enveloped in roaring flames. All who had sought shelter there, including the father's eight children, perished within a few minutes. No rescue was possible.

The school was one of 141 elementary schools destroyed in the Tokyo air raids. More than 200 other Tokyo schools were damaged. Four thousand schools were destroyed in all Japan. This figure is not cited to imply, as did Japanese propagandists during the war, that American air-raid damage was confined chiefly to schools, hospitals, and shrines. Such damage was inevitable, merely incidental to the primary and unmistakable military objectives achieved. Actually, the bombings hit Japan's military machine where it hurt.

Statistical information on the effect of the raids is still incomplete and inaccurate, but some examples can be given from official reports. The output of the marine industry, upon which the people of Japan have traditionally depended for the bulk of their protein, was cut 40 per cent below the prewar level, largely owing, directly or indirectly, to aerial attack. Consumption of ammonium sulphate, the most important fertilizer used in Japan and essential to full food production, dropped from a prewar figure of 1,143,000 metric tons per year to less than 300,000 tons in 1945, because of war damage and lack of raw materials. The production machinery industry was cut to about 73 per cent of normal, and the power-producing machinery industry dropped to 28 per cent of its prewar level, partly because of conversion to munitions manufacture. About 88 per cent of the nation's precision machinery industry was left intact.

Although the automobile industry did not sustain major damage from the air, some key plants, such as those producing piston rings, were destroyed, and production suffered heavily as an indirect result of the raids. Production of railroad rolling stock was down 28 per cent for locomotives, 30 per cent for passenger and electric cars, and 18 per cent for freight cars. Of 25 Government railroad repair shops, 13 were damaged.

Fifteen of 37 large flour mills were destroyed, and the production of wheat flour decreased by 50 per cent.

There was a major decline in electrical goods manufacturing in 1945, partly as a result of bomb damage and partly because of dispersal of plants to avoid bomb damage. It was estimated that dispersal of the plants caused a greater production loss than the bomb damage itself. At war's end it was estimated that at least half of the plants manufacturing signal communication equipment would have to be rehabilitated to restore full production.

Fifty per cent of the nation's telephone instruments were destroyed, as were several large telephone exchanges. In Tokyo there were only 50,000 telephones left out of 200,000 when the war started. About 30 per cent of the communications cable manufacturing capacity of the country was destroyed at the same time. Manufacture of civilian radio receivers was cut from 1,178,322 sets of all types in 1941 to 72,864 sets in 1944.

These are only a few of the examples that could be given of how the air raids crippled Japan's war potential, striking day after day at vital spots in every corner of the country. Toward the last there was an attack in some part of Japan almost every day. The saturation point had been reached in most of the large cities, and the principal effort was directed at the middle-sized and smaller urban areas. Those who had fled there as refugees were forced to undergo the same ordeal all over again. There is no way to estimate the full psychological effect of this Allied strategy in shifting the emphasis of its attacks to widely separated areas. There could no longer be a sense of security anywhere, and the constant feeling of fear that had destroyed the sleep and disturbed the work of big-city dwellers day after day spread to all parts of Japan. The raids contributed materially to the shortage of food in cities. Workers had to go to the country in the daytime to obtain food and made their way homeward at night in peril of their lives. Attendance at war factories was thus sharply reduced.

The closing months of the war were made the worse by the swarm of smaller planes from Iwo Jima and from carriers. Kyushu was particularly vulnerable. Naval task forces were free to strike at any point they liked with both bombs and shells, and they had plenty of air strength to prevent effective Japanese interference.

Travel by train became increasingly dangerous. I was traveling frequently between Tokyo and Chiba, where my family had gone. On one occasion the train I was riding in had scarcely pulled out of the station at Chiba city when a bomb fell near by. Shutters were pulled down to avoid flying glass, and passengers crawled under overturned seats. The attack passed without damage to the train, but other trains were not so fortunate. There were frequent direct hits on the Tokaido main line. Many persons were killed when a train was hit at Hiratsuka. So many people knew of this incident that the newspapers were permitted to publish an account of it.

Another of the most important results of the raids was the damage to external lines of communication. In addition to a heavy toll of ships from bombings, aircraft strewed mines throughout Japan's home waters. Trade routes to China and the south were cut, and even the Korea Strait, last link with the Asiatic mainland, was seriously threatened and on many days was effectively severed so far as movement of supplies was concerned.

After the Doolittle raid of April 18, 1942 the Japanese homeland had had a recess from bombing, which lasted more than two years. Then on June 16, 1944, B-29's based in China bombed the Yawata steel plant in northern Kyushu in a raid that merely hinted at the holocaust to come.

In the interim the Doolittle raid almost had been forgotten by the Japanese public, which had come to regard it as a propaganda stunt. The Government, realizing the deadly danger from incendiary bombing because of the paper-and-wood construction of most Japanese homes, was not so complacent. The Army kept up its reminders that raids were

possible at any time from American bases in China or from carriers, and there were constant nights of practice blackout and air-raid drills. Almost at the same time with its warning, however, the Army could not resist boastful statements that it would not permit enemy planes to reach the skies over Tokyo, so the warning was not taken too seriously.

