

## From a Crude Seed to a Masterpiece

Morse

D. C. Student

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TITLE

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INTRO ← SOME HEADINGS WOULD BE HELPFUL  
“The fact that the presence of electricity can be made visible in any desired part of the

circuit was the crude seed which took root in my mind and grew up into form, and ripened into the invention of the telegraph [1].” Samuel F. B. Morse wrote this quote while reflecting on his invention of the electric telegraph. This quote reveals something interesting about Morse.

Although he is recognized today as an inventor, he didn't begin his career as one. He actually began his career as an artist but became an inventor after “a crude seed took root.” Samuel

Morse's determination to be an excellent artist drove him to create many masterpieces. But his greatest artwork is the electric telegraph, an invention that has changed the life of the deaf by

THESES  
making communication over great distances easily possible.

only those?

~~EARLY HISTORY~~  
Samuel Finley Breese Morse was born on April 27, 1791, in Charleston, Massachusetts.

He was raised the son of a Calvinist minister and received an education at Yale College [2].

While a student in college, Morse sold paintings to earn money and then went to Europe after graduating in order to study art. He lived the life of an artist but also used his education to invent the electric telegraph. Morse died on April 2, 1872, in New York City [2].

Life as an artist wasn't always the easiest for Morse. His career found its humble beginning in the mischief of a child. At the age of four, he took a pin and scratched his teacher's portrait into a chest of drawers [1]. But his career really began after Morse went to Europe.

Although he wasn't very successful in America, an art exhibition at the Royal Academy of the Arts helped him receive critical acclaim [3]. This led to work that was composed mainly of painting portraits. And even though his life as an artist was put on hold during the time spent as an inventor, he never forgot his need and love for art. In one of his letters he wrote, “with the assurance that I still have an artist's heart, while deprived by long disuse of an artist's skills [3].”

Morse continued in his artistic endeavors after working as an inventor by being one of the first Americans to practice photography.

Life as an inventor began on a trip across the Atlantic. Many conversations took place between Morse and Dr. Charles T. Jackson about the possibility of an electric telegraph [4]. Morse thought that there was a need for a machine that could transmit intelligence and record it at a distance, so he turned the dream of an electric telegraph into reality. There are four parts needed to build a simple telegraph: a battery to provide electricity, a telegraph key to send signals, an electromagnetic sounder to receive messages, and a wire to connect the receiver and the sender [5]. When the telegraph key is pressed down the electric circuit is complete and current flows to the receiver where it travels through a small electromagnet. This produces an electromagnetic force that pulls down the sounder, resulting in a click. When the key is released, the current stops, and the sounder snaps up, resulting in another click [5]. It was soon realized that messages could easily be read from the sound of clicks. This was done with the use of the Morse Code.

The Morse Code is a system of dots and dashes that is used to represent letters and numbers. When written, a dash is equal to the duration of three dots, with the space between characters equal to three dots and the space between words equal to six dots [6]. Messages were easily sent via an electric telegraph using Morse Code. A person who wanted to send a message would have to bring the message to an operator who would tap out the message letter by letter. The operator at the receiving end would listen to the incoming message and translate it back into words so that the message would be delivered to the intended recipient [5]. On May 24, 1844, the first electric message was sent from the Supreme Court Chamber in Washington D.C. to the

B&O Railroad Depot in Baltimore, Maryland [3]. The message read, "What hath God wrought?"

While the electric telegraph is no longer used today as it was during Samuel Morse's days, it still has a profound impact on communication for the deaf. The invention of the electric telegraph led directly to the invention of the teletypewriter. The teletypewriter functions similarly to the electric telegraph, but one difference between the two is the presence of a keyboard unit on the teletypewriter. This allowed for quicker and easier communication than the electric telegraph [7]. The teletypewriter, referred to as a TTY, is very important today because it allows the deaf to overcome great distances in order to communicate with each other or with those who can hear. Simply put, it is a "phone" for the deaf.

When both parties are deaf, one calls and puts the telephone handset on the TTY. The other answers by typing. Many abbreviations are used, such as GA for "go ahead," Q for question, and SK for "stop keying" [8]. When one person is deaf and the other can hear, the deaf person uses a TTY and the hearing person uses a phone. One calls the Relay Service and is then connected to the other. The Relay Service provides CA's, Communication Assistants, to mediate the conversation [8]. The CA speaks what is typed by the deaf person and types what is spoken by the person who can hear. But if a deaf person wants to speak to the person who can hear, he or she must use Voice Carryover, a system in which the deaf person talks while the hearing person types [8]. The teletypewriter is the most common way a deaf person can communicate by phone, and it makes communication much easier for the deaf.

When talking about the possibility of sending messages using an electric telegraph Morse said, "If it will go 10 miles without stopping, I can make it go around the globe" [1]. This vision of global communication brought out the best of Samuel Morse, both as an inventor and as an

artist. His passion to strive for the best in his artwork led him to one of his greatest masterpieces, taking a "crude seed" and turning it into a communication system that has improved life for the deaf.

How?

YOU DID NOT EXPLAIN OR  
DEFEND THIS THESIS

### GRADING

COMPLETENESS F THESIS IS NOT  
DEVELOPED

STYLE B NO HEADINGS - OUTLINE  
NOT CLEAR

ACCURACY A

REPORT GRADE

(D)

## References