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Assignment #2
Obsolete Media
Mary Jackson
19 November 2018

The Talking Postcard

Overview

The Gramophone postcard, a now obsolete form of media, also known as the "Talking Postcard," was in use beginning in the early 1900s. It was known by a variety of names in different countries, such as the "Phonogram," "Postal Phonogram," "Greetaphone," and "Gramophone Postcard."[1] Postcards "were popular because they were a quick and easy way for individuals to communicate with each other."[2] "The talking postcard was typically one-sided and comprised of a small phonograph record, played at 78 rpm, which was glued onto a postcard. A hole was inserted through the middle of the record and postcard to enable playback on the device of the time, the gramophone. This paper will focus on a brief history of key events leading up to the development of the flat phonograph disk, early patents filed, and trace the talking postcard from Europe to its first appearance in the United States.

Evolution of the Flat Phonograph Disk

Approximately four years after Thomas Edison's invention of the phonograph cylinder in 1877, Alexander Graham Bell, with a monetary award for his invention of the telephone, established the Volta Research Laboratory. Charles Sumner Tainter joined the laboratory and

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[1] Lotz, Birgit. "Phonocards & Phonopost." Our Wants. September 16, 1999. Accessed October 22, 2018. http://www.lotz-verlag.de/Online-Disco-Phonocards.html.

2 KapsalisE. "Postcard History." Smithsonian Institution Archives. September 19, 2013. Accessed October 23, 2018. https://siarchives.si.edu/history/featured-topics/postcard/postcard-history.

began collaborating with Alexander Graham Bell, and others, to begin research on improvements to Edison's invention. In the course of the teams' research, Tainter "conceived of the idea of cutting a groove into a recording surface."[3] [4]As with Edison's phonograph cylinder, the stylus moved vertically across the record surface.

In 1887, Emile Berliner, a German inventor, began his work in improving upon the work of the Volta Research Laboratory team. As noted in the 1926 book "*Emile Berliner: Maker of the Microphone*," Berliner's goals were:

> "..to perfect (1) a photo-engraving process; (2) a scheme for 'etching the human voice' – another of the ingenious idioms which he minted; and (3) a duplicating method whereby it would be possible to make an unlimited number of record of the same voice-registration out of some tough, wear-resisting material like celluloid or hard rubber."[5]

By 1888, Berliner developed the flat phonograph disk. He experimented with a variety of materials, beginning with rubber, and finally settled on a shellac compound. Shellac, a natural resin, is a secretion produced by the female lac bug, an insect native to Thailand and India. The secretion was scraped from the bark of trees, and when combined with ethyl alcohol, produced a liquid shellac. This shellac was used to coat the flat disc. With Edison's graphophone, audio was

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[3] Steffens, Bradley. *Phonograph: Sound on Disk*. San Diego, CA: Lucent Books, 1993. p. 30.
[4] French inventor Charles Cros previously developed a theory of grooves on a recording surface but did not pursue it further.
[5] Wile, Frederic William. *Emile Berliner, Maker of the Microphone*. Indianapolis, IN: Bobbs-Merrill Company, 1926. p. 187.

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created by mechanically reproducing sound vibrations. Berliner's gramophone reproduced sound acoustically. The sound was directed into a large horn into a stylus, and the vibration of air in the horn was added to the gramophone by the stylus cutting grooves into the disk. Berliner's gramophone included a stylus that moved laterally along the disc surface. Advertisements for the talking postcard appeared as early as 1903, and by 1904, patents were filed in both France and Germany. □

