The Pescadero Opera Society presents

Dr. Atomic



Music by John Adams

Libretto in English by Peter Sellars

Opera in Two Acts

Setting: Los Alamos, NM Time: Summer of 1945

Cast

| J. Robert Oppenheimer (baritone) | Gerald Finley |
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| Kitty Oppenheimer (mezzo-soprano or soprano) | Kristine Jepson |
| General Leslie Groves (bass) | Eric Owens |
| Edward Teller (dramatic baritone) | Richard Paul Fink |
| Robert R. Wilson (tenor) | Thomas Glenn |
| Frank Hubbard (baritone) | James Maddalena |
| Captain James Nolan (tenor) | Jay Hunter Morris |
| Pasqualita (mezzo-soprano or contralto) | Beth Clayton |

Conductor: Donald Runnicles Metropolitan Opera Orchestra and Chorus

Première performance October 1, 2005 at San Francisco Opera, San Francisco, California

Synopsis

Background. In July 1945, against a backdrop of desert solitude and scorched landscapes, a new millennium in human history is about to start. World War II is in its final, terrible phase. Work on the atomic bomb approaches its culminating point. Physicists, engineers, and U.S. military personnel are laboring under intense pressure from Washington to have the first atomic bomb tested and ready for use within the next two weeks. J. Robert Oppenheimer ("Oppie" to his friends) has brought the brightest minds in physics and engineering to a remote mesa in Los Alamos, New Mexico, in what was assumed to be a race against their German counterparts. But now Germany has surrendered, and many of the scientists are beginning to question the necessity of its use in Japan. General Leslie Groves, Army commander of the project, while aware of Oppenheimer's vague but troubling past involvements with the Communist party has, up to now, been able to persuade the government to look the other way because of Oppenheimer's great value to the program.

Act I, Scene 1

The Manhattan Project laboratory, Los Alamos, New Mexico. June 1945

After the opening chorus, Edward Teller confronts Oppenheimer in the lab. Teller's obsession with his dream of a thermonuclear weapon, the "Super," has caused difficulties with other scientists. Teamwork is difficult for Teller, and Oppenheimer excuses him from the group collaboration. Teller shows Oppenheimer a letter he has just received from another physicist, the Hungarian Leo Szilard, urging all the scientists involved in atomic energy to take a moral stand against the bomb's use and to sign a letter to President Truman: "We alone are in a position to declare our stand." Oppenheimer admonishes Teller and other scientists not to involve themselves in "political pronouncements."



Robert Wilson, a committed, idealistic physicist (and the youngest division leader at Los Alamos) is organizing a meeting in his technical area to talk about the social and moral implications of the "Gadget" (code word for the bomb). Oppenheimer, well aware of Wilson's liberal affinities, objects to the plan. "You could get into trouble if you had such a meeting." Wilson also has a petition for the President that he hopes everyone will sign: "Atomic attacks on Japan cannot be justified until we make clear the terms of peace and give them a chance to surrender." Oppenheimer, who has just returned from Washington, describes the decision to bomb Japanese cities, focusing on civilian targets. "We should seek to make a profound psychological impression on as many inhabitants as possible."

Scene 2 The Oppenheimers' house in Los Alamos



Oppenheimer and his wife, Kitty, are alone at home. It is a warm summer night, but Oppenheimer is preoccupied reading reports. Kitty asks him: "Am I in your light?" Roused, Oppenheimer responds to her in rich, atmospheric stanzas by one of their favorite poets, Baudelaire. For a few brief moments, they are transported into the intoxicated climate of the poem, and then it's time for Robert to go to work. "Those who most long for peace now pour their lives on war." Left alone, Kitty thinks about the

contradictions of peace, war, and love: "A world is to be fought for, sung and built — love must imagine the world."

Scene 3

The "Trinity" test site at Alamogordo, New Mexico July 15, 1945

It is the night of the test of the first atomic bomb. Truman is in Potsdam, Germany, negotiating the spoils of Europe with Churchill and Stalin. The pressure on Oppenheimer and General Groves to achieve a successful test is unyielding — the Americans need to have a nuclear weapon as a trump card to play against the Russians.

As predicted months before, a massive electrical storm is lashing the test site. The bomb, already partially armed for detonation and hoisted on a high tower, is in danger of being struck by lightning. General Groves, beside himself with frustration and anxiety, berates Chief Meteorologist Frank Hubbard, who warns the General that attempting the test in these conditions is extremely dangerous. Captain Nolan of the Army Medical Corps tries to impress upon Groves the deadly toxic properties of plutonium and radiation poisoning, which are only just beginning to be understood. An accident at the test site could render hundreds of military and scientific personnel fatally ill with painful radiation poisoning.