Japanese air-raid defense was divided into three parts. The entire civilian population was mobilized through Neighborhood Associations as one of the three. Each association was organized to protect its own houses and guard against the spread of fire. The association received and distributed instructions for fire-fighting and disposal of incendiary bombs, construction of air-raid shelters, and evacuation procedures. Whatever success was had in passive air-raid defense was due largely to these associations, which did their best, at least in the beginning, against overwhelming odds. Thousands of home-owners died heroic deaths because they remained at their posts until the last in a vain effort to halt the spreading flames. In the event of an incendiary raid the women and children were permitted to take shelter, but the men were supposed to remain in their houses or near by in the open to dispose of any incendiary bombs that might fall. As a result of these instructions, fatalities from direct hits were not uncommon. I escaped death by a hair's breadth during one raid, while I was standing in my garden on a warm May evening. I felt a sudden rush of air in the darkness, heard a swift rustling sound and a heavy thud. Part of an incendiary bomb case, a metal plate about three feet long and half as wide, had landed no more than an arm's length away. I think I moved my body instinctively at the right moment, perhaps saving my life.

Equipment for fighting fires was extremely primitive. In each home there was supposed to be kept a grappling hook, a broom, a bucket of sand, a shovel, and a barrel of water. There was a shortage of many of these articles, but nearly everyone managed to have the barrel of water on hand, and

in the summertime this became an ideal breeding-place for mosquitoes.

Particularly in the lower portion of Tokyo, construction of air-raid shelters was very difficult because they could not be dug more than a few feet deep without encountering ground water. In any case, the shelters were likely to fill up with water after a rain, and they seldom dried out completely. Every home had some type of dugout in its yard, perhaps two—one for family treasures and the other for protection of the members of the family. These were usually very crude and unsatisfactory because of lack of materials. Except for a few public shelters, of which there were never enough, concrete construction was out of the question. Often timbers were obtained by cutting down trees in the yard. Some tore down portions of their homes to obtain timbers and planking. At first many householders contented themselves with open trenches, but later they were encouraged to cover them with planking and dirt. At best the average shelter was not much better or more comfortable than a front-line foxhole, despite the fact that the people of Japan had several years in which to make their preparations.

In the later stages of the air war these small home shelters were not widely used because of the number who had been suffocated in them from lack of oxygen or simply roasted alive. This broke down the basic defense system, and instead of remaining to fight the fires, residents of a threatened area would flee to open spaces such as parks or vacant lots, or to large shelters dug in the sides of hills.

The second main element of air-raid defense was the fire department, which was utterly inadequate to cope with the mass raids. Much of the fire-fighting equipment was destroyed by the first big raids, and in any case the firemen seldom ventured out to fight the flames until after the raids were over, when it was far too late to furnish effective protection. Besides lacking equipment, the fire department was additionally handicapped by the partial destruction of the water

supply. Since, after a raid, areas adjacent to those destroyed went without gas, water, or electricity for long periods, to obtain enough water for drinking was an acute problem, let alone obtaining a sufficient supply for fire-fighting.

Other air defense activities were the responsibility of the Army, which divided them between various corps, each of which was responsible for a geographical area. The Eastern Corps was responsible for defending Tokyo and the surrounding Kwanto plain. Tokyo was heavily defended at first by anti-aircraft, which did its share in contributing to civilian casualties, by fighter planes, and by searchlight batteries. As a result of attrition from raid damage, Tokyo's defenses grew weaker and weaker, so that toward the end there was relatively little anti-aircraft fire, and fighter defense was almost entirely driven from the skies. Outside Tokyo, there were many cities entirely without anti-aircraft defenses.

The Army supervised the air-raid warning system. Radar devices in the Bonin Islands ordinarily gave warning of approaching raiders about an hour in advance. The alert was sounded by means of sirens and factory whistles—a long, steady note for the first warning, a series of short blasts for the actual raid, and another long, steady note for the all-clear. There were frequent signs of confusion in the operation of the system. On some occasions enemy raiders attacked immediately after the all-clear was sounded. At other times the warning was not sounded until the planes were already dropping bombs. Frequently the radio continued to broadcast instructions and warnings after an alert had been sounded, although this undoubtedly helped to guide the enemy raiders.

One of the occasionally successful defense tactics of the Eastern Army Corps was the building of camouflage fires in the mountains, or the placing of camouflage lights in wilderness areas to simulate a city. Sometimes these fires and lights drew heavy air attacks. In at least one instance, however, the tactic was a complete failure. A huge fire was built on a mountain near Ota, in Tochigi prefecture, where an important airplane factory was located. The raiders disregarded the fire and struck unerringly at Ota, heavily damaging it.

It was evident throughout the war that the American raiders had highly accurate information as to the location of factories and military installations, even after a belated effort was made to disperse many industries among the mountain areas. The Americans seemed to have no difficulty in locating important factories even though their location was unknown to most Japanese. Undoubtedly this information was obtained chiefly from aerial scouting. One day I was shown a photo map that had been taken from an American plane shot down by Japanese defenders. The map showed Tokyo in great detail, although it must have been photographed from a very high altitude, and such objectives as the Nakajima aircraft factory in the northwest part of the city were circled.

