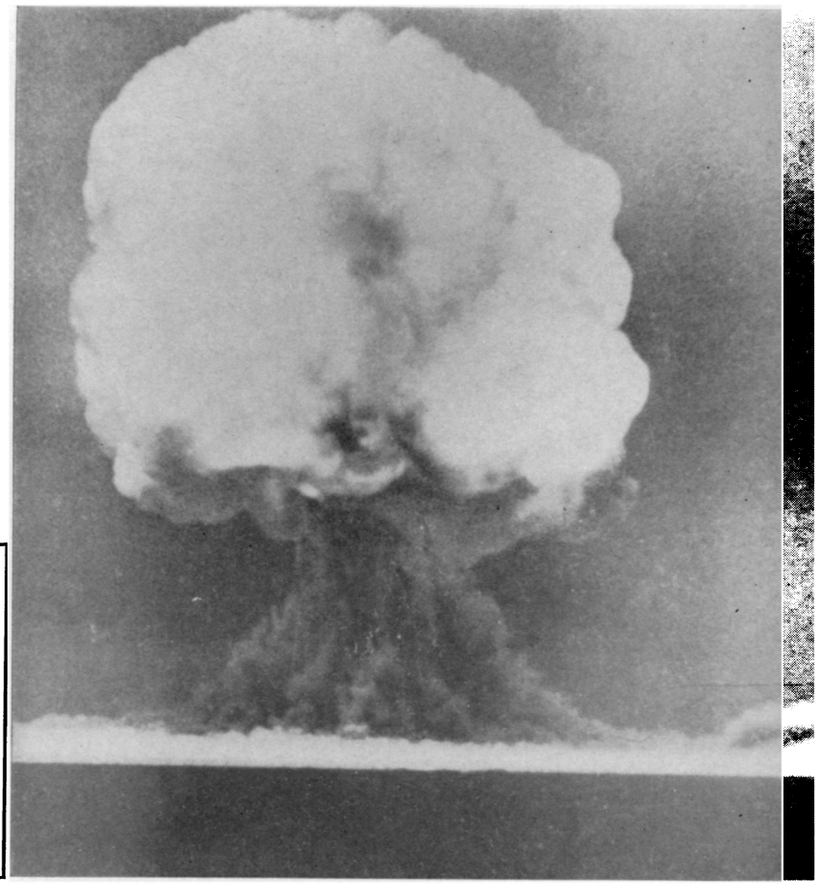
"Now we are all sons-of-bitches"

The only reporter allowed to witness the birth of the Atomic Age recalls the day it happened

by William L. Laurence

W. L. Laurence, science editor emeritus of the New York Times, was the only reporter on the story of the atomic bomb. He was at Trinity, Hiroshima and Nagasaki. He was awarded his second Pulitzer Prize for his eyewitness account of the bombing of Nagasaki, recognized as a classic of journalism. This is his account of the day the world turned a corner.



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The world, as we knew it, would never be the same again.

To the few of us on the desert near Alamogordo, N. Mex., that morning of July 16, 1945, the world, as we knew it, was never to be the same again. We watched that world explode in a fraction of a millionth of a second and a new world born in its ashes. We all knew that we had been privileged to be present at the birth of a new age—the Atomic Age.

Those moments that dismal, drizzly July morning are just as fresh in my memory as though they were just happening. Once again I hear the voice of gentle Sam Allison, assistant director of the Los Alamos Atomic Laboratory, intoning what was then the first countdown over the radio network, first at periods of minute intervals, beginning at "twenty minutes to Zero," and then the last ten seconds at intervals of one second.

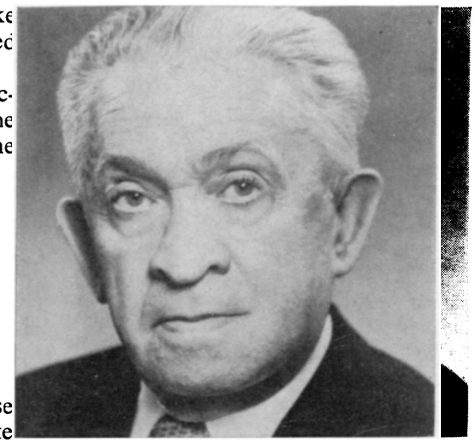
I remember only too well the atmosphere of doubt that pervaded the scientists up to the last minute of the test. On the one hand, they were haunted by the fear that their "gadget," the product of the greatest concentration of brainpower in history, might turn out to be a "fizzle," which meant either a complete dud or the equivalent of no more than a few ordinary blockbusters in terms of TNT. On the other hand there were many, including some of the elite among them, who feared that man, like Sorcerer's Apprentice, may have started something beyond his control.

One day, when confidence in the successful outcome was very low, someone composed a doggerel which became known as the "Los Alamos Blues":

From this crude lab that
spawned the dud
Their necks to Truman's
axe uncurled
Lo the embattled savants
stood
And fired the flop heard
round the world.

