

A-bomb Survivor Testimony

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However fast time has passed, however many important things occurred, the devastation wrought by the atomic bombing has never left me. Even now, the horror of that day remains etched in my mind.

On August 6th, 1945 at 8.15 am, the world's first atomic bomb exploded over Hiroshima. There was a U.S. Military Base on Tinian Island in the Pacific Ocean. Early in the morning of August 6th, three U.S. B-29 bombers took off from Tinian headed for Hiroshima. One of those B-29s was the Enola Gay carrying the atomic bomb. The Enola Gay and two other bombers took six and a half hours to bring the A-bomb to Hiroshima. Then, they dropped the atomic bomb from an altitude of about 9,600 meters.

The bomb detonated approximately 580 meters over the Shima Hospital, located southeast of the A-Bomb Dome (before the bombing, the Dome was a beautiful modern building called Hiroshima Prefectural Industrial Promotion Hall). The uranium bomb dropped on Hiroshima was named "Little Boy." It is said that 50 kilograms of uranium were used, but actually, the nuclear explosion was created by just less than one kilogram of uranium. Using eggs for comparison, all that enormous, tremendously powerful energy came from uranium weighing as much as 13 to 15 eggs.

The United States deliberately chose to explode the Hiroshima and Nagasaki bombs in the air. Generally, bombs dropped from aircraft reach the ground first, then explode. Or, they strike a building and explode. Such bombs damage buildings in the immediate area, but the atomic bomb was different. Because it exploded in the air, the three primary forms of energy—heat, blast, and radiation—reached out in all directions and immediately reduced Hiroshima to ruin. That turned out to be an extremely effective tactic, from the viewpoint of the U.S.

Of the three forms of energy, I will speak first about the heat. At the instant of the explosion, a fireball with a temperature at the center of several million degrees Celsius rose into the sky. The fireball is said have grown to a diameter of 200 to 300 meters. At the hypocenter, near the A-bomb Dome, temperatures on the ground rose to 3,000 to 4,000 degrees Celsius. Iron melts at a 1,530 degrees. Glass like that used in bottles melts at 700 to 800 degrees. Thus, the heat of the A-bomb was far hotter than the temperature at which iron melts in a blast furnace. Those strong heat rays of 3,000 to 4,000 degrees burnt bodies, clothes, and houses. The entire city was burnt,

all in an instant.

Next came the blast. Blast damage extended as far as 16 kilometers from the hypocenter. When the bomb exploded, a shock wave with a pressure of several hundred thousand atmospheres blew out in all directions. Following the shockwave, an extremely strong wind blew through with a maximum instantaneous velocity of 440 meters per second. The power of the A-bomb blast is beyond imagination. I remember the Okinawa-Daini-Miyakojima Typhoon that hit Japan on September 10th, 1966. I've heard that this is still one of the strongest typhoons ever recorded, with a maximum instantaneous wind velocity of 85.3 meters per second. The A-bomb wind was 440 meters per second. The strongest typhoon ever to attack Japan did not even come close. That blast blew people through the air. It peeled skin right off. It popped eyeballs out, ruptured organs, blew streetcars and buses off the street. It leveled wooden houses and crushed most concrete buildings. The A-bomb blast was devastating.

The third form of energy released was radiation. Conventional weapons emit no radiation, so this is a property exclusive to nuclear weapons. We use Sieverts to measure radiation, and natural radiation is said to be about one milliSievert, which is supposed to be harmless to the human body. The Hiroshima A-bomb is said to have generated four Sieverts (not milliSieverts) of radiation within about 1 kilometer of the hypocenter. To put this in perspective, one chest X-ray gives us about 0.3 milliSieverts. An abdominal X-ray requires a dose of about four milliSieverts. As I mentioned, 1 milliSievert is considered harmless, so the abdominal X-ray is over that harmless threshold. The A-bomb is said to have produced 17 Sieverts near the hypocenter.

The compound effects of heat rays, blast and radiation caused tremendous damage to the city and citizens of Hiroshima.

(1) Japan was at war for 15 years. The Manchurian Incident occurred on September 18th, 1931. This incident is considered the preliminary skirmish of the Second Sino-Japanese War as it clearly led to the start of that war on July 7th, 1937. This series of battles expanded to become the Pacific War, which began with Pearl Harbor on December 8th, 1941.

Japan conducted a war of aggression against China and other Asian nations. We colonized the Korean Peninsula for 36 years. Japan made a terrible mistake.