As part of the air defense program Japan's people were taught a song to bolster their courage:

> *Why should we be afraid of air raids?*
> *The big sky is protected with iron defenses.*
> *For young and old it is time to stand up;*
> *We are loaded with the honor of defending the homeland.*
> *Come on, enemy planes. Come on many times.*

The Kyushu raid sent a ripple of apprehension throughout the main islands of Japan, but Kyushu is a long way from Tokyo, and it was still possible to view the terrors of air warfare in a detached and objective manner, like the battles at the front. The Army insisted that mass air raids could not be carried out over a sustained period until the Americans obtained bases much closer to the homeland. Consistently they minimized B-29 production possibilities in announcements to the people, although privately they admitted considerable concern over the prospect that America might be able to produce such a long-range giant in large numbers.

The fall of Saipan in July 1944 and the construction of an air base there was the prelude to full-scale aerial warfare over

the home islands, but it was not until November 1 that residents of Tokyo had their first look at an enemy bomber. On that date, at about one p.m., a small number of B-29's soared lazily over the capital on a reconnaissance mission, but dropped no bombs. This was repeated once or twice before the first real raid on the Tokyo area, which took place shortly after noon on November 24, 1944. About seventy B-29's took part in the raid, dropping principally incendiaries. Some bombs fell inside the capital, but mostly they were aimed at military targets in outlying areas on the Kwanto plain. Bombs were also dropped in the Tokai district, near Nagoya, and in the Kinki district, near Nara, during this raid and one that followed it on November 27.

Air-raid discipline was extremely poor in the early raids because so many residents wanted to see what was happening. On the occasion of the first raid a group of us at the Domei office ran into the street to watch. In my excitement it did not occur to me to wear a helmet, although anti-aircraft guns were barking throughout the area, and flak bursts were filling the sky. There were only a few clouds and we could see the attacking planes very high in the sky, so high that they looked like toys, no more than a foot or two in length. Fire had broken out near the Imperial Hotel, just across the street from the Domei office, and we went as near as the police lines would permit us, which was within about a block, to watch. We learned later that a group of naval officers had been dining in a restaurant in the building and had refused to take shelter. They were trapped by flames and all were killed.

While we were returning to the office we were accosted by an angry policeman, who ordered us to shelter in near-by Hibiya Park. Another group of attackers was coming over, and we could hear explosions in the distance, while the anti-aircraft guns kept banging away. We heard one explosion close enough to shake us as we waited in the public shelter. It was a small high-explosive bomb, which landed no more

than ten yards from the Hibiya public hall building, in which Domei was housed, without doing any serious damage.

We went through those early bombings in a spirit of excitement and suspense, but without the stifling feeling of terror that was to come later. There was even a spirit of adventure, a sense of exultation in sharing the dangers of war even though bound to civilian existence, and a fascination in the novelty of the experience.

The initial bombings fell into a routine pattern that seemed so rigidly defined as to induce a false sense of security. People spoke of the bombers' "regularly scheduled service." The big planes came regularly between noon and one p.m., and the warning sirens began their first wailings shortly before noon. There was a rumor that the planes would only come on dates divisible by three—the 24th and 27th of November, for example—and for some time this seemed to be true. The raiders usually remained overhead for two or three hours, so the period from noon to three p.m. was considered as the most dangerous, while the rest of the day was supposed to be more or less safe. Housewives stood in line to do their marketing before or after the danger period; most business transactions were arranged with the air-raid timetable in mind. Officials calculated that the American bases in the Marianas did not have facilities for night landings and take-offs and that therefore the raiders could not leave until after daylight. The trip took an estimated four or five hours each way, so the danger could not last for more than a few hours in the Tokyo area.

People could still make jokes about the raids in late 1944 and early 1945. As the raiders passed, Tokyo residents used to speculate on what the pilots might have brought for lunch. "Some nice ham sandwiches, perhaps." The fire department and the Neighborhood Associations affected would put out the fires, and work would go on as usual.

There was actually much admiration for the power and beauty of the B-29. The raids were being confined to military

objectives, and when residential areas were hit, most Japanese regarded it as an accident.

Not only did the planes keep scheduled hours, but they followed well-defined routes as well. Usually they came up the Izu Peninsula, which juts into the sea south of Tokyo and Yokohama and forms the westward side of Sagami Bay, and returned by way of the Boso Peninsula on the other side of the bay. Sometimes they reversed this course, but in either case it was popularly believed that Fujiyama, that conical symbol of the Japanese landscape, was the landmark that guided the planes to Tokyo. Fuji-san (equivalent of "Mount Fuji") had so overshadowed the lives of millions of Japanese that the mountain had been a god to many, a shrine to most, and a revered object to all, but after the air raids began, it had a more baleful significance.

At first the bombers came only in good weather, and it was thought that there would be safety on stormy days, but on November 30, 1944 the bombers dropped their incendiaries through a snowstorm to set fire to the Kanda district. That was the first day on which a very large fleet, numbering perhaps hundreds, attacked in a group. Most of the bombs fell in factory areas, and casualties were relatively light, although a considerable number of homes were burned.

Night raids, which most Japanese people had believed would be impossible, began before the end of 1944. The night raids were much worse. The planes usually flew over singly, each plane lighting targets for those which followed. A mixture of high explosive and incendiaries was most effective in spreading the flames and in terrorizing those on the ground. It was necessary to go to bed as early as possible in order to get some sleep before the raiders came. Often a householder would be routed out to meet the threat of one raid, would retire with the all-clear, and then be called out again a second or third time. Satisfactory sleep was almost out of the question in most cities from the beginning of 1945 to the end of the war. Cooking gas had become almost nonexistent, and it was

necessary to cook by open fires, which could be seen from the sky at night. As a result, most cooking was done before dusk, so families ate in the twilight and then went to bed.