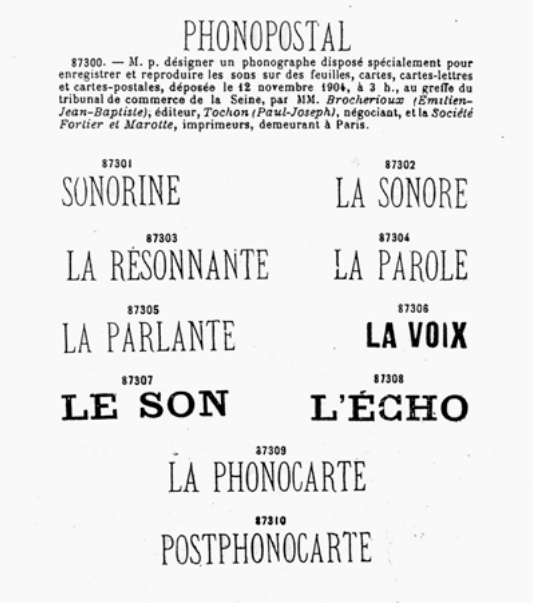

Figure 1: Phonocards & Phonopost History (2013)

Max Thomas, a German inventor, filed the first patent in Germany and filed a second patent in England the same year. Thomas describes the material used in the Phonogram records:

> "…such cards, however, when made of ordinary paper, have not been found very suitable for this purpose, whilst cards made of entirely of

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> celluloid lack stiffness and are expensive….the improved phonogram card comprising a postcard…having a thin disc-shaped phonograph record of light transparent material such as transparent celluloid…"[6]

The earliest appearance of the talking postcard in the U.S. was a patent filed in 1905. In the U.S. patents can be filed for "use in commerce" or "intent to use."[7] [8] Speculation is that this filing requirement may have resulted in the later production of the talking postcard in the U.S. The U.S. postcards were "opaque and were usually stapled to the printed paper card. A variation is the French *Sonarine* or the [French] Pathe Company's *Phonal-Postal*, in which the sender could record a short message with the aid of a specially sold device adapted for the gramophone."[9] In the book *"Hallmark A Century of Caring*" the author notes:

> "In the U.S., the post office had sold plain, prepaid postcards for decades. However, it would be nearly 30 years after the rise of picture postcards in the Europe before the practice of sending privately produced postcards – and the hobby of collecting them – caught on in the United States."[10]

Much of the information available about the Talking Postcard note it was a British company, Raphael Tuck & Sons, that was able to successfully manufacture and market the

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[6] Lotz, Birgit. "Phonocards & Phonopost." Our Wants. September 16, 1999. Accessed October 22, 2018. http://www.lotz-verlag.de/grafiken/Phonokarten/Max-Thomas-Patent-2.jpg. Accessed October 22, 2018.

[7] Lotz, Birgit. "Phonocards & Phonopost." Our Wants. September 16, 1999. Accessed October 15, 2018. http://www.lotz-verlag.de/Online-Disco-Phonocards.html.

[8] Trademarks. "Basis for Filing." United States Patent and Trademark Office - An Agency of the Department of Commerce. Accessed October 23, 2018. https://www.uspto.gov/trademarks-getting-started/trademark-basics/basis-filing.

[9] Petrulis, Alan. MetroPostcard List of Topical Subjects on Postcards G. Accessed October 18, 2018. http://www.metropostcard.com/glossaryt.html.

[10] Regan, Patrick. Hallmark: a century of caring. Kansas City: Andrew McMeel, 2010. Background on the popularity of postcard use in the United States. pg. 23.

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"Tuck Gramophone in the U.S. A variety of musical selections appeared on the postcard records. However, since the music was in the public domain, the Tuck Company did not need to spend additional money on rights permissions in the production of the postcards. □

Figure 2: Phonocards & Phonopost History (2013)

Figure 3: The Internet Museum of Flexi/Cardboard/Oddity Records (2011)

Up until the time at which the Tuck Company began manufacturing the Gramophone Postcard, the record material was made of celluloid. The records attached to the Tuck Gramophone Postcards manufactured in the U.S. were made from Durium, a type of synthetic resin, that was heat and water resistant. This synthetic resin was developed in 1929 by Professor

Hal T. Beans of Columbia University. Professor Beans, along with several colleagues, began experimenting with the development of a substance "…in the search for an unbreakable phonograph record."[11] In a New York Times article announcing Professor Beans' new substance, he stated that Durium was a liquid that when subjected to heat becomes "a insoluble, infusible solid which combines hardness and flexibility to a remarkable degree."[12] Durium was an ideal material to use for the Tuck Gramophone Postcards given their flexibility and durability. In addition, since the substance hardened quickly, phonograph disks could be stamped in large numbers and at a lower cost.

