

EVOLUTION OF AUTHORIZED DEATH DEVICES:

PROGRESSION OF SANCTIONED KILLING MACHINES, TRENDS THEY YIELD,

AND WHAT THESE DRIFTS INDICATE ABOUT THE NLAC LASER AS THE FUTURE OF CAPITAL

PUNISHMENT IMPLEMENTATION

ABSTRACT

This article illustrates the progression in the sophistication of death devices with regard to both materials utilized and apparatus design, from times in ancient history through modern days. The article will illustrate the fact that when examining the development of death penalty constituents and contraptions, as the means by which the convicted are condemned to death become *increasingly* technologically savvy, they also become *decreasingly* gruesome and less time-consumingly torturous. With the passage of time and the rise of innovative methods of execution comes a change from primitive, bloody, lengthy agony to state-of-the-art, minimally-gory, swift humaneness. This alteration shows a definite surge in moral and ethical responsibility. If this trend is to continue, the questions for corrections professionals are as follows:

1. What will the capital punishment device of the future be?
2. In what ways will the future death apparatus continue the ongoing movement toward innovative technology, morality, ethics, and humaneness and away from bloody displays and drawn-out suffering?

BEFORE THE INVENTION OF EXECUTION APPARATUSES

In the beginning, prior to man's creation of death devices, he simply utilized what was found nearby in nature. A simple rock found at the side of a walking path was a death device. No apparatus design was necessary, as rocks were found and used "as is". Stoning was the earliest of the nature-based methods of capital punishment. Traditionally speaking, stoning

involved the pelting of rocks at a condemned individual, repetitively, until his demise resulted from blunt-force head trauma and/or internal hemorrhaging. Stoning was a very painful way to die on account of the seemingly endless lacerations from sharp stones and the continuous soft tissue damage by the heavyweight rocks crashing into the flesh. After executions were completed, the subjects were not only deceased, but also bloodied, bruised, and often laying in their own urine and feces, as the release of both are physiological reactions to fear and pain (3).

One of the earliest cases of leader-authorized execution by stoning was that of an offender by the name of Lucius Appuleius Saturninus, a Roman populist and tribune. Ultimately, senatorial opposition to the laws he reformed resulted in his stoning death in the year 100 BC (1). The length of time in which Saturninus endured the stoning prior to his ultimate demise is unknown. However, many stonings that occurred after Saturninus' have been known to last in excess of three hours' time (2).

The method of stoning was the definitive means of a primeval, gory, and excruciatingly prolonged departure.

A HAND-CARVED, WOODEN EXECUTION APPARATUS

As time pressed onward, man decided that he needed a more inventive method to execute offenders. At this point, he looked to the tree. Wood was a familiar material that was utilized quite often already in the construction of dwellings, furniture, household tools, and the like. It was then that this easily accessible matter brought capital punishment into a new zone. Design and wood-working skills were needed for an impalement rod to be fashioned. A long,

sturdy piece of hardwood, oak for example, would be whittled into pole-like form and at one end a sharp point would be carved. The other end would be shaved flat. The condemned would be subjected to having the piercing point enter one part of his body and exit through the opposite side of his body. While skewered, the impalement device would be secured into the ground at its flat end, and the subject's demise would come soon after. Some subjects' impalement rods entered through the abdomen and exited out the back. Some had impalement rods pass in through the mouth and pass out through the back of the neck. Still, others were impaled through the rectum and out the abdomen, or through the rectum and out the mouth. Depending on the anatomical location of the impalement, subjects would die from aspirating their own blood, or more commonly, simple exsanguination (bleeding out).

Athanasios Diakos, a rebel military commander, was apprehended after the Battle of Alamana, near Thermopylae, and was impaled after rejecting conversion from Christianity to the Islamic religion. Diakos' death took "one hour and six minutes from the time the stake entered his body to the moment he took his last breath" (5).

Impalement as a means of dying is only slightly less primitive and grisly than stoning. Considering that an impalement death has been said to last shorter than half the time of a stoning death, it could be said that since it is less in time duration with regard to pain endured by the subject, it is, in fact, less torturous.

A WELDED, METAL EXECUTION APPARATUS

Again, the passage of time ensued, and man declared a requirement for a more up-to-date method to end the lives of lawbreakers. Metals were popular during the 1500s, and boiling cauldrons were crafted by blacksmiths from copper, tin, and iron for both cooking and for capital punishment. The condemned were placed into this “large container of heated liquid such as water, oil, molten lead, wax, tallow, or wine, into which a convicted prisoner was placed until he died” (6). While many died of shock followed by cardiac arrest, others were simply “cooked” to death.

Statute 22 was passed in 1531 by Henry VIII. This made boiling a legal form of capital punishment in England. The Bishop of Rochester's personal cook served a numerous people poisoned porridge. Two individuals perished as a result of this occurrence. For his crime, he was boiled. “His breath ceased after nine-hundred-sixty-two seconds in the ‘dead pot’” (7). That is approximately sixteen minutes.