It was one of the early night raids that destroyed a section of my home community of Oimachi, near Omori, about midway between Tokyo and Yokohama. That night I went out, this time wearing a helmet, to the home of some relatives near by, because I saw so many sparks coming from that direction that I thought their home must be on fire. I found that their house was not yet burning, but several near by were blazing, and I helped them beat out flying sparks with brooms dipped in a bucket of water. Houses that caught fire burned very rapidly, and there was little hope of saving them, once the flames got a start.

Many homes escaped that night because of the alertness of their owners, who threw the incendiaries outside after they had crashed through the roof. One man threw out half a dozen during the course of the evening. When an incendiary crashed through your roof on to the living-room floor you had a fair chance of saving your home. If it stopped between roof and ceiling or on one of the upper floors where it had more than a few seconds to ignite its surroundings, there wasn't much hope.

The Americans selected perfect weather conditions for their first real "carpet bombing." The night of March 9 was cold and clear, with a freakish wind of near-gale velocity, whipping this way and that through Tokyo's dark and empty streets. Late in the evening a fire, its origin unknown, broke out in a warehouse in Fukagawa ward, and firemen fought desperately to control the flames against the fury of the wind. At about the same time the sirens wailed in the darkness, and the people of Tokyo, grumbling a little, groped their way to shelter or stood by with their puny buckets of sand and water.

The first of the B-29's, perhaps guided by the light of the blazing warehouse, came in very low, only a few thousand feet up, at about 11.30 p.m., plowing through frantic but mis-

directed anti-aircraft fire and the searching fingers of scores of searchlights. The first plane was followed by a steady procession of about a hundred and fifty others, which churned their way relentlessly across the sky to scatter their belly loads of fire across twelve of Tokyo's thirty-five wards. The last of them finished its work at 3.40 a.m. on the following morning.

The city of Tokyo is divided roughly into two sections: Shitamachi, the lower, flat portion embracing the eastern and southern wards, and Yamanote, the hilly section. On the night of March 9 the raiders struck at Shitamachi, with the heaviest blows falling on Honjo, Fukagawa, Joto, Edogawa, and Mukojima, a section of workers' homes and small factories. This area, known in general as the Koto area, crisscrossed by the Sumida River and numerous canals, was one of the hardest-hit areas in the 1923 Tokyo earthquake. It was one of the most closely congested areas in the world.

Almost as soon as the first bombs fell, the fire was out of control, racing crazily through the district as house after house flared up like a torch before the touch of the flames. By the time residents of the district had begun to sense their deadly peril, the raiders had strewn fires throughout the area, and the wind had whipped hundreds of small fires into great walls of flame, which began leaping streets, firebreaks, and canals at dazzling speed.

Frantically, panic-stricken residents seized what belongings they could carry and began to flee, some toward Tokyo Bay, some to vacant lots, parks, school grounds, any open space, toward higher ground, to canals, ponds, and the Sumida River. The flames, riding the gale, moved faster. The enemy planes, attracted like giant silver moths to the towering blaze, spread new fires in front, behind, on every side. The refugees dropped their bundles and ran on; the crowds of panting, gasping, choking men, women, and children became thicker in every open space—in the broad avenues, in the winding, narrow alleyways of ancient Tokyo.

The crowds ran blindly from the searing flames only to come to a gasping, milling halt before a new barricade of fire thrown up by a treacherously shifting wind. Some paused to gauge the direction of the wind, but no sooner had they determined a new way to safety than the wind shifted again, or a new load of bombs showered down, cutting off their line of flight. The flight rapidly became an aimless stampede, and the old, the very young, the lame, and the ill were the first to go down beneath the trampling feet. They lay where they fell, and the fortunate ones were those who died before the flames reached them.

As the fire rose in intensity, it seemed in turn to whip the wind into a new fury, and the racing flames were cutting down blocks of houses as though with a giant sickle. A single house would be reduced to ashes in less than ten minutes.

Many ran for blocks to reach one of the bridges that provided an exit from the area, only to find that the bridge had been destroyed. Crowds piled up at the approaches to the useless bridges, and those behind forced those in front into the water, where many were drowned. Others fanned out along the canals and river, then leaped in by the frantic thousands to escape the searing heat. The flames roared on, gulping up great draughts of oxygen, and thousands of human beings died in shelters, in the streets, in the canals, and even in large open areas, like so many fish left gasping on the bottom of a lake that has been drained. Above the holocaust the B-29's kept boring in through the billowing smoke clouds, the leaping flames, and the intense heat. Below, dying Japanese looked up with mingled despair, awe, hatred, and terror at their last sight of the enemy.

Hisaki Imai, an office boy at Kyodo News Service, told me the story of his escape that night. Like the others who got away he did not realize until afterward the extent of the disaster nor how narrow was his escape. His flight had a dreamlike quality that later obscured many details.

Imai's home was near a lumber yard in Fukagawa ward.

