The Electric Chair

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Introduction

A picture of an electric chair strikes fear into the average American and being led into a room with only an electric chair sitting in the middle would make most pee their pants. The reason I use American in place of person is that the rest of the world may not even know what it is, as the electric chair is unique to the United States (except a brief period of use in the Philippines in 1924 with strong American influence). The electric chair is a piece of Americana, it so encapsulates America's love affair with "being the best" that I am surprised that the Smithsonian Museum does not have an exhibit where Elvis drives up in a muscle car, sits in an electric chair, and is served a piece of apple pie by Mom. Most would say that the electric chair is symbol of the death penalty but I disagree. The death penalty could be symbolized by anything from a pile of rocks to a hypodermic needle depending on the time you lived and your geographical location. The electric chair is a symbol of an emerging nation attempting to use technology to show civility, it is a symbol of capitalistic greed, a symbol of media fear mongering, a symbol of inhumane animal testing, and a symbol of competition. Since its discovery by Alfred P. Southwick and building of the first electric chair by Edison Electric Light Company (later become General Electric) employee Harold P. Brown (commonly thought to be Thomas Edison but historically inaccurate), this invention has been steeped in controversy. When the primary purpose of an invention is to end human life, how could it not be?

Timeline of the Electric Chair (Penrose 44)

Aug 8, 1881	Intoxicated man electrocuted at Buffalo generating plant.
1882	A.P. Southwick suggests electricity to replace hanging.
Aug. 1884	Newspaper editorials complain of brutality of hanging.
Jan. 12, 1885	NY Gov. David Hill, in state of state address, suggests electricity to replace hanging
May 13, 1886	New York commission appointed to study alternatives to hanging
Jan. 16, 1888	Commission recommends electrocution to replace hanging
Apr. 17, 1888	New York Assembly passes electrocution law
April 25, 1888	New York Senate passes electrocution law
June 4, 1888	Gov. David B. Hill signs the bill into law.
July 30, 1888	Harold Brown begins tests using electricity to kill animals
Nov. 15, 1888	N.Y. Medico-Legal Society endorses use of electricity.
Dec. 18, 1888	Medico-Legal Society completes six days of debate on AC vs. DC.
Jan. 7, 1889	Southwick announces plans for an electric "chair."
Feb. 1889	Electrical engineers at Chicago convention condemn the use of electricity for the death penalty.
Mar. 1, 1889	Hill signs law allocating $10,000 to buy equipment for the chair.
Mar. 9-13, 1889	New York experiments with chair and dynamos.
Mar 12, 1889	Brown experiments at Edison labs in New Jersey
Mar. 29, 1889	William Kemmler kills Tillie Ziegler in Buffalo.
May 7, 1889	New York and Brown close deal to build the chair.

May 8, 1889	Dynamos purchased for three New York chairs.
May 10, 1889	Kemmler sentenced to die in the chair.
May 23, 1889	Kemmler arrives in Auburn.
June 7, 1889	Dynamos arrive in Auburn, via Brazil.
June 7, 1889	Writ filed in Cayuga County to halt the use of the chair.
July 8-31, 1889	Hearings on use of the chair in New York City.
Aug. 1-2, 1889	Hearings on use of the chair in Buffalo.
Aug. 7, 1889	National Electric Light Association asks New York to repeal its law.
Aug. 25, 1889	New York Sun publishes letters stolen from Brown showing his secret links to Edison
Sept. 17, 1889	Oral arguments in Cayuga County.
Oct. 9, 1889	Cayuga County rules Kemmler must die in the chair.
Dec. 29, 1889	Electrical apparatus tested at Sing Sing.
Jan. 19, 1890	Electrical apparatus tested at Auburn.
Mar. 21, 1890	NY Court of Appeals rules Kemmler must die in the chair.
April 29, 1890	Federal writ halts Kemmler's execution with only hours to go.
May 1, 1890	Bill to abolish capital punishment passed by NY Assembly.
May 6, 1890	Abolition bill killed in the Senate.
May 20, 1890	U.S. Supreme Court hears arguments on the Kemmler case.
May 23, 1890	U.S. Supreme Court rules Kemmler must die in the chair.
Aug. 6, 1890	Kemmler dies in the chair.
Oct. 9, 1890	Official report on the execution.
July 7, 1891	Four murderers executed in Sing Sing chair.