'Go, go soldiers go!' This phrase appeared in a textbook I read as an elementary school child. During the war, we received militaristic education using such textbooks.

(2) Most junior high school boys in those days assumed that they would join the military when

they grew up. I myself was eager to enlist in the Boys' Naval Air Force headquartered in Kasumigaura in Ibaraki Prefecture.

At the center of this slide is the summer uniform of that school consisting of white cap, white jacket with seven buttons, and white trousers. On the left is the uniform of an airplane pilot. They looked very sharp to us at the time. Our school teachers told us that becoming airmen of the Naval Air Force was admirable and marching into the enemy's territory to kill as many enemy soldiers as possible was right and necessary for Japan to win the war - and we believed them.

However, Japan lost the war. That was when we realized how wrong militarism was. We learned that Japan caused our Asian neighbors great suffering and sorrow. I therefore believe that basic responsibility for the war lies with the Japanese Government because the Japanese Government started the war... At the same time, however, I, myself, deeply repent the war. I am sorry as a Japanese who lived through the war, even though I was only a boy at the time. I was taught that killing people was the right thing to do, and I believed it. Now, despite that training, I think such ideas are totally wrong. I deeply repent my earlier belief.

(3) During the war, junior high school students and girls in girls' schools were mobilized. Rather than studying, we performed demolition work removing the houses of ordinary citizens by order of the government. This demolition work was done to create vacant areas as firebreaks in anticipation of air raids by the United States. In case of emergency, we could escape the fire there. Residents of the demolished houses had no choice but to give up their houses and evacuate to the countryside where relatives or acquaintances lived. They were forcibly evicted by government order.

(4) Just before the A-bomb was dropped on August 6th, an air-raid warning and a subsequent caution had been cleared. Feeling safe, we went out onto the playground and waited for morning assembly to begin. There were about 150 students on the playground, including about 60 of my classmates. We then saw a U.S. B-29 bomber approaching, even though the warnings had been already cleared. We never dreamt that this plane was carrying an atomic bomb.

(5) In Hiroshima, the sky was perfectly clear that morning. The B-29 flew just above us leaving a beautiful vapor trail. Believing we were safe, we looked up at the flying plane, pointing to it in the sky. Then our teacher came out of the staff room and our class president called out, 'Fall in! Attention!' That was the instant the tragedy happened.

(6) I heard an incredible noise as complete darkness covered my eyes. Unable to see an inch

ahead of me, I had no idea what had happened. Some say there was a flash but I do not remember it. From what I have heard, it was a pale blue light bursting out in all directions, followed by a powerful booming blast.

- (7) We were blown away unable to put up the least resistance.
- (8) After a while, I recovered consciousness when the smoke that had covered the playground lifted and it became light again. I had been blown about 10 meters from where I had been before the explosion, and had fallen hard on the ground. The blast had thrown me that far.
- (9) I then found that 150 other students had been blown in all directions and lay scattered around the playground. The wooden schoolhouse was flattened to the ground. Every house and building that had once stood around the school had collapsed because of the blast.
- (10) I gazed into the distance but saw no houses - all had disappeared except for a few concrete buildings. 'Oh no, Hiroshima has disappeared,' I thought. Then I looked at my own body. My school uniform had been burned and torn to tatters. At the moment of the A-bomb flash in the sky, my uniform had spontaneously caught fire and burned to tatters. The blast peeled the skin right off the back of my head and down to my back, arms, hands, and legs. I could see my own red flesh exposed between tatters of skin burned by the heat ray. Recognizing that my state must be similar to the many other students lying around me, I was seized momentarily by panic.
- (11) 'Flee to a river in case of an air raid.' This is what I remembered being told during evacuation drills by the teacher. I promptly left the playground to flee to the river.
- (12) On my way to the river I heard somebody calling my name from behind. 'Hey, Takahashi, Takahashi, wait for me, wait for me.' I turned around and saw my friend, Tatsuya Yamamoto. He was calling me. We were in the same class, and I used to go to school with him every day.
- (13) He was crying, 'Mom, help me, help'. He just kept crying. I told him, 'Stop crying. Crying is no use. Get moving instead or we could be in terrible trouble. We have to get out of here now.' I scolded him sometimes and encouraged him at other times. I stayed with him and pulled him along. During the war we wore what we called a 'combat cap'. Where the cap covered it, we still had some hair, but the heat ray burnt away the hair that was not covered by the cap. The exposed spots were bald. The cap was, of course, blown off.
- (14) A great number of bombed people were fleeing in long lines. They all held their arms out in

front of them, their shredded skin dangling from their fingertips. Their clothes were all tattered. Some were almost naked - their skin had peeled off and red flesh was exposed. Everyone was fleeing, but dragging their bare feet, staggering along. It looked like a procession of ghosts.