In an article from the *Scientific American*, the Durium record making process is described as follows:

> "The Durium phonograph record consists of a coating of only six or eight thousandths of an inch of Durium upon a heavy fiber paper. This paper is impregnated with Durium, passed through a drying room, cut into workable sections, pressed rapidly through a stamping machine, and finally printed with titles in another machine. The die from which it is stamped is precisely the same as those used in making ordinary records."[13]

[11] "Saturday January 4, 1930." The New York Times. Accessed October 18, 2018. https://www.nytimes.com/1930/01/04/archives/unbreakable-disks-made-of-new-resin-phonograph-records-flexible-and.html.
[12] Ibid.
[13] "The Scientific American Digest." Scientific American 142, no. 4 (1930): 306-09.

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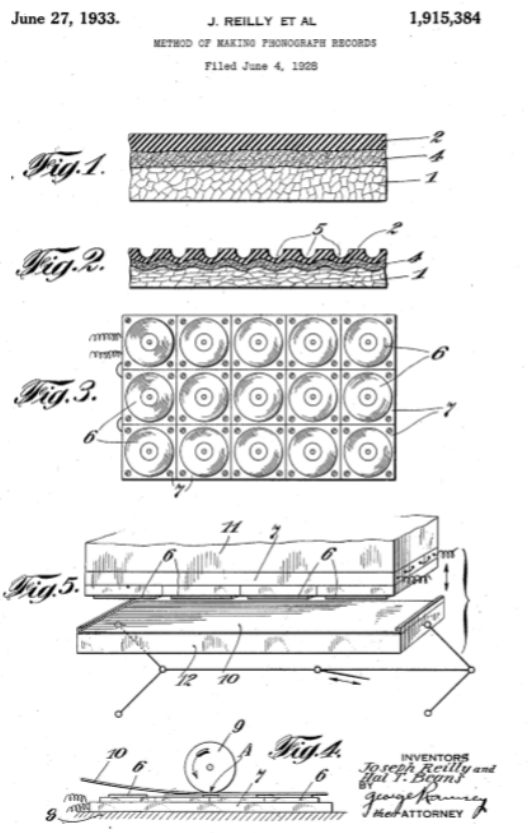

Figure 4: Google Patents (1928)

The New York Times article also announced that the Durium Corporation would be founded to explore other uses for the substance. Other uses for Durium later included spraying the substance on aeronautical equipment given its heat resistancy. However, it does not appear to be used post-WWII.

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Successors to the Tuck Gramophone Postcard

- **Durium's "Hit of the Week"**

Figure 5: 1930-1932 "Hit Of The Week" 78 rpm Records Made of Durium

Given Durium records could be manufactured quickly and less expensively, the Durium Company began issuing "Hit of the Week" records beginning in 1930 for approximately two years. The flexible records were sold at newsstands for 15 cents.

- **Flexi-Disc**

Figure 6: The Beatles Singles 1962-1970 Collection (Sampler Flexidisc)

These records made of thin vinyl or plastic, these records were often inserts in children's books or in magazines. Flexi-Discs use in the U.S. dates back to 1962. The sound quality was often poor given the material used to produce the record. The use of Flexi-Discs declined with the introduction of Compact Discs in the 1990s.

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- **Cardboard (Promotional) Records**

Figure 7: A Journal of Musical Things

These disposable records were made of thin paperboard with a coating of plastic and prone to warping and curling. They were often used as promotional materials on kids cereal boxes or free inserts in magazines.

With the advent of technology and the variety of ways that individuals can be in contact with one another, the forms of media described within this paper have been rendered obsolete. However, greeting cards that play music when opened can still be found along with greeting cards that enable one to record a personalized greeting. While not as popular a form of media, they are carryovers from the days of the Talking Postcards. □

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Stylusmagazine.com. Accessed October 20, 2018. http://www.stylusmagazine.com/articles/weekly_article/disposable-pop-a-history-of-the-flexi-disc.htm.
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