

**Q & A with Cynthia Lowen**author of *The Cloud That Contained the Lightning***Q: Why did you want to write about the atomic bomb and Oppenheimer in particular?**

Although I never met him, I understood from a very young age that my grandfather worked on the Manhattan Project. He was a young physicist in Eugene Wigner's theoretical group at Met Lab in Chicago. When the scientists began to clash with the military over the management of the Project—the scientists were convinced it would only take one atomic bomb to beat the Nazis, while the military wanted to develop an entire industrial production line of bombs—my grandfather leaked the Manhattan Project's existence to first lady Eleanor Roosevelt, in the hopes she would take up the scientists' cause. For this security breach, he was kicked of the Project, followed by the FBI who suspected him of communist sympathy, and died shortly after the war at the age of 38, of causes my family has never determined.

Having the atomic bomb as part of my family history was something that I always felt deeply conflicted about. It also prompted me to wonder, what drove these scientists to create such a terrible weapon? What were the fears, prejudices, hubris and very human qualities that came together at that juncture in history, to produce such a thing? And furthermore, what prompted it to be used? While the earliest drafts of the poems in the book were originally about my grandfather, I soon decided that I wanted this collection to revolve, rather, around the character of J. Robert Oppenheimer. Although the atomic bomb had thousands of creators, it was Oppenheimer who came to be known as 'the father of the atomic bomb,' and I wanted to use this emblematic status as a way to explore these questions. Oppenheimer is such a complicated, rich figure, and the more I found out about him, the more I felt his life encapsulated the intersection of ambition, violence, conscience, and ultimately, tragedy, that touched so many people involved with the atomic bomb's creation and use.

**Q: Richard Rhodes, who won a Pulitzer Prize for his landmark book *The Making of the Atomic Bomb*, has said "No biographer in six hundred pages has come closer to understanding him—**

and the bomb—than does Cynthia Lowen in these subtle, resonant poems.” What kind of research did you do into Oppenheimer’s life in order to get this close?

Richard Rhodes’s own watershed book is where my research began—in fact, years before I ever started the poetry collection, when I was trying to learn more about my grandfather, who is mentioned therein. I continued to turn to this book often in the course of writing the collection, not just for information about Oppenheimer, but also to develop an understanding of the science behind the bomb, and the timeline leading up to its use. Kai Bird and Martin Sherwin’s Pulitzer Prize-winning *American Prometheus* was absolutely instrumental in learning about Oppenheimer’s personality, character, beliefs, insecurities, relationships, and really, in developing a sense of him as a person. From there I watched documentaries, clips I found of Oppenheimer online, I read papers, letters, articles—really, anything I could get my hands on. Both the plays *In the Matter of J. Robert Oppenheimer* and *Copenhagen* helped me look at the scientist from a dramatic standpoint, and think about how to develop the distinct voice that would become that of Oppenheimer’s in the book. I also read biographies about other scientists working on the Manhattan Project, such as Eugene Wigner and Leo Szilard, and the military heads of the project, including General Groves and Vannevar Bush, and histories of life at Los Alamos. Of course, in writing a book of poetry, rather than hard history, I was able to take the historical record as a jumping-off point to imagine the psychological dimensions of this man and his work.

That said, as I was learning more about Oppenheimer and the making of the bomb, I felt it was essential to write also from the perspective of the *hibakusha*, Japanese for “explosion-affected people.” The Peace Memorial Museum in Hiroshima has done an incredible job of archiving the testimonies of the people who witnessed the bombing on August 6, 1945, many of whom lost their children and loved ones. I also read several collections of essays by the survivors of Hiroshima and Nagasaki, as well as poems by authors including Sankichi Toge, an activist who used poetry to advocate for peace.

**Q. What were the most surprising things you came across during your research?**

There were many things that surprised me in the course of researching this book. One of the things that really stands out—though I suppose it’s not really surprising at all—is that documentary footage of Hiroshima and Nagasaki filmed shortly after the bombings and bearing witness to the human toll, was

suppressed and confiscated by the Americans and taken out of the country. A ban was also imposed in Japan on the publication of written works referring to the atomic bombings, as well as criticism of the Allied forces. This lasted throughout the U.S. occupation and reconstruction, until the early 1950s. As a result, during the ban, poetry and art became an important way to talk about the bomb, and to write critically of the U.S. and Japanese governments.

I was also surprised to discover the extent to which the hibakusha were discriminated against, as reminders of defeat and humiliation. They often had a difficult time finding jobs, getting married, and even getting support for their medical needs from the government.

In terms of Oppenheimer, I was surprised to discover that he himself wrote and loved poetry. Of course, he famously quoted the Bhagavad Gita upon the first testing of an atomic bomb at Trinity, “Now I am become death, destroyer of worlds.” I think his passion for poetry gave me a kind of permission to address his life through this form, and gave me hope that perhaps, from somewhere in the great beyond, he might approve.