(15) Many in the procession had been hideously injured. This boy was covered with broken glass pieces from the waist up - these glass pieces were probably window glass shattered into fragments and scattered by the blast. I could see a few such glass fragments in my own body in several places, including my waist and both arms.

(16) One woman was covered in blood with one of her eyeballs hanging out. This had been caused by the blast. The man on the left had been so badly burned above the waist that his skin was peeling from his entire back exposing burned red flesh.

(17) There were many dead bodies. Among them I saw a hideously damaged woman's body. Her ruptured internal organs were pouring out onto the ground. This had also been caused by the blast.

(18) I also saw a baby lying beside a woman who was apparently the baby's mother. Both were seriously burned. Most of their skin had peeled down to red flesh. The baby was shrieking. He was still alive. But we were just boys. We couldn't do anything for the baby.

(19) A horse lay dead with its neck in a trough and its skin peeled from most of its body, exposing red flesh. The entire scene was horrible. Words can never describe such horrible sights.

(20) With such dreadful sights in front of us, we ran for our lives towards the river. The wreckage of houses destroyed by the blast blocked every alley from the main street to the riverbank. It was impossible to walk normally. We desperately climbed over the wreckage of the houses - crawling on all fours - and finally reached the riverside.

(21) As soon as we reached the riverside, fire suddenly broke out in the wreckage of the houses we had just crossed. The fire was spreading rapidly and a tall column of flame rose to the sky with a loud sound and blast - like a volcano erupting. Even now, I can clearly remember how frightened I was. We were very fortunate to escape that fire. The fire was caused by the wreckage of houses destroyed by the bomb blast spontaneously catching fire due to the heat rays that flashed for a second in the sky. Fires for cooking breakfast escaped and combined with this fire. That fire was what is called a 'super high-temperature fire.' Many were trapped beneath destroyed houses with no hope of help reaching them. One or two people could do

nothing to save them. The spreading fire quickly reached them, and many survivors had no choice but to flee leaving beloved, living family members beneath the rubble to perish in the fire. Within two kilometers from the hypocenter, the fire burned everything combustible including all wooden houses.

(22) Crawling down to the riverside, we saw a small bridge that had miraculously remained intact after the blast. That bridge saved our lives.

(23) I crossed the bridge to the other side and suddenly realized that my friend Yamamoto was no longer with me. Later, after I recovered, I heard from his mother that he had been taken to his home by a kind stranger, but died six weeks later on September 16 from acute radiation poisoning. I crossed the bridge and got to the other side alone.

(24) The opposite bank was 3 kilometers from the hypocenter. Luckily there was no fire over there. 'I made it, ' I thought to myself. Then I let go. Tears welled up in my eyes for the first time and I couldn't hold them back. At the same time, I felt that my body was getting hot - unbearably hot - so I entered the river and soaked in the water. The cold water felt so good on my burning hot body. It was like a treasure. In reality, however, floating dead bodies filled the river. It looked like hell on earth. Thousands of people were soaking their bodies like I was. Many drank river water, then were carried away to their deaths.

(25) Soon, I came out of the river and went to a makeshift relief station made of bamboo brought down from the mountains. I received simple treatment and rested. A number of bombed victims were waiting in line for treatment. Suddenly, large black drops of rain began falling. This was what we called 'black rain'.

(26) Black rain was formed when the dust sent to the sky by the blast mixed with rain. This black rain contained radiation. Some who were directly exposed to that rain later suffered from radiation sickness. Luckily, I was in a tent so I was not exposed to the rain. Looking at the first black rain I had seen in my life, it all felt so strange. I gazed at the rain and wondered if black rain had ever fallen before on this Earth.

(27) I waited until it stopped raining and started walking home by myself. I was worried, however, wondering whether I could walk the more than 6 kilometers to my house after suffering such severe burns.