Within an hour or so after the raid began, his district was virtually surrounded by fire. Most of the members of his Neighborhood Association had already left, groups of ten or twenty persons clinging to long ropes so as not to become separated in the evacuation. Imai remained behind, beating out sparks and firebrands, which fell in an increasing rain on the roof of his house. When the fire had swept to within a block or so of his home, he decided that further effort was futile. Then he discovered that his eight-year-old brother, who was supposed to have left much earlier with their mother and the rest of the family, had misunderstood instructions and was still in the house.

Taking his younger brother by the hand, he started to run from the flames. At first undecided where to flee, he remembered a large vacant lot, some distance away, where he had played as a child. Choking and gasping, the boys made their way as rapidly as they could toward that haven. As they reached cross roads they were caught up in a tremendous, hurrying crowd. Imai noticed refugees pouring into the intersection from all four directions at the same time. As the converging columns met, they milled about frantically until a small group suddenly broke away in one direction, and all the rest followed blindly. Imai and his brother continued on to their original goal. They passed many persons who were fleeing in the opposite direction, many with their bundles wrapped in a quilt tied to their backs. On more than one occasion he noticed that these bundles had caught fire, but the bearers struggled on, unaware. Burning timbers, corrugated iron roofing, bricks, and other debris were showering into the streets, adding to the danger of the flight.

When the two boys reached the place that Imai had remembered as a vacant lot some years before, they found it had been built up with houses and was therefore as unsafe as any other place. Nevertheless, they were so exhausted that they remained there for some time, resting. Imai was at a loss what

to do—should he remain where he was, should he turn back, where could he find safety? Finally he decided to try to reach Tokyo Bay, nearly a mile and a half away. Somehow, he cannot remember how, they found a path through the ring of fire and, keeping dampened towels over their faces, reached an unoccupied shelter, only partially completed, near the shore of the bay. There they crouched, sleepless for the rest of the night. Imai recalls that on the way he crossed many bridges and noticed that boats on the canals were burning, but he could remember encountering no burned or damaged bridges during his flight. Many were gone, however, when he attempted to retrace his steps the next day.

Although the fire was still raging in many sections—in fact, it was four days before it burned itself out—the boys were able to return to their neighborhood by a roundabout route on the third day after the raid. All along the return route they saw heaps of charred and blackened bodies; there was no way of knowing whether the bodies of their own family might be among them. They found their home, along with all the others in the neighborhood, a heap of ashes. A sign painted on a bit of wood instructed them to meet their mother and two other brothers at the Shibuya primary school, about ten miles away. Such signs were posted everywhere in the devastated area as families sought to effect reunions. There was no other means of communication, no central point for exchange of information.

On the following day Imai was reunited with his mother, who told him that she had spent the night of the raid knee-deep in the icy waters of Tokyo Bay with her three-year-old son clinging to her back. She had held on to a bit of piling throughout the night. More than two hundred other persons were in the same group, and during the night several of them died of fatigue, shock, or burns.

Imai learned that of his Neighborhood Association of thirteen families and about seventy persons, more than half

had been killed that night. This was a relatively small percentage, for all the members of some Neighborhood Associations in the same district were killed.

Takao Kurashima, a Domei messenger boy who also lived in Fukagawa, escaped by climbing into a small reservoir, used for fire protection, and remaining in the water all night. He could recall only running, running blindly to escape the flames. When he reached the safety of the reservoir a friend who had started with him had disappeared. The next day he found his body near where they had started. The collapsing wall of a burning house had fallen as he ran past and trapped him in a blazing pile of debris.

The tremendous scope of the fire lighted the sky for miles around Tokyo, and everyone in the area knew that something tremendous and terrible was taking place that night, but there was no means of finding out what had happened until the next day. Few could sleep that night because no one knew in what area the raiders might strike next.

On the day following the fire no one was permitted into the stricken area except such emergency personnel as doctors, nurses, policemen, and fire fighters. When I was permitted to enter the area on the second day, fires were still burning everywhere. I remember seeing a man pausing to light a cigar from a blazing telephone pole as he passed. Bodies, looking like misshapen lumps of charcoal, littered the entire area.

The bodies, singly, in groups, and in heaps, told the story of the disaster in unmistakable terms of human agony. On some broad streets, as far as one could see, there was an even row of bodies where men, women, and children, trapped by the flames, had futilely tried to escape them by lying down in the center of the paving. There were heaps of bodies in schoolyards, in parks, in public shelters, in vacant lots, and huddled under railroad viaducts.

Several days later, when I visited the area again, police and volunteer workers were still pulling bodies from the Sumida River and the network of canals. The workers pulled the

bodies out with grappling hooks and stacked them on the banks until trucks could carry them away for cremation. It was impossible to attempt to identify so many corpses. The workmen labored with frantic haste to get the job done before putrefaction could become too much of a health hazard. Fortunately the weather remained cold, but even so the sickeningly sweet odor of dead bodies was everywhere in the area.

Hundreds of spectators, seeking to identify missing relatives or friends, watched anxiously as body after body was pulled from the river or from the ruins of buildings. Often it was impossible to distinguish even the sex of the bodies because they had been so mutilated by the flames. I noticed one man, wearing the garb of a workman, tenderly placing the body of a dead child in a large oil can in order to remove the corpse for burial.

Refugees were wandering aimlessly through the area, most of them with bundles of household belongings on their backs. Their faces were dirty, haggard, and pale. Most of them looked dazed, their eyes dull and uncomprehending. Many wore bandages, testifying to the burns they had received.