Already panic is starting to take hold, and several enlisted men have had to be removed under sedation. The General dismisses all staff to confer with Oppenheimer alone. The physicist "Oppie" gently humors Groves about his chronic weight problem. The General confesses that he has made many failed attempts to control his diet. Groves leaves to catch two hours of sleep. Oppenheimer faces his own personal crisis alone in the desert, recalling the *Holy Sonnet* by John Donne that inspired him to name the test site "Trinity:" "Batter my heart, three-person'd God."

Act II, Scene 1

The Oppenheimers' house

It is two in the morning, July 16th. Two hundred miles from the test site, Kitty and her Tewa Indian maid, Pasqualita, are watching the night sky for signs of the explosion. (Women were prohibited from entering Alamogordo.) Pasqualita occasionally checks on the Oppenheimers' sleeping child, Kitty. She sings a long soliloquy reflecting on the war, death, and of the resurrection

of the spirit: "Now I say that the peace the spirit needs is peace, not lack of war, but fierce continual flame."

~ Orchestral Interlude ~

Rain over the Sangre de Cristos Mountains. Seven-month-old Katherine Oppenheimer awakens, crying. Pasqualita takes the baby and comforts her, singing a lullaby.

Scene 2

The "Trinity" test site at Alamogordo, New Mexico Midnight, July 16, 1945

The plutonium bomb has been mounted on the detonation tower and all personnel have been cleared from the surrounding blast area. Robert Wilson and Jack Hubbard are at the observation bunker. Both scientists are extremely worried about testing the bomb in the middle of an electrical storm. They worry about the possibility that the detonation might set off an uncontrolled chain reaction, ending in the destruction of the earth's atmosphere.

Wilson has to climb the tower one last time to attach a measuring instrument to the bomb. From the top of the tower he can feel the wind and rain pound his face, and he sees flashes of lightning in the distance. Jack Hubbard is at the foot of the tower, making wind velocity measurements ordered by General Groves. Wilson confesses his extreme anxiety about being around the bomb in the middle of an electrical storm. Hubbard points out that a test in the middle of such weather is a "blunder of the first magnitude," and that the high winds could scatter lethal radioactive debris for miles.

Meanwhile, General Groves, Oppenheimer, and the others wait nervously at the Base Camp observation bunker for the storm to pass. Edward Teller muses: "Might we not be settling off a chain reaction that will encircle the globe in a sea of fire?" Rumor has it that Enrico Fermi, one of the team's most respected scientists, has been taking bets on whether such a calamity might occur. Oppenheimer notes pointedly that such a result is not possible, but it hardly brightens the mood of gloom pervading the test site. With the rain still coming down, Groves disregards Hubbard's warnings about the storm and Oppenheimer orders all personnel to prepare for the test shot at 5.30 a.m.

Scenes 3 and 4

The final countdown begins at 5:10 a.m. Groves, always fearing sabotage, complains to Lieutenant Bush about the behavior of individuals who have caused endless security headaches: "This program has been plagued from the start by the presence of certain scientists of doubtful discretion and uncertain loyalty."

Groves is plagued by fears of sabotage, while Oppenheimer, whose normally thin frame has shrunken even further to 98 pounds, is in a state of extreme nervous exhaustion. Everyone waits, each absorbed in his own thoughts. "Memories, regrets, spasms, fears, afflictions, nightmares, rages and neuroses" overwhelm the hours between the minutes. Pasqualita has her own visions: "News came on the frost, 'The dead are on the march!""

At Base Camp, the men make bets trying to guess the yield of the bomb. Oppenheimer surprises everyone by his pessimistic prediction of three kilotons. "A fizzle," Teller calls it. Even Groves is unable to conceal his waning faith. Teller scoffs at their timidity and predicts a 45-kiloton explosion.

The night sky is suddenly filled with a terrifying vision of Vishnu, as described in the *Bhagavad Gita*: "At the sight of this, your Shape stupendous, full of mouths and eyes ... terrible with fangs ... when I see you, Vishnu ... with your mouths agape and flame-eyes staring — all my peace is gone; my heart is troubled."

At zero minus ten minutes, Groves becomes concerned that Oppenheimer, "our high-strung director," is going to have a nervous breakdown. A warning rocket arches in the sky and a siren sounds. Everyone rushes to their places in the trenches. Then the storm breaks, and the sky over Ground Zero suddenly clears. At zero minus two minutes, another warning rocket goes off, but sputters out prematurely. At zero minus 60 seconds, a third rocket appears in the morning sky, signaling the final 60-second countdown. Base Camp resembles an outpost of the dead — rows of scientists and Army personnel lying face down in shallow ditches. There is no movement or whisper of activity, only the rhythmic countdown over the loudspeaker. At zero minus 45 seconds, an engineer flips the switch for the automatic timer. The triggering circuits begin to fire. "Zero minus one." There is an eerie silence — a new era begins.