(28) After walking for a while, I heard somebody calling my name again. 'Takahashi, Takahashi, take me home with you'. It was a moaning request for help. I looked in the direction of the

moan and found a classmate, Tokujiro Hatta, crouching by the roadside. We were from the same town and went to the same school together everyday. I looked at his body. The skin had peeled off the soles of both his feet and I could see the burned red flesh inside. It was impossible for Hatta to walk. I said, 'How did you get here?' He said that a kind stranger had carried him on a bicycle and left him there. I was worried about whether I could find a way to help him. He was my classmate from the same town, so I did not want to go home myself and leave him behind. I wanted to help him some way or another but couldn't find a way of to do it. In the midst of misfortune, he was fortunate to have no severe gashes or burns except for the soles of his feet. I finally thought of two ideas to help him.

(29) One was for him to crawl on his hands and knees like a cat or dog. This way his feet did not touch the ground.

(30) The other idea was for him to walk on the backs of his heels with me supporting him from behind. By traveling in these two ways alternatively, we traveled very slowly towards home much slower than a snail's pace. It now comes as a surprise that I could think of such ideas.

(31) Walking in that unique way exhausted us, so we rested by the roadside. I happened to turn around, and there were my granduncle and grandaunt approaching. I was overjoyed to see them and called out at the top of my voice. They were very surprised. They never expected to find me in such a place. They were on their way home from the country where they had been attending a memorial service for their relatives. We were extremely lucky they happened to come by.

(32) My granduncle carried me on his back, my grandaunt carried my friend Hatta, and that is how we were finally able to get home. Without their help, I'm sure we would have died along the way and I would have had no chance to talk to you like I am now.

(33) My friend and I finally reached home on a stretcher that my grandfather brought.

(34) After I got home, my mother cut off my clothes with scissors to undress me without the pain I would have experienced if my clothes had brushed against my hands and legs where red flesh was exposed. She dressed me in a new yukata, a light cotton kimono. I later heard that my friend Hatta had died from acute radiation poisoning on August 8th - two days after the bombing.

(35) For one and a half years I received treatment for my burns. Fortunately, one of our acquaintances was a doctor and he visited my house twice a day - morning and evening. This

doctor, however, was an 'ENT' doctor - ear, nose and throat. Such doctors did not normally treat burns – that would be a surgeon or dermatologist. However, we couldn't ask for more because, with the city virtually destroyed, we had neither doctors, nurses, medicines nor food available to us. It is estimated that about 300 doctors and 1,800 nurses were in Hiroshima City before the atomic bombing. More than 70 percent were killed by the bombing. I was very lucky to receive treatment from a doctor, regardless of his specialty, because a great number of victims never got any treatment. In this way, I managed to survive - I was extremely fortunate. However, treatment was a painful ordeal. The burns were covered with gauze bandages smeared with medicine. Each day, the doctor came to remove the bandages. Since the summer heat completely dried the gauze, it stuck to the wound. I couldn't stand the extreme pain I felt when it was pulled off. Blood and pus spouted from the affected area. I clearly remember wailing, 'Ow! Ow! It hurts! Stop!' My grandfather washed the blood and pus from the gauze just removed, sterilized it in boiling water, dried it, and used it the next day. No better treatment was available in postwar Japan due to the scarcity of goods.

(36) Although I have survived, since 1971 I have suffered from chronic hepatitis thought to have been caused by radiation. I have been hospitalized 14 times, and currently I receive injections three or four times a week. I suffer from many diseases. I now receive every kind of treatment except those related to obstetrics, gynecology, pediatrics, and psychiatry. Every day I'm anxious and painfully aware of my difficulties and the pains involved with living. In despair, I sometimes wonder why I have to continue to live while suffering this much. Whenever I yield to despair, however, I encourage myself by saying that I managed to survive the bombing so I should continue to live. This is how I have lived thus far.

(37) Scars from the burns remain on many parts of my body. Among them, burns on my right hand and arm were so severe from the right elbow to the fingertips that the skin peeled off and the red flesh inside was exposed. My right elbow has been locked at an angle of 120 degrees since then, I can't move it. My fingers - except for the thumb - remain bent and I cannot move them either. I have a very hard life because of this.

(38) My four fingers don't move. I have keloids on my wrist. Usually a burn heals within a month. When mine healed, large lumps of flesh swelled up on the scar. This slide shows my wrist after the keloids were removed by a surgical operation.

(39) I have a peculiar black-brown fingernail growing from my right index finger. A glass fragment propelled by the blast pierced the root of this nail. According to a dermatologist, the glass fragment destroyed the cells that produce the nail. He correctly predicted that this right fingernail would never heal and become a normal fingernail.