March 20, 1899	Martha Place executed in Sing Sing chair.
Oct. 29, 1901	Leon Czolgosz executed in Auburn chair.
March 30, 1908	Chester Gillette executed in Auburn chair.
Jan. 6, 1927	Robert Elliott kills six men in two states on same day.
Aug. 23, 1927	Sacco and Vanzetti executed in the Massachusetts chair.
Jan. 12, 1928	Ruth Snyder's photo taken while executed at Sing Sing.
Feb. 22, 1929	John Hulbert, retired state executioner, commits suicide.
April 3, 1936	Bruno Hauptmann executed in New Jersey chair.
May 3, 1946	Willie Francis survives electric chair in Louisiana.
May 9, 1947	Willie Francis dies in the chair after his appeal fails.
June 19, 1953	Julius and Ethel Rosenberg executed in Sing Sing chair.
June 25, 1959	Charles Starkweather executed in the Nebraska chair.
June 29, 1972	U.S. Supreme Court strikes down the death penalty.
July 2, 1976	U.S. Supreme Court restores the death penalty.
May 25, 1979	John Spenkelink becomes first chair victim in a decade.
Jan. 24, 1989	Ted Bundy executed in the Florida chair.

(Penrose 44)

Electric Chair-Technology, Society, and Culture

The electric chair has been an optional method of execution in twenty-six states but is on the decline with only nine states still having this option and Nebraska being the only state with the electric chair as their primary method of execution. The invention of the electric chair was an attempt of the United States to find a more civil means of execution that would be less gruesome than hanging (the primary method of execution) but more civilized than the guillotine. After the first execution Alfred P. Southwick proclaimed "We live in a higher civilization from this day on" (Meyer 3) and this was the common idea of the American populous. In a country that was little over a century old and still referred to as "The Colonies" by Europeans, there was a huge push for Americans to show that they were the equals of more established nations. Ironically enough France abolished the death penalty shortly after the invention of the electric chair stating that "only barbarous nations torture and execute human beings" (Penrose 37). I guess that the United States no longer has anything to prove to the French as that ideal has still not transcended at the time of this writing. The term electrocution is a portmanteau (ex. *animatronics* from *animated* and *electronics*, *guesstimate* from *guess* and *estimate*) that describes a new technology and is now understood to mean a new way of death. Before 1881 no one was electrocuted. The electric chair is about Americans establishing themselves as a technological power. The "Current Wars" (the battle whether to use alternating current AC or direct current DC) were not just about which was better or safer but the battle between Nikola Tesla (a Serbian) and Thomas Edison (an American). The electric chair was partial invented to show American technological superiority. Much like the invention and subsequent use of the atomic

bomb. The United States had a term for the idea and now it was time to show the superiority of DC by discrediting the safety of AC. We see this translated now in American culture as we rarely point to the merits of what we represent but rather discredit a competing invention or ideal.

Capitalistic greed may have been the main driving force for the electric chair to have been invented. Thomas Edison had invested a particularly large amount of his companies capital in hopes that direct current would be the prevailing means of supplying electricity to America (spoiler alert; it isn't). George Westinghouse on the other hand was heavily backing Nikola Tesla's idea of alternating current financially. Westinghouse proved the efficiency and superiority of the ability of currents to flow in both directions but this was not enough to convince America. Direct current requires huge diameter copper cables to be transported and unluckily for Edison the price of copper went through the roof almost doubling in price in the late 1800's. Edison realized that his back was against the wall and his entire fortune could be lost. He grasped to the only straw he had left and that was that alternating current was unsafe. This is entirely untrue as alternating current just operates on an ampere factor of two (it is the difference in putting a one thousand pound boulder on someone or a one thousand two hundred pound boulder on someone) which is negligible to the voltage. This battle came to be known as the "Current Wars".

Edison immediately turned to the media to protect his investment. This exact same method was used by William Randolph Hearst with Hearst Paper Manufacturing Corporation. Hearst founded a company on DuPont's method of turning wood pulp to paper and stood to lose billions (that is 1937 billions) if he could not eradicate the use of hemp for paper. Even though

hemp makes better paper, is more environmentally sound, and is cheaper to manufacture, Hearst began a smear campaign against marijuana and that is why it is illegal today. Edison started a McCarthyistic slander articles questioning Westinghouse's patriotism for his backing of a Serbian over an American. Westinghouse would counter much later after the first electric chair execution, William Kemmler. The execution took over eight minutes and the prisoner actually caught fire on one of the attempts. Westinghouse is quoted as saying "They would have done better with an axe" (this is very witty as Kemmler killed his girlfriend Matilda Ziegler with an axe and that was the reason he was being executed)(Penrose 39). With absolutely no regard for journalistic integrity, the newspapers flocked to Thomas Edison's attractions. Edison would electrocute animals by luring them onto copper plates that were charged with electricity. Once the animals stepped on the plates they were charged with alternating current. Most of the time the animals did not die on the first attempt including a highly publicized electrocution of an elephant named Topsy. He made videos and distributed them as means of showing the dangers of alternating current. This practice gave rise to a heightened need of power for the SPCA (Society for the Prevention of the Cruelty to Animals) and the majority of early precedents are related to Edison's torturing electrocution machines.

