

Do Not Drop the Atom Bomb: The Scientists

Teacher Created Materials, Inc. World War II.

Our greatest fear is the unknown, for we do not know where this scientific invention will take humanity and world civilization. We do know that we have created a weapon that has awesome destructive power. The work at Los Alamos is only the beginning, for the atomic bomb and the plutonium bomb are just steps along the path to building other weapons of mass destruction. If the bombs we created can destroy a city and its 150,000 inhabitants, the next round of weapons will be able to do a thousand times more damage. If today we can calculate the carnage in the hundreds of thousands, what will tomorrow bring? It is possible at this point to envision a time when one bomb will be capable of destroying one million human beings in a single blow.

What is happening now with these new weapons is similar to England's experience in building the first dreadnought in 1908. HMS *Dreadnought* was a formidable battleship, heavily armored, with the uniform armament of ten 12-inch guns and possessing the ability to slice through the seas at a speed of 20 knots. The big guns, eight firing at broadside, together with the speed of the ship, enabled it to sink anything in sight while safely distant from the fray. HMS *Dreadnought* was a powerful weapon that rendered all other battleships obsolete. Other nations, notably Germany, had to keep up and build their known dreadnoughts or other ships that were bigger in armament. As soon as the Germans laid down the keel for their battleship, the British took steps to do better. This cycle of competition resulted in bigger and stronger and more powerful vehicles of destruction. The weapons continued to grow and become more deadly.

A similar situation now awaits the world, only this time the arms race will not center on navies and battle fleets but on how fast and how many weapons of mass destruction nations can accumulate, giving them superiority over all others. It is inevitable that alliances will be forged and nations will take sides over ideological issues, each building its own potent arsenal of atomic weaponry to stay ahead of all enemies, actual or imagined. It was the arms race and the naval construction programs of England and Germany that helped bring about World War I in 1914. A new age will be ushered in by the atomic bomb and along with it, the potential of a new arms race, not only in developing and perfecting the weaponry that can destroy all human civilization but also in constructing the means of delivery against a hostile power, be it an aircraft or a rocket.

Militarists are a thriving breed, even in the democracies. Working together with the industrialist, they will embark on projects to build bigger and faster bombers and rockets that can carry a deadly payload greater distances. It portends a bleak future for the world community. Yet, if there is one other major issue underlying our protest to use the bomb, it centers on the issue of the pain, suffering, and the deaths it will inflict upon human beings.

We acknowledge that the face of war is death. Indeed, death and killing are the business of war. There have been accidents at Los Alamos in experiments that led to the building of the bomb. Two of our scientists were exposed to radiation and died within a few days. The detonation of the bomb releases an annihilating wave of blinding, searing heat that lasts only a millionth of a second but measures 150 million degrees centigrade [Celsius]. We estimate that anyone within a radius of one mile from detonation will be incinerated. The unfortunate life in the path of this destructive force up to five miles from the detonation will probably suffer searing burns that will eventually cause death. Some, depending on their shelter or lack of it, might escape any form of burn or serious injury. Of greater concern is the radiation, as we do not fully know what effect this will have on the victims and their descendants for generations, in the form of birth defects and genetic disfigurement. The horrors we can unleash by dropping the bombs are unimaginable.