(40) The fingernail grows so thick and hard it can't be cut with ordinary nail clippers. I let it grow for 2 to 3 years.

(41) Then a crack appears at the root of the nail and it falls off naturally. I have donated those nails to the Hiroshima Peace Memorial Museum, where two of my nails are exhibited in a showcase in the bomb blast section.

(42) This slide shows only one of my ears, but both of my ears were crushed. Blood and pus accumulated in both ears and they swelled large and turned purple. The doctor squeezed the blood and pus out, but that blood and pus had rotted the cartilage forming the ears. The rotted cartilage was crushed when the blood and pus were squeezed out. This is how my ears were damaged.

(43) These clothes were worn by my friend, Yamamoto, with whom I fled immediately after the bombing. His mother always treasured them as his "remains." His siblings donated them to the A-bomb museum in June 2003.

(44) The chest of the jacket is burned out, and the front of his pants is burned to shreds. You can see the lining in back. I encountered my friend's clothes again on August 2, 2004, after 59 years. I was unable to look at them without tears. Why did the U.S. have to mercilessly kill 7,200 innocent mobilized students? Again, I felt a twinge of hatred for the U.S. However, hatred never destroys hatred. Where there is hatred, we cannot have peace. However painful, we must overcome our hatred.

Of about 60 classmates, only 14 are still alive. I am one of the few survivors. Nearly 50, including Yamamoto and Hatta, were cruelly killed by the atomic bomb.

Ever since the war, I have pledged myself to not wasting their deaths.

I have lived with the conviction that it is the duty and responsibility of those who survived to convey the unheard voices and will of the tremendous number of dead. I live and work on behalf of my dead friends.

Even under the harshest of circumstances, we must never forget to open our hearts to others. We survivors have discussed this among ourselves and have lived since the war with this lesson etched in our minds.

I believe it is clear that the atomic bomb was dropped for experimental purposes. There are three

facts that support my view. First, the United States manufactured two different types of atomic bombs and wanted to compare them in terms of destructive capability. One was the 'Little Boy,' the uranium bomb dropped on Hiroshima. The other one was the 'Fat Man,' the plutonium bomb dropped on Nagasaki. These two atomic bombs are different models using different nuclear substances. Secondly, the bombing targeted the center of the city where factories and houses were clustered. In order to overthrow militarism, the killing of a great number of Japanese citizens was seen as necessary. Thirdly, they selected cities that had been hardly damaged by incendiary bombs from air raids. In fact, air raids on targeted cities were prohibited. These are the three facts that prove the atomic bomb was used to experiment with its power and destructive energy.

The U.S. takes the view that dropping the atomic bomb was justified because it saved a million U.S. officers, troops, and Japanese citizens. But I'd like to ask the United States to stop and think. The million lives saved is a baseless assumption. The atomic bombs dropped on Hiroshima and Nagasaki actually killed well over 300,000 people. What does the U.S. think about taking this number of lives? Don't we always say that the life of a single person weighs more heavily than the earth?

Nuclear weapons are an absolute evil. We victims of the A-bombs overcome our grief and hatred to object to all war and appeal to the world for the prompt and total abolition of nuclear weapons. Currently, it is said that including 10,000 in Russia waiting to be dismantled, there are as many as 30,000 nuclear warheads on earth. Of those, 90% are in the U.S. or Russia. It is only the U.S. and Russia that maintain huge arsenals of nuclear weapons. The five nuclear-weapon states, the U.S., Russia, the U.K., France and China, are sanctioned by the Nuclear Non-proliferation Treaty (NPT). This contradiction has been allowed by the international community. We, the A-bomb survivors, cannot help but feel strong resentment against such an obviously irrational and unjust situation.

Unless we all have respect for international law and order, the world will never know peace. As we have seen in Iraq, no true victory, and certainly no peace, can come from power controlling power. We must value the frameworks built so painstakingly by the nations of the world and be determined to live in peaceful coexistence with other peoples, other religions, and other cultures. I firmly believe that only on that foundation can we build a world of security and prosperity.

The human family is struggling with the negative legacy of the 20th century, including wars, nuclear weapons, terrorism, global warming, famine, refugees, violence, and violations of human rights. If people living in the 21st century fail to deal properly with this negative legacy, the present century may be the last with humans on this Earth. I now strengthen my own

determination to live my remaining days in full awareness of my responsibility as a crew member on 'Spaceship Earth.' I would like you to convey my view and wishes to all citizens in all parts of the world.

Thank you very much.