The Modern Monster

Since the beginning of time engineers and scientists have pushed society in issues concerning what is legal and even moral. There is no doubt to what engineers and scientist can do and obtain for a society, from high-tech computers to our automobiles. However the question remains, what happens when a science or technology produces a loss or disruption in our lives? Such as the loss and disruption that the atomic bomb had on the world in 1945. Nuclear power had been researched several years before the actual development and use of the bomb by the United States in the Manhattan project. Nothing seemed very different when the Manhattan Project scientist first tested the bomb, but the fact was that everything had changed. The first atomic bomb created a “nuclear arms race” that lasted fifty years and a fear that remains until this day.

On August 2, 1939 just before the beginning of the World War II, Albert Einstein and several scientists told President Franklin D. Roosevelt of the attempts that Nazi Germany had to build an atomic bomb. It was then when The United States Government began to seriously push forwards the creation of nuclear weaponry. The Manhattan Project was a U.S. government research project that first produced an atomic bomb. The first atomic bomb was exploded at 5:30 AM on July 16, 1945, at a site on the Alamogordo Air Base (Beyer 49).

Upon witnessing the explosion, its creators had mixed reactions. In “The History of the Atomic Bomb”, a web site, the scientist were quoted on their initial responses. Isidor Rabi felt that the balance of nature had been upset, “as if humankind had become a threat to the world it inhabited.” J. Robert Oppenheimer thought ecstatically about the success of the project. However he did say, “We knew the world would not be the same,” “…the destroyer of worlds.” Ken Bainbridge, the test director, told Oppenheimer, “Now we're all sons of bitches.” After viewing the results, several participants signed petitions against losing the monster they had created, but their protests fell on deaf ears. It was evident that after creating the atomic bomb the inventors had some fear to what they had created. Robert J. Oppenheimer, the head scientist in the Manhattan Project, said near the end of his life:

“As how we used it, I understand why it happened and appreciate with what nobility those men with whom I’d worked made their decisions. But I do not have the feeling that it was done right, The ultimatum to Japan, the Potsdam Proclamation demanding Japan’s surrender, was full of pious platitudes…. our government should have acted with more foresight and clarity in telling the world and Japan what the bomb meant (Lamont 332-333)."

After the war Oppenheimer abandon his creation and opposed development of more powerful hydrogen bombs than the atomic bombs used in Japan.

Some may compare the reactions of the bomb to that of Victor Frankenstein reaction when he created Frankenstein in Mary Shelley’s novel Frankenstein. Victor Frankenstein was a young ambitious scientist who discovered how to create a human being. In a period of two years, in his laboratory, he uses this knowledge to create a man like creature. He dedicated his “heart and soul” for his project. He describes that he put everything on hold, everything he did, till this great project of his was completed. Victor Frankenstein says it “swallowed up every habit of my nature.” He was a slave to his favorite employment. And when the project was finished he was horrified by what he had done. His horrified feeling caused him to abandon his creation. He said a “breathless horror and disgust filled my hear (Shelley 234).” Although Frankenstein’s initial hope was to lay the foundation to future scientific success, instead he created a monster that he himself feared.

That is not to say that the atomic bomb did not have any success. The bomb brought about the end to World War II, saving thousands of lives if not millions. The end of the war meant that millions of American would return to their love ones. As Robert Keinnen a teacher, a friend of mine said “ I was young when the bomb was dropped, but the fact that my uncle was in the war and that this meant he was coming home gave me a great sense of happiness.” To Mr. Keinnen the bomb itself and the destruction it had on Japan did not matter. The only thing that did counted was that his uncle, somewhat of a hero to him, was coming home. The two atomic bombs produced by the project and dropped on Hiroshima and Nagasaki did cause the “enemy” to surrender. Japan offered to surrender on August 10, 1945 known as VJ-DAY. The bomb itself did triumph in World War II. (Beyer 15). John J. Ruszkiewicz, editor of The Presents of Others, says to those that criticize today’s science, “have either short memories or little historical sense (Lunsford & Ruszkiewicz 237).” In that sense, Ruszkiewicz would also critique those who judge the first atomic bomb.