John AdamsBorn: February 15, 1947 in Worcester, MA

As a composer, conductor and creative thinker, John Adams occupies a unique position in the world of music. His works stand out among contemporary classical compositions for their depth of expression, brilliance of sound, and the profoundly humanist nature of their themes.

Adams' works span more than three decades and are among the most performed of all contemporary classical music. His stage works, all in collaboration with director Peter Sellars, have transformed the genre of contemporary music theater. *New Yorker Magazine* wrote "Not since *Porgy and Bess* has an American opera won such universal acclaim as *Nixon in China.*"

Born and raised in New England, Adams learned the clarinet from his father and played in marching bands and community orchestras during his formative years. He began composing at age ten, and his first orchestral pieces were performed while just a teenager. Adams received honorary doctorates from Yale, Harvard, Northwestern, Cambridge and The Juilliard School. A provocative writer, he is author of the highly acclaimed autobiography, *Hallelujah Junction* and is a frequent contributor to the *New York Times Book Review*.

As conductor, Adams leads the world's major orchestras. Conducting engagements in recent and coming seasons include the Concertgebouw Orchestra, Berliner Philharmoniker, the Cleveland Orchestra Symphony Orchestra, Los Angeles Philharmonic, Netherlands Radio Philharmonic, Wiener Symphoniker and BBC Symphony. He leads Rome's Orchestra of Santa Cecilia in his oratorio *The Gospel According to the Other Mary* in October 2018.

Dr. Atomic



In the desert at Los Alamos, New Mexico, a group of young physicists, hand-picked and led by the brilliant and complex J. Robert Oppenheimer, have labored furiously in a race against Hitler to develop the world's first atomic bomb. Now, in the hours before the test explosion, they are confronted with the moral crisis of its inevitable use on Japanese citizens.

The question of the moral implications of the atomic bomb is raised in John Adams' opera, *Doctor Atomic*, just as much as that of the influence on the private lives

of the main characters. The longing to overcome human boundaries led the physicist, J. Robert Oppenheimer, to begin an experiment that formed a threat to the whole of humanity, and whose scientific results remain today.

Doctor Atomic, an opera by the contemporary American composer John Adams, with libretto by Peter Sellars, is the fifth work to result from almost twenty years of collaboration between the American composer and his fellow American director and Erasmus Prize-winner, Peter Sellars. It premiered at the San Francisco Opera on October 1, 2005.

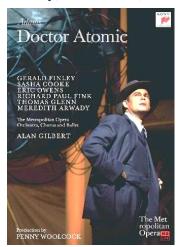
The work centers on key players in the Manhattan Project, especially Robert Oppenheimer and General Leslie Groves, focusing on the great stress and anxiety experienced by those at Los Alamos while the test of the first atomic bomb (the "Trinity" test) was being prepared.

Adams often tackles contemporary and controversial subjects. *Doctor Atomic* is similar in style to previous Adams' operas Nixon in China (1987) and *The Death of Klinghoffer* (1991), both of which explored the characters and personalities that were involved in historical incidents, rather than a re-enactment of the events themselves. Much of the text from *Doctor Atomic* was adapted from declassified U.S. government documents and communications among the scientists, government officials, and military personnel who were involved in the project.

This new production of *Doctor Atomic* is directed by the film director Penny Woolcock and conducted by Alan Gilbert. It was performed at the Metropolitan Opera in October 2008 and marks Adams' Met debut. *Doctor Atomic* was also included in the *Metropolitan Opera Live in HD* series presented on November 8, 2008. The HD video of the production was later televised nationally on PBS as well, in the *Great Performances at the Met* series. On January 17, 2009, the Met production of the opera was heard on NPR as part of the Saturday afternoon Metropolitan Opera radio broadcasts. It was restaged by the English National Opera in London, February 25 to March 20, 2009, with Gerald Finley reprising his portrayal of the lead.

Dr. Atomic: The Video (2008)

Starring Gerald Finley, Sasha Cooke, Eric Owens, Richard Paul Fink, Thomas Glenn, Meredith Arwady; Alan Gilbert, conducting



Doctor Atomic is a very powerful work — almost a horror story. Unfortunately, the bomb is all too real. The production by librettist and collaborator Peter Sellars is commanding. John Adams and Peter Sellers are considered the most important creators of total theater in the 21st century. Adams' music is breathtaking, and Sellars' libretto and direction are beyond compare. The combination of John Adams' beautiful, dramatic music, fine writing and superb acting from an excellent cast, along with outstanding production, make *Doctor Atomic* a winner. It is a must-see for Gerald Finley alone. He nails the character perfectly, and his singing is exemplary.

This is an awesome performance. John Adams has captured the anxiety, tension and confusion of this time and place with remarkable accuracy. (He had access to some of the, until now, classified material from that time.) The music drives the scenes with a relentlessness that

matches what is being worked on. Time flows like a current that cannot be opposed and the characters each respond in their idiosyncratic ways. This is a piece of American history that needs more exposure.