On the other hand, there were those who feared that the test would liberate a Frankenstein monster. After all, no such force had ever before been liberated on earth, and no one among the scientists, not even the great Enrico Fermi himself, was willing to guarantee that no such thing as the ignition of the atmosphere, either in the vicinity of the explosion, or even over the entire globe, might not take place.

"If the bomb fails to go off," Fermi said on the day before the scheduled test, "then Oppie (Dr. Robert Oppenheimer) and the laboratory would have proved the system impossible and that would be the best of good news for man. On the other hand, there is the more remote possibility of atmospheric ignition."

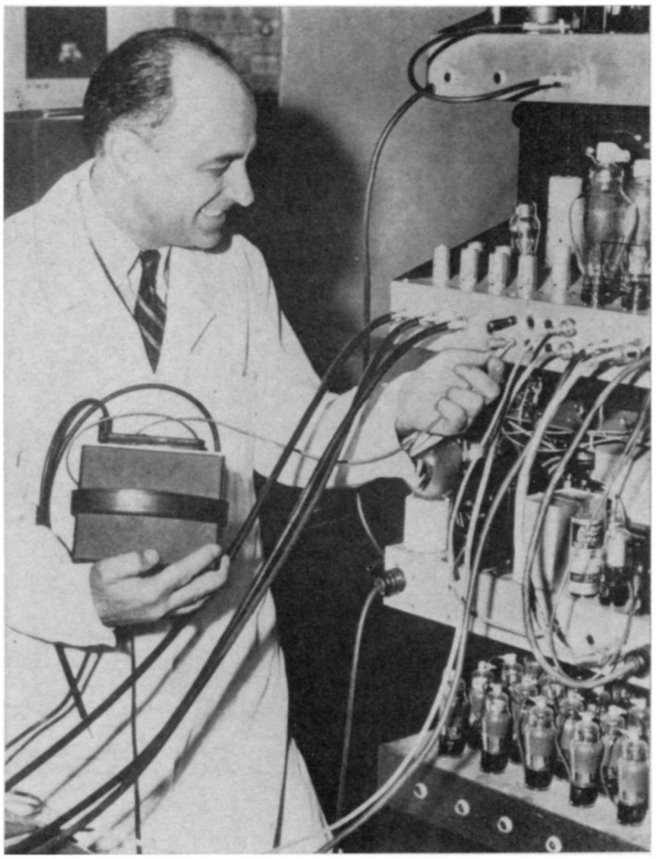


Laurence: Watching a gadget perform.

"I invite bets," he said, "first, against the destruction of all human life, and second, just that of human life in New Mexico."

One of the younger scientists was so unnerved that he was removed from the scene on the advice of the psychiatrists whom Gen. Leslie R. Groves had brought down to calm down the physicists. As it turned out, some of the psychiatrists had to calm down each other.

As a matter of fact, I had already prepared, at the request of Gen. Groves, a set of press releases, one of



Fermi: A fizzle would be the best of good news for man.

Oppenheimer and Grove: The calm who stayed to watch.

which reported that Dr. Oppenheimer and a number of other distinguished physicists, chemists and educators, who had visited Oppie's ranch in New Mexico, had lost their lives in an accidental explosion of an Army ammunition dump. But when Gen. Groves heard of Fermi's apocalyptic speculation he decided Fermi was making a bad joke, though a good many of the senior physicists did not feel that Fermi was merely joking.

Allison spoke into two microphones linking the control station by wire and radio to the other observation points.

"Twenty minutes to Zero!" Allison announced.

"Fifteen . . . ten . . . five minutes to Zero!"

Dr. Joseph L. McKibben, University of California physicist, was in charge of the control panel that would actually fire off the bomb. Not far from him stood young Dr. Donald Hornig, in charge of a reserve switch that would stop the operation at a command from Dr. Kenneth T. Bainbridge, Harvard physicist, the field commander, in case anything went wrong.

Turning to Oppenheimer, who was just passing by, young Hornig, who later became Special Assistant to the President for Science and Technology, asked: "What if I just say this can't go on and stop it?"

Oppenheimer looked at the young face grinning at him in the glare. "Are you all right?" he asked. Just then Allison's voice was heard again.

"Four minutes to Zero!"

"Three . . . two . . . fifty-five seconds to Zero!"

At forty-five seconds McKibben turned on the automatic timer. Allison kept counting off the seconds.

"Ten . . . nine . . . eight . . . seven"

Like many in the group Allison had his doubts. What if Fermi's qualms were right? In a few more seconds, as I count them off, we may release on earth a 1,000 billion curies of radiation, the equivalent of a million tons of radium, an unimaginable quantity never released before on this earth, a quantity possibly great enough to set the atmosphere on fire and extinguish all life on earth. Do I have the right to participate in an experiment that might kill off the human race?

"Three . . . two . . . one . . ." It was the voice of doom tolling off the world's last seconds.