It was possible to look across acres and acres of desertlike space where once had stood a bustling community of workers' homes and small factories. Now there was nothing but heaps of ashes, bits of corrugated iron, bricks, concrete blocks, a few twisted girders, and here and there the shell of a burned-out concrete building. Skeletons of motor vehicles, including fire engines, dotted the landscape.

There had been many lumber yards in the district, and piles of lumber had been sunk in the canals for seasoning. Many bodies had become entangled among the boards so that even a month after the fire bodies were still being recovered from that first big raid. Most of them had been collected, however, within a week or two.

Official casualty estimates, known to be well below the true facts, fixed the death toll for March 9–10 at 78,660, with 42,380 injured, 1,500,000 made homeless, and 272,210 homes

destroyed. The best unofficial estimates would place the true death toll at 100,000. In any event, the raid constituted the greatest single disaster in the history of the human race up to that time in terms of suffering and destruction.

Three or four heavy attacks did most of the damage that was done to Tokyo during the war, accounting for more than half the city. Besides the March 9 raid, strikes on April 13 and 15 hit at the northern part of the city; and the last great raid was on May 24–5, when the central and western sections felt the brunt of the attack.

On April 13 about 170 B-29's and some smaller planes destroyed an estimated 170,000 houses, making a half million persons homeless. On April 15, 200 B-29's returned to the attack with about 330 planes from aircraft carriers, and 260,000 more were made homeless. On May 24, 250 B-29's made a daylight raid that accounted for another 210,000 homeless, and the following day a fleet of 300 of the big bombers burned down 150,000 homes belonging to an estimated 570,000 people. It was during the May 25 raid that a large part of the Imperial Palace was burned, not by direct hits but by flames that spread out of control.

On the night of May 25 we watched Japanese aerial defenders put up one of their most spirited displays of resistance of the war. The night was alive with ack-ack bursts, scores of searchlight beams, and explosions from rocket fire. The B-29's were clearly visible in the searchlight beams as they floated across the Tokyo skies, and it was even possible to catch glimpses of the smaller Japanese interceptors rising to the attack. Several American planes went down in flames, each making an orange ball of fire as it plummeted down through the darkness.

That night my wife's sister was staying at our house. A short time earlier she had received notice that her son, who had been drafted by the Navy and had risen to officer rank, had been killed off the Philippines in October 1944. Her husband urged her to come out of the dugout for a while to watch

the big show in the sky. Just as she came out, a B-29 burst into flame high above us and began to cut a slow parabola earthward. Although my wife's sister is ordinarily a woman of great poise and unusually quiet in her manner, she clapped her hands suddenly as she watched. "Banzai!" she cried out, and there were fierce tears in her eyes. "Banzai! Thank God. Thank God."

In all there were six major raids on Tokyo and a number of minor ones. Official casualty figures for the six raids were 93,956 killed, 59,633 injured, 2,890,000 homeless, and 744,895 houses destroyed.

Like the English proverb "It never rains but it pours," Japan has one: "While crying, stung by bee in the face." The start of the air raids had generated a popular debate about which was more dangerous, earthquakes or bombs. Until the bombings, Japan's worst disaster had been the earthquake of 1923. On December 7, 1944 Japan was shaken by an earthquake which could easily have been more serious than that of 1923 except that its center was at the bottom of the sea off Miye prefecture. Aichi, Miye, and Shizuoka prefectures suffered damage from the quake, but official figures on it have never been made public. An American seismograph accurately located the quake, and the Americans announced it before it was mentioned in Japanese communiqués. There was known to be heavy damage in Nagoya, which had already felt the weight of American bombs and which was made a frequent target afterward. In Miye prefecture villages were washed away by a tidal wave and ships were left beached on the hillside, but the Government minimized the effect in all of its public announcements, and very little is known of the effect of the quake to the present time.

Both earthquakes and fire bombs, however, seemed insignificant after the atom bombing. I heard an account of the first atom bombing from Bin Nakamura, subchief of the Domei bureau in Hiroshima, which before the war had been a rather wealthy city, facing the Inland Sea and favored with

a mild climate and some of the most beautiful scenery in Japan.

Until August 6, 1945 Hiroshima had not been bombed, although its citizens had seen American planes frequently on reconnaissance missions. On that day, which dawned clear and calm, the planes were over early. Nakamura, idly watching from his garden in the Hiroshima suburbs, saw one large plane and two small ones flying over at about 6.30 a.m., bound, he thought, on another reconnaissance mission over the Japan Sea to the west. A little later there was another air-raid alert, but it didn't last long, and no bombs were dropped. He saw planes returning in the other direction at about 7.30 a.m., and ten minutes later the all-clear was sounded. This was unusual, since the enemy planes had scarcely disappeared from sight, but it seemed of no great importance. (Later, investigation disclosed that the all-clear was sounded by mistake.) Nakamura merely went on with his breakfast.

At about 8.20 a.m. Nakamura felt an intense heat which brought with it a sharp aching sensation about the face. At the same instant all the window glass in his house was shattered. He was seated on a *tatami,* a Japanese mat, and a powerful concussion wave lifted him, together with the mat, a short distance into the air, seemingly pushing up from beneath. His first thought was that a one-ton bomb must have fallen near his home, and he ran out of the house to investigate.