Oppenheimer thought that the making of the bomb was a triumph. He was quoted in “A Science Odyssey: People and Discoveries: J Robert Oppenheimer,” a web site, “That was done right. However the scientist that witnessed the first atomic bomb were mostly afraid of how the bomb would be used against mankind. J. Michael Bishop, a professor of microbiology, and a winner of the Nobel Prize says that we live in an age of scientific achievements. He writes in “Enemies of Promise” that science has solved many human problems and has brought great knowledge to mankind despite the fact that scientists are still critiqued. Bishop writes that some blame science “for what are actually the failures of individuals of society to use the knowledge that science has provided. (Bishop 239).” Bishop also mentions that science is a “continuing thing.” It is in our nature, as human beings that we seek knowledge and progression. Bishop also states that when doing research, scientist cannot anticipate what benefits or disadvantages are likely to result. Therefore resistance of science is born out of the fear of the unknown, but then again fear itself is fueled by ignorance. Bishop says, “…it is ignorance that is our deepest malady (Bishop 241).”

Some may say that our worst deficit is ignorance. In the case of the atomic bomb, one does not need to be aware of how the bomb is activated to understand the devastating outcome. The United States was the first country to develop and use the bomb. Shortly after the Soviet Union became the world’s second nuclear power. From then on a “nuclear race” was on its way. We had people supporting the building of nuclear weapons to ensure peace, but it creates a bigger problem than a solution.

Until the Nuclear Test Ban Treaty was introduced nothing insured countries that others were not going to produce or use nuclear weapons. That is not to say that the fear was eliminated. Every year a new threat arises like our new one with the war on terrorism by the United States on Taliban. Many people are afraid of the unknown creating a big fear and insecurity amongst themselves. My initial reaction was if we go to war with all these nuclear weapons that we are unaware of, this so-called war would not be war but a suicide mission in part of all human kind. Don E. Beyer says, “it is estimated that there are 50,000 or more nuclear weapons in existence today in the arsenals of eight or so nations (Beyer 15).” If a great amount of such weapons were not kept under control, the result could be catastrophic upon the world.

The problem is that in the attempt to bring simplicity or resolution to our current situations, we not only tend to overlook the damage that it can inflict upon others but we create modern monsters. Since the first atomic bomb was used its first reaction to many Americans was a sigh of relief. Thereafter, it created a sense of insecurity. Now the new focus became, if these weapons we create were used against us, how do we protect ourselves? In our attempt to progress, our Sciences and our technologies sometimes, cause more problems than they solve.

Work Cited

Beyer, E. Don. The Manhattan Project. New York, NY: A Twentieth Century America History Book, 1991.

Lamont, Lansing. Day of Trinity. New York, NY: Antheneum, 1965.

Shelley, Mary. “Frankenstein.” The Presence of Others. Ed. Andrea A. Lunsford, &

John J. Ruszkiewicz. Bedford, New York: 2000. 231-236

Bishop J., Bishop. “Enemies of Promise.” The Presents of Others. Ed. Andrea A. Lunsford and John J. Ruszkiewicz. New York: Bedford, 2000. 237-242

Keinnen, Robert [Retired Elementary Teacher]. Personal interview. Pacoima, Ca. 03 December 2001

“The History of the Atomic Bomb.” About-Inventors. 03 December 2001 http://inventors.about.com/library/weekly/aa050300a.htm?iam=dpile&terms=atomic+bomb

Long, Doug. “The Decision To Use the Atomic Bomb: H-NET Debate.” Hiroshima. 2 September 2001. 03 December 2001. http://www.doug-long.com/index.htm

“A Science Odyssey: People and Discoveries: J. Robert Oppenheimer” PBS. 1998. 03 December 2001. http://www.pbs.org/wgbh/aso/databank/entries/baoppe.html

“J. Robert Oppenheimer (1904-1967).” Atomic Archive. 1998-200. 07 December 2001. http://www.atomicarchive.com/Bios/Oppenheimer.shtml