The late 1800's and the early 1900's were the time of monopolies. From Alexander Graham Bell to John D. Rockefeller these times were plagued with some having all. The "Current Wars" and subsequent dethroning of Edison as the monopoly on power paved the way for the right to competition in business. He tried to derail this endeavor by Westinghouse by the creation of the electric chair. Edison had to acquire an AC generator but Westinghouse would not sell him one, so he routed one from a fake South American company so that it could be used

in the prison. The Edison Electric Light Company installed the first three chairs in New York State Prisons and they were first used on an axe murderer William Kemmler at Auburn Prison. The electric chair was a tool of the competition for power and not an invention that neither Edison nor his company was proud of manufacturing. This is evident in that the electric chair looks very much like the very first one. In fact, there has only been one improvement made to the chair by an inmate named Charles Justice. He was an inmate at Ohio State Penitentiary in Columbus. While on cleaning duty he noticed that if the leather straps were replaced by metal ones that it would minimize the burnt flesh. Ironically enough after his release he committed a robbery/murder and was executed eleven years later in the same chair he had helped improve. If the electric chair was truly the marvel of engineer that Edison had touted it would have been in the engineering spotlight for years. This cements the fact that it was invented to discredit Westinghouse because only an inmate in a maximum security penitentiary would have their name associated with it.

Conclusions

The invention of the electric chair is the American ego meets the goals of a capitalist society. Thomas Edison later admitted that he had always believed that alternating current was far superior to his method of direct current. If his ego and loss of money had not gotten in the way it could have formed an international scientific bond instead of a rift, he could have had a corporate partnership instead of a cutthroat business philosophy that still hangs on today, he could have stopped the attempted soiling of George Westinghouse's name and the desensitization of animal cruelty, and he could have help implement alternating current throughout the United States much sooner instead of heeding its progress. On the other side of the coin without the electric chair Nikola Tesla would have been far more renowned and when he sold his "Death Ray" plans to Kaiser Wilhelm he may have actually built it (it was built by M.I.T. in 1998 and it worked killing all life in a six hundred yard radius), General Electric/Edison Light Company could be the largest monopoly in the U.S.A., the S.P.C.A. may not have made any progress and still be as impotent as they were in the early 1900's and lastly the United States may have rushed into an alternating current frenzy with no watchdog to test and prevent some of the hazards. All technologies regardless of how ghastly they appear help to shape our society. I believe there are always some good and some evil, but that duality is the reason for the journey.

Definitions and Notable People

An alternating current (AC) is an electrical current whose magnitude and direction vary cyclically, as opposed to direct current, whose direction remains constant. The usual waveform of an AC power circuit is a sine wave, as these results in the most efficient transmission of energy. However in certain applications different waveforms are used, such as triangular or square waves. (Wikipedia Alternating Current)

Direct current (DC or "continuous current") is the constant flow of electric charge. This is typically in a conductor such as a wire, but can also be through semiconductors, insulators, or even through a vacuum as in electron or ion beams. In direct current, the electric charges flow in the same direction, distinguishing it from alternating current (AC). A term formerly used for direct current was galvanic current. (Wikipedia Direct Current)

Nikola Tesla (Serbian Cyrillic: Никола Тесла) (10 July 1856 – 7 January 1943) was an inventor, physicist, mechanical engineer, and electrical engineer. Born in Smiljan, Croatian Krajina, Military Frontier, he was an ethnic Serb subject of the Austrian Empire and later became an American citizen. Tesla is best known for his many revolutionary contributions to the discipline of electricity and magnetism in the late 19th and early 20th century. Tesla's patents and theoretical work formed the basis of modern alternating current electric power (AC) systems, including the polyphase power distribution systems and the AC motor, with which he helped usher in the Second Industrial Revolution. (Wikipedia Tesla)

Thomas Alva Edison (February 11, 1847 – October 18, 1931) was an American inventor and businessman who developed many devices that greatly influenced life around the world, including the phonograph and a long lasting light bulb. Dubbed "The Wizard of Menlo Park" by a newspaper reporter, he was one of the first inventors to apply the principles of mass production to the process of invention, and therefore is often credited with the creation of the first industrial research laboratory. (Wikipedia Edison)

George Westinghouse, Jr (15 October 1846–12 March 1914) was an American entrepreneur and engineer who invented the railroad air brake and was a pioneer of the electrical industry. Westinghouse was one of Thomas Edison's main rivals in the early implementation of the American electricity system. Westinghouse' system using alternating current ultimately prevailed over Edison's insistence on direct current. In 1911, he received the AIEE's Edison Medal 'For meritorious achievement in connection with the development of the alternating current system light. (Wikipedia Edison)

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