As soon as he reached the open, Nakamura saw in the sky a long streamer of smoke, perhaps fifty yards high, rising from the center of Hiroshima, about two miles distant. At the top of the column of smoke, which looked to him like the smoke from the old-fashioned magnesium flash explosion once used by news photographers, was a ball of orange fire, which seemed to him to be about the size of a large oil drum. He was convinced at once that something unusual must have occurred—this could have been no ordinary bomb.

Mounting a bicycle, Nakamura started for the Domei office, but before he had gone far the area was swept by heavy

wind, much like a whirlwind, and a torrential rain. He took shelter briefly before pushing on toward the center of the city. Refugees were already streaming in the opposite direction, many with severe burns on their faces and hands, some with their clothing torn off. All were dazed, and none was able to give a coherent account of what had happened. He was familiar with theories of atomic energy, but at the moment the idea of an atomic bomb didn't enter his head. Everywhere as he passed, people were searching for the site of the explosion, each convinced that a large bomb had dropped in the immediate neighborhood of his house.

As he approached the center of the city the appalling extent of the devastation became gradually apparent, although most of the area was covered by a heavy cloud of smoke and dust, and fire raged everywhere. The heat made it out of the question to approach the main portion of the city.

By ten o'clock that evening Nakamura had gathered as much information as he could from survivors of the blast, and from the Haramura radio station in the suburbs he was able to make a telephone connection as far as Okayama prefecture. By this means he sent the first news flash to the outside world—that Hiroshima had been hit by some special kind of bomb, or possibly two bombs, dropped by a group of either two or three enemy planes, and the whole city had been smashed. There was, he said in his first dispatch, no knowing what kind of bomb it might have been, but it "might have been an atomic bomb." There is no doubt that this bit of speculation sounded somewhat fantastic even to Nakamura.

Nakamura described the people he saw walking away from the flame-swept city. They didn't look remotely like human beings—more like so many ghosts, he said. Some had skin hanging from their hands like gloves turned inside out and caught near the fingernails. Many were blind or partly so; others were stumbling along silently with the skin of their faces burned off completely. It was a curious circumstance

that any article of white clothing appeared to have been untouched by the explosion, whereas that of any other color was stripped or burned off.

Late in the evening he was able to hire a small boat and approach the center of the city along the Ota River. He found much of the city still burning, and he had to make his way over heaps of bodies. He talked to several persons who had been burned in the explosion, and without exception they reported that they felt no pain from their burns. He found that wooden buildings in the blast area had been blown into the air and smashed as they fell back to the ground. Fire had then completed the ruin. Here and there reinforced concrete buildings remained upright, but their interiors were smashed and gutted.

The Domei office at Hiroshima was located in the *Chugoku Shimbun* building, a reinforced concrete structure, and Nakamura went there in the hope of finding out how Tokuho Kobayashi, chief of Domei's Hiroshima staff, and other Domei employees might have fared. Nothing was left of the building but its outer walls. Nakamura thought perhaps there might have been no more than one or two of the staff present at the time of the explosion, since it occurred before regular working hours. He located one man who had been in the building at the time of the explosion and had managed to reach safety with no more than minor burns. He had no information about other occupants of the building. By this time, Nakamura says, he was becoming more and more convinced that some form of atomic or radioactive energy had been loosed upon the city.

Nakamura slept that night on the river bank and early the next morning resumed his search for members of the Domei staff. He learned that Kobayashi had been working that morning as the foreman of a crew of twenty-eight persons, mostly from the staffs of the *Chugoku* newspaper and branches of *Asahi* and *Mainichi*, who were engaged in voluntary labor service on public works. Kobayashi's crew was at

work only about five hundred yards from the center of the explosion, and the entire group was killed. Some ten thousand workers had been employed in the same general area, including most of the second-year pupils of the Hiroshima First Middle School who were contributing their labor as a patriotic duty. Most of these volunteer workers also were killed.

Kobayashi had been horribly burned over his entire body, but he had managed to walk to his home. He was still alive when Nakamura reached there the day after the explosion, although it was impossible to recognize him except by his voice. He immediately inquired about the safety of Domei's wireless receiving set, which he regarded as the most valuable property in the office. He asked Nakamura to take charge of the office after his death; he was under no illusions about the fact that he was dying. Nakamura sought vainly for a physician, but could find none, and in a short time Kobayashi was dead. Of the total Domei staff of twenty, seven were killed, two were seriously injured, and two were slightly burned; only nine escaped entirely.

The burial of Kobayashi was a problem that had many thousands of counterparts all over Hiroshima that day as on the following days. No undertaker was available. The Domei survivors went to the mountain and brought back a load of wood. Near the bank of the river they dug a pit, in which they placed wood, together with the body of their former chief, then ignited the pyre. Similar fires were burning throughout the area. The summer heat was already at work, and the stench in the city was unbearable. There were not enough able-bodied workers to bury or burn more than a few of the thousands of corpses. Many temporary hospitals were thrown up, but the victims who came for treatment usually died within a few days. Unless friends or relatives were at hand, there was no one to bury the bodies. On the second day the situation was relieved somewhat when several thousand young men were brought into Hiroshima from surrounding communities to aid in clean-up work. Most of these young men

temporarily lost their hair within a few days as a result of radioactivity still present in the area, and there were unconfirmed reports that several hundred died.