A boiling death is less uncultured and ghastly than an impalement death, being that blood and other bodily fluids are not being released. A mere sloughing of skin will result which could be considered much less gory than the results of impalement. In addition, boiling took a fraction of the time that impalement took, making the length of torment diminish greatly.

A CHEMICAL-RELEASING EXECUTION APPARATUS

Once again, the clock ticked and time continued to pass; once again, man required a new and improved execution method to match the current times. In the 1980s, the wide world of pharmaceuticals opened up more so than in previous decades. On December 7, 1982 the

first chemically-induced death of a condemned inmate occurred as he lay on a gurney with a syringe in his vein. "The first drug, sodium thiopental, a barbiturate, renders the prisoner unconscious, the next, pancuronium bromide, a muscle relaxant, paralyses the diaphragm and lungs, and the third, potassium chloride, causes cardiac arrest and ensures the prisoner's death" (8).

"It should take about 10 minutes for the inmate to die, reports The Associated Press" (9). However, there are instances where the duration of active dying is indeed shorter. In fact, some "inmates have been rendered unconscious in seconds and pronounced dead in as little as five minutes" (10). This was the case for Bobby Joe Long, a Tampa serial killer who amassed a body count of ten women. "No sooner did they push the plunger, and the next thing I know, the MD was calling time of death" (11).

Death by lethal injection is less boorish and distressing than a boiling death, being that the condemned's body remains outwardly intact. Only the organs and muscles within are affected, providing a monumentally less gruesome display. Besides this, the first drug injected reduces the recipient to comatose, making the already short dying process extremely that much more tolerable compared to methods of the past.

PROGRESS TO DATE

As time periods moved from early, to middle, to later, to current, apparatuses of sanctioned killings became increasingly revolutionary. The procedures became increasingly morally and ethically sound. Also, as the time period moved from early to current, a decrease

in primality and gore is noted. Additionally, as time passed, a decrease in the extent and lengthiness of pain endured by the condemned subject can be observed. Table 1 displays these increases and decreases in accordance with period of time.

<u>Time Period</u>	<u>Material</u>	<u>Primitivity Level</u>	<u>Skilled Creator of Device</u>	<u>Execution Method</u>	<u>Gore Factor</u>	<u>Agony Length (Duration of Active Dying)</u>	<u>Ethics Level, Morality, & Humaneness</u>
Earlier	Rock	Most Primitive	Nature / God	Stoning	Very High	3 Hours	Non-Existent
Middle	Hardwood	Primitive	Carpenter	Impalement	High	1 Hour 6 Minutes	Low
Later	Metal	Developed	Welder	Cauldron Boiling	Moderate	16 Minutes	Middle
Present	Chemical	Modern	Chemist	Lethal Injection	Low	10 Minutes	High

Table 1 (Cirigliano) – Advancements Achieved From Historical Times To Present Day

MOVING FORWARD / CONCLUSION

Considering that the above-mentioned trends have been continuing in the same direction since 100BC, it is sufficed to say that this flow will indeed continue. Since this is the case, forensic psychologists who practice in the field of corrections find themselves pondering the possibilities for the capital punishment device of the future, and how this impending apparatus will follow the trend.

After conducting thorough research on modern machinery, it is in the author's opinion that the futuristic device of death will be a laser. It will have to be blue-printed and ultimately created by an optics physicist, as these physical scientists specialize in laser technologies. Currently, a vast variety of lasers are being developed for a plethora of hi-tech applications. From lasers "being able to shoot down cruise missiles" (14) with regard to military applications, to "advances in laser therapies on hard and soft tissues" (15) with regard to dentistry applications, the laser is clearly the wave of the future.

For purposes of this article, the future's capital punishment laser will be identified as the NLAC Laser. Considering that "lasers could be used to generate exceptionally short pulses of light, each lasting just a few trillionths of a second (or a few picoseconds)" (12), the NLAC Laser will be exorbitantly quite less time-consumingly torturous than current measures and methods, and of measures and methods of the past. Duration of agony will be virtually non-existent, as death will be instant and at the height of humaneness. With this, the NLAC Laser will also provide for an execution with absolutely no gruesomeness. To date, lasers offer "the most concentrated power on the planet" (14). In addition, "thanks to their high intensity they can ablate almost any material in very short times. In a simplified view, the material is blown away before its heat can dissipate into the surroundings" (13). Essentially, the NLAC Laser will vaporize or disintegrate a condemned inmate leaving no flesh and bone behind. If there is no flesh and bone, there is no gore. Table 2 exhibits the foreshadowed future advancements regarding the NLAC Laser.

<u>Time Period</u>	<u>Material</u>	<u>Primitivity Level</u>	<u>Skilled Creator of Device</u>	<u>Execution Method</u>	<u>Gore Factor</u>	<u>Agony Length (Duration of Active Dying)</u>	<u>Ethics Level, Morality, & Humaneness</u>
Future	Laser	Ultramodern	Optics Physicist	Disintegration / Vaporization	None	Instantaneous	Extremely High

Table 2 (Cirigliano) – Foreshadowed Future Advancement of the NLAC Laser

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