Transmitting with the Liquid Transmitter

As social beings, humans yearn to communicate. The means and methods of interactions between individuals continue to evolve. In 19<sup>th</sup> century North America, the telegraph provided an alternative to mail delivery systems for the distribution of information. Although the telegraph was more costly, important messages could be transmitted quickly (Pollard, 1991). Expanding on the idea of sharing messages over long distances, the telephone facilitated interactive oral communication. As with most new technologies, the telephone was initially met with skepticism and concerns about its possible negative impact on society.

The term "telephone" is derived from the Greek word *tele*, meaning distant, and *phone*, meaning voice" (Stwertka & Stwertka, 1991). 1876 marks the year Elisha Gray developed the plans for a liquid transmitter yet did not build it. Later that same year, Alexander Graham Bell patented the telephone and constructed a liquid transmitter, his first telephone (Pollard, 1991). The operating principle of this device was quite simple and involved

a wire attached to the bottom of a parchment diaphragm that is adjusted so that it just barely makes contact with the water, which is made electrically conductive with a small amount of acid (Everson, 2013).

The existence of the telephone and the ability to speak to others across vast distances has had implications for language, literacy and the distribution of knowledge.

The telephone was the first device that permitted individuals in different geographic locations to speak directly to one another. This development would transform oral culture, beginning in the birthplace of the invention, North America.

In the early days, many means were devised to showcase the capabilities of the telephone. "They often unveiled the device in flamboyant demonstrations, usually involving the broadcast of music and speeches from one place to an audience in another" (Fischer, 1994). The public did not trust the new technology and modeling needed to take place in person. Telephone salesmen traveled to remote areas and often had to convince non-English speakers that the device spoke their language (Fischer, 1994).

Communication, normally limited to face-to-face interactions, was no longer confined by proximity. With this new capability, new vocabulary was necessary to discuss objects and mannerisms associated with telephone conversations. "Phone call", "operator", "receiver" and "hello" represent a hand full of new words entering the English language for the first time or with new meaning as a result of the telephone. In a telephone conversation, the voice, tone and volume, became more important as body language could not be used to construct meaning.

"A new orality is sustained by telephone, radio, television, and other electronic devices that depend for their existence and functioning on writing and print" (Ong, 1982). Despite the oral nature of the telephone, it was still replacing written forms of communication and was operating in a literacy rich environment. Text was also used to advertise and sell the marvels of this new invention. The telephone, its capabilities and impact on society, evolved as modifications and improvements were made to this new technology.