

Physics 596 – Fall 2016

Scientific Ethics Case Study #14*

The year is 1939. Adolf Hitler's troops have invaded Czechoslovakia and a second world war is imminent. You are a German-born physicist working at Princeton University in America and, having devised general relativity, are considered one of the greatest scientists of all time.

Recent discoveries concerning the atomic nucleus have revealed the possibility of a new kind of weapon, one capable of annihilating entire cities in seconds. Your colleagues Leo Szilard and Edward Teller are afraid that Germany is building just such a weapon. They have drafted a letter to President Roosevelt urging him to begin a nuclear weapon program, but they fear that their relative obscurity will leave the letter ignored. They ask you to sign the letter, knowing the weight your name carries.

You shudder at the idea of bringing a possibly world-ending weapon into existence, but, if Germany is indeed also building nuclear weapons, surely it would be better for America to have them too? Do you sign the letter?

The following is to be read after the case study has been presented on:

Einstein did sign the letter. Germany did indeed have a nuclear weapon program as Szilard feared, but was defeated before it could be finished. America's nuclear weapon program, the Manhattan Project, was not finished at the time of Germany's surrender, but was carried to completion. Nuclear bombs were then dropped on the Japanese cities of Hiroshima and Nagasaki.

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