Irrespective of scientific pronouncements on the subject, the people of Hiroshima have reached their own conclusions as to the lingering effects of radioactivity. There is a well-authenticated story of a family of four, a father, mother, and two sons, who had evacuated the city prior to the bombing and had buried their belongings before leaving. They returned on August 10, 1945 and began to dig up their things. Within a few days all died, one by one.

There were the usual number of freak stories after the bombing. Shizuo Takada, who represented Japan in the shot-put event at the Olympic games at Berlin, was standing at the entrance of the Chugoku Electric Company building, one of the finest buildings in Hiroshima, when the bomb struck. When he recovered consciousness he was on the third floor and unhurt, except that he subsequently lost his hair. Nakamura reported two other incidents of a similar nature.

The blast seemed to strike many of its victims at the base of the spine, paralyzing them so that they could not walk. Many of these were burned to death because they could not get away after the explosion. Most burns were caused by the intense wave of heat that accompanied the explosion rather than the fires that followed it. Even fish in the river were burned by the blast, and they floated on the surface by the thousands.

A fisherman who witnessed the bombing from a small boat off shore reported that he had seen a brilliant flash and had closed his eyes. When he opened them his sail had disappeared. It had been a dirty, dun color and lacked the resistance to the blast that appeared to be characteristic of white fabrics.

The bomb exploded, witnesses said, at a height of about two thousand yards directly over the Aioi Bridge, a modern steel and concrete structure about one hundred yards in

length, spanning the Ota River. The blast lifted the bridge bodily into the air and dropped it back, twisted by the heat, in almost the same place.

On the night of the explosion there were three theories among the survivors as to what had happened. Some believed that a new type of rocket bomb had been fired; others thought a powerful land mine had been dropped by parachute; still others contended that an ordinary bomb, of extraordinary size, had been dropped in the ordinary way. On the first night a rumor spread that Hiroshima was not alone in the disaster—all Japan had been destroyed simultaneously.

Army and Navy experts could not agree on what had happened. Navy officers sent to the scene quickly reached the conclusion that some type of atomic bomb had been dropped, but the Army's representative disagreed. The Army received orders from Imperial Headquarters to disclose only bare details of the bombing and to minimize its effects.

Full casualty figures for the bombing probably will never be assembled. It is certain that almost everyone in the center of the city, within a circle with a radius of about two and a half miles, was either killed or injured. Many died instantly from concussion or the heat wave that accompanied the explosion. Others were crushed to death when buildings collapsed. Unofficial estimates are that 80,000 persons died on the first day alone. There was a second group of casualties who lived for about a week, suffering from burns and a decrease in white blood corpuscles. A third group of fatalities included persons who lost their hair and suffered from bleeding from the eyes, ears, and mouth. Their deaths occurred about a month after the bombing. It is no exaggeration to say that at least 120,000 of the civilian population were killed and many others injured. There were stationed in the area 80,000 troops, of which fully half were killed in addition to the civilians, although this fact was not announced. Lieutenant General Yoji Fujii, commander of the area, was killed in-

stantly, as were several other high-ranking officers. The civilian Governor of Hiroshima prefecture was killed, as was the Governor General of the Chugoku area.

Official figures on the Hiroshima bombing, announced about six months later, listed total casualties at 306,545, including 78,150 dead, 13,983 missing, and 9,428 seriously injured. Even accepting the official figures for the Tokyo and Hiroshima fatalities, both of which were extremely low, it is obvious that the official estimate of 280,000 air-raid deaths for the entire war was not realistic. Careful unofficial estimates would put the civilian death toll from bombing for the whole war at more than 400,000.

Casualties in the second atomic bombing, which occurred at Nagasaki on August 9, 1945, were not as excessive as at Hiroshima, because of the mountainous character of Nagasaki. Hiroshima had been flat and was regarded as a city of the ideal size for the first atomic bomb attack. Although a more powerful bomb was used at Nagasaki, its effects were not so great, many sections being protected from the blast by the hills in which much of the residential area of the city was located.

The Nagasaki bomb exploded at about 11.02 a.m. over the Uragami section, which happened to be the place where Catholicism was first introduced into Japan. Of 120,000 Catholics in Japan, half lived in Nagasaki prefecture and about 10,000 in Uragami, where casualties were heaviest. Unofficial estimates placed the Nagasaki death toll at 30,000.

XII

Unconditional Surrender

WHY, after so many impassioned pledges of a battle to the death, did Japan not carry on until she had been completely destroyed, until her men, women, and children had contested with their lives every foot of the invader's advance?

Had President Truman gone on the air without preliminaries to announce to the American people in August 1945 that the Allies had lost the war, that Japanese troops and planes and ships had ringed the American continent with steel shackles, that the United States Navy was at the bottom of the ocean, that the American Air Force was gone, that American and British armies abroad had been cut up, cut off, and destroyed, that all stories to the contrary about bombing Japan and capturing Saipan, Iwo Jima, and Okinawa were so many fabrications, the effect on the American people could have been no more stunning than was the impact on the Japanese people of the Emperor's rescript ending the war. Yet despite the shock, despite the bewilderment, the defeat was accepted with less unrest than has accompanied some elections in democratic countries.

Why would a nation endure such bitter sacrifices as did Japan only to stop fighting suddenly at a mere signal and docilely submit, completely and unreservedly, to the will of a conqueror, the first in a proud and ancient history?

There are many explanations, most of them stemming from