**Q: You quote Oppenheimer’s own words in the opening of the book: “*There is another theory of relativity, one more easily noticed and intuitively understood than Einstein’s great theory. It speaks to human nature rather than to the nature of the physical universe, to the complementary relationship between observer and observed. It speaks to the occasional work in which an author comes to a deeper understanding of his own life through studying another.*” How has your understanding of Oppenheimer—and yourself—changed through the writing of these poems?**

My aim with this book was to resituate violence that takes place on such a large, abstract scale and to make it personal. I wanted to bring the bomb back down to human size and find an entry point. And so there’s a lot of interpersonal violence and anger in these poems, between Oppenheimer and his wife, who had a tumultuous relationship, between Oppenheimer and his brother and family, between him and the victims. There is also a lot of rage Oppenheimer directs at himself. Though I was trying to understand this man and what drove him, I was also observing myself, and my relationships and experiences, as a way to relate to the bomb, and so these poems are also very personal. I was struck by this quote from Oppenheimer, and chose it for the epigraph, because in the course of writing the book, I began to feel a

very close relationship with my subject, and it was my hope that readers would see themselves, and the difficult choices they may face, in the conundrums Oppenheimer faced.

As the poems developed, and also through the experience of making BULLY, I knew I wanted to hold Oppenheimer, and the many creators of this weapon, accountable. While Oppenheimer was initially driven, as were the majority of Manhattan Project scientists, by the fear Hitler was on his way to creating an atomic bomb of his own, I did not want to let Oppenheimer off the hook, or suggest he was merely a product of his time. Following the defeat of Germany in May 1945, there was an opportunity to reassess completing this weapon, but that opportunity was missed—why? To me, this was a moment where those very human qualities of ambition, curiosity, prejudice and power outweighed those equally strong qualities of empathy, compassion and mercy. Through both the poems and the film, the thing I come back to at the end of the day is that we *do* have choices in how we treat our fellow humans, and that it *is* within our power to act conscientiously, even when it comes to issues as big as war or bullying.

**Q: Halfway through the collection, a series of poems starts to appear, ‘Notes From The Target Committee’ which include things said by those in the US Government while they were discussing where to drop the bombs. It brings to home the enormity and reality of the bombings in such a visceral way. Could you elaborate on this?**

Among the things that I was stunned by in researching this book were the calculations that went into selecting the cities that would be the testing-ground for this new weapon. The title of each section of the poem *Notes from the Target Committee* are cities that were under consideration by the committee of military and civilian leaders, including Oppenheimer. The fact that Kyoto was spared because Secretary of War Henry Stimson had visited it and found it beautiful, while Tokyo was off the list because it had already been leveled by fire-bombing, while Hiroshima was “ideal” because it had not suffered extensive damage and would enable scientists to study the effects of the blast, seemed to me like playing god. How can anyone say the temples of Kyoto are more valuable than the lives of innocent people in Hiroshima and Nagasaki? The poem from which the title of the book is taken, *Oppenheimer Gets Caught in a Blizzard*, is a kind of response to the *Notes from the Target Committee* poem, in which Oppenheimer is trying to remind

himself in the wake of the bombing that each human life is precious, and yet, he is so haunted by the bomb's many victims, that to think of each one as precious is terrible.

**Q: You recently visited Japan and went to Hiroshima for the anniversary on August 6th. What was that journey like for you?**

Visiting Hiroshima for the 68<sup>th</sup> anniversary of the dropping of the bomb was incredibly intense. Especially on August 6<sup>th</sup>, the magnitude of the tragedy that occurred there is so visceral. In visiting the Peace Memorial Museum, and seeing items that were preserved by family members to remember those who perished—a child's lunchbox filled with food that turned to charcoal, a melted tricycle, fragments of skin, a girls' sandal—the loss of innocent life is just immense.

While August 6<sup>th</sup> in Hiroshima is a day of remembrance, it is also a day of hope. It was incredible to see people from all over the world coming to Hiroshima to advocate for a future when the world's existing nuclear arsenals have been decommissioned. (According to the Federation of American Scientists, today there are approximately 20,000 nuclear warheads in the world's combined stockpiles, while 2,000 belonging to the U.S. and Russia are believed to be ready for use on short notice). I was also struck by was the extent to which the people of Hiroshima, especially the young people, see themselves as ambassadors to the world, and take the responsibility of reminding us of the human toll of these weapons very seriously.

That afternoon, I attended a talk with a man who had been in Hiroshima that day 68 years ago, as a teenager in his first year of college. He was badly hurt in the bombing, and has been diagnosed with cancer. When an American member of the audience asked him if he felt hatred towards the Americans for dropping the bomb, he seemed taken aback and responded, "No, I don't hate the Americans. I hate this weapon."

**Q: What are your hopes for this collection?**

While this book is about a historical figure, and an historical event, it is also about how we apply the lessons of the past to the future, and to our everyday lives. My hope for *The Cloud That Contained the*

*Lightning* is that it will spark debate about how we pursue science and technology ethically and how we value and respect human life, especially as the means of killing in conflict—such as by unmanned drones—become ever more removed from the brutal reality of the act. With that in mind, I hope this book will find a home among a diverse audiences, from high school students studying the Second World War, to college and university students who are going into the sciences, to professionals working in technology, to artists, historians, and of course, poetry lovers. It is my hope this book will speak to the stakes—and opportunities—we all have in reducing violence in our communities and in the world.