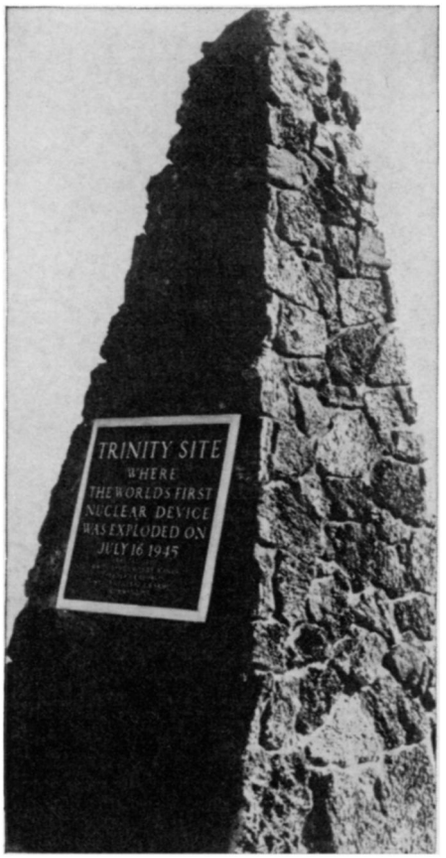
And then, after an agonizing interval, the voice from the clouds shouted "ZERO!" and at that instant, as I recorded soon after that morning, there rose from the bowels of the earth a light not of this world, "brighter than a thousand suns," lighting up earth and sky with a dazzling luminosity. Up it went, a great ball of fire, changing colors as it kept shooting upward, expanding and rising, rising and expanding, an elemental force freed from its bonds after being chained for billions of years. A giant mountain was born in a few seconds instead of millions of years, quivering convulsively.

Then out of the great silence came a mighty thunder. It was the blast from thousands of blockbusters going off simultaneously. The thunder reverberated all through the desert, bounced back and forth from the Sierra Oscuro Mountains, echo upon echo. The ground trembled under our feet as in an earthquake.

The big boom came about one hundred seconds after the great flash—the first cry of a newborn world.

That morning, while still in a state of semi-consciousness, I wrote:

"On that moment hung eternity;
Time stood still,
Space contracted into a pinpoint.
It was as though the earth had opened
And the skies had split;
One felt as though he had been privileged
To witness the Birth of the World;
To be present at the Moment



Monument to a new world's birth.

of Creation
When God said: 'Let
there be Light!'"

But Prof. George B. Kistiakowski, Russian-born Harvard chemist, saw an entirely different vison. "It was the nearest to Doomsday," he told me that morning, "that one could possibly imagine. I am sure that at the end of the world, in the last millisecond of the earth's existence, the last man will see something very like to what you and I have seen."

A little later I ran into Prof. Ernest O. Lawrence, inventor of the cyclotron, who was one of my neighbors at the desert that morning. "I'll never forget what you said," he exclaimed. Since I had forgotten, he reminded me.

"You said that it was like watching the Second Coming of Christ!" Later still I asked Dr. Oppenheimer, the intellectual head of the project, what his first thoughts had been at the Zero moment. "At that moment," I heard him say, and his voice sounded as though it came from far away, "there flashed into my mind a passage from the Bhagavad-Gita: 'I am become Death, the shatterer of worlds!'" It was the line in which Krishna had reassured a reluctant royal swordsman that he was both the slayer and the slain. But the most down-to-earth reaction came from young Prof. Bainbridge: "Now," he said, "we are all sons-of-bitches!"

I watched the "shatterer of worlds" a little more than three weeks later as I witnessed the duplicate of the "gadget" tested in the desert, the second atomic bomb made of the man-made element, plutonium, dropped from a B-29, half a mile in front of the B-29 in which I was riding, over the city of Nagasaki. The vision that I then saw was entirely different from the one I saw in the desert. And here, in brief, is what I recorded on the spot in the only eyewitness account of what I saw, written by one half awake like one recording a nightmare seen in broad daylight.

Awe-struck, I watched a pillar of purple fire shoot upward, becoming ever more alive as it climbed skyward through the white clouds. It was no longer smoke, or dust, or even a cloud of fire. It was a living thing, a new species of being, born right before our incredulous eyes.

At one stage of its evolution, covering millions of years in terms of seconds, the entity assumed the form of a giant square totem pole, its base about three miles long . . . It was a living totem pole, carved with many grotesque masks grimacing at the earth.

There came shooting out of the totem pole's top a giant mushroom, even more alive than the pillar, seething and boiling in a white fury of creamy foam, sizzling upward and then descending downward, a thousand geysers rolled into one. It kept struggling in an elemental fury, like a creature in the act of breaking the bonds that held it down. In a few seconds it had freed itself from its gigantic stem and floated upward with tremendous speed, its momentum carrying it into the stratosphere to a height of about 60,000 feet.

But at that instant another mushroom, smaller in size than the first, began emerging out of the pillar. It was as though the decapitated monster was growing a new head.

We could still see the giant totem pole and its mushrooms when we last gazed at them from a distance of about two hundred miles. The pillar was a giant mountain of jumbled rainbows in travail. I knew that much living substance had gone into the making of those rainbows.

The quivering top of the pillar was protruding to a great height through the white clouds, giving the appearance of a monstrous prehistoric creature with a ruff around its neck, a fleecy ruff extending in all directions, as far as the eye could see. □