Revolutions and Meanings of Emerging Media: Telephone

According to Tom Vanderbilt's The Call of the Future, the introduction of new technology tends to mimic a predictable script: (1) the technology is viewed as possessing limitations, only capable of servicing a specific niche or function, (2) the true uses of the medium become apparent and are followed by "grandiose pronouncements" about the technology's (often utopian) affect on society, and (3) as prices decrease and the technology improves, it reaches saturation, becoming a common, everyday occurrence. The telephone, in many ways, follows just such a script.

Although there is some debate over who first created the telephone, Scottish-born inventor Alexander Graham Bell is recognized–at least in the eyes of the law–as its official inventor due to Bell's patent which was approved on March 7, 1876. (Pound, 1926) Three days later, while in Boston and separated by the space of just a few rooms, "Mr. Watson, come here, I need you," became the first words transmitted via telephony from Bell to his assistant Thomas A. Watson. Although Bell and Watson no doubt recognized the significance of such a transmission, neither could have fully imagined the global impact of their invention. Perhaps best summarized by a famous patent attorney, "Most patents…cover plans for doing in a worse way something that is well done already. This truism never applied to the infant telephone. It did what had never been done before on earth, what could never be done without it. So devastatingly new, so revolutionary, was this innovation of Bell's that a self-satisfied world wasted a good deal of time ridiculing the telephone and its inventor." (Pound, 1926)

Early on businessmen, economists, and sociologists, were skeptical and often critical of the telephone, suggesting the new technology was an insufficient and unreliable

communication mechanism when compared to the telegraph. (Vanderbilt, 2012) But as it improved–and through the power of marketing and advertising–the telephone was first adopted by commercial businesses and later became a commodity in American households. (Vanderbilt, 2012)

The most significant affordance of the telephone is its ability for users to (1) communicate in real-time, (2) over long distances, and (3) in a format that exclusively utilizes the sense of hearing. Although commonplace today, the idea of communicating in such a way was genuinely innovative and its importance cannot be overstated.

The telephone changed almost every facet of life from farming and business, to news-gathering and politics, to emergency services and family dynamics. Telephony allowed for faster decision-making and for information to reach a greater number of people, faster. The rate of exchanging information was unprecedented at the time and only surpassed by the rise of the Internet.

On January 25, 1915, when 'long lines' connecting the continental United States from east to west were formally opened, Bell phoned, from Boston, once again, "Mr. Watson, come here, I need you." This time Watson, answering from San Francisco, replied that it would take him at least a week to do so. In this way, geographic location became a hurdle the telephone could easily jump. Historian Arthur Pound, in his 1926 paper The Telephone Idea: Fifty Years After, addressed the significance of cross-continental telephony and its manipulation of time and space writing, "For purposes of thought transmission this vast country has been compressed into a fraction of its former size." Pound's statement still holds true today, except "this vast country" now includes a global network of telephone (and Internet) users.

Although the telephone evolved from the telegraph, the former pioneered a true network to the extent that the technology saw its way into the infrastructure of both cities and rural communities cable by cable, much like an irrigation system or other public works project. This infrastructure afforded people opportunities that were logistically more difficult, if not impossible, to accomplish before the technology became available. At the turn of the century, for example, farmers could live further away from neighboring farmers because they were accessible via telephone and could communicate needs, concerns, or business opportunities without the inconvenience of painstaking travel. (Pound, 1926) Geographically, people could self-organize. Politically and philosophically, they could also share ideas. Economically, businesses could conduct market research, and "a keen, aggressive manager(s) could extend his control of men and things further than his predecessors could." (Pound, 1926)

As the telephone evolved from landlines to cellular and mobile devices to smartphones, so too did the advantages and disadvantages of the medium. Landlines made people more accessible, but an obvious limitation relied on that person being home or at the office. With mobile communication, the dynamics of telephone conversations shifted from "What are you doing?" to "Where are you?" in the Digital Age. The cellular phone user also experienced a shift in their sense of privacy by having everyone within the proximity of his or her pocket.

According to Tom Vanderbilt, the average phone call time decreased over time. Inconvenient location and/or logistics were partially to blame for this trend but another important consideration was people's desire for alternative methods of communicating that did not require speaking at all. As McLuhan points out, telephony requires complete

participation and audio cues reveal much about one's attention and interest in a conversation. Although this is advantageous in some circumstances, it is less desirable in others. For the "phone averse," text messaging presented a solution to a unique problem and was later followed by smartphone technology which made email and Internet access possible. Thus, the evolution of the telephone came to satisfy varying user preferences within a single device.

There is some debate as to whether or not the telephone and the smartphone are in fact the same medium. Although telephony is a capability of the smartphone, it certainly is not at the heart of the technology as smartphones have come to function like the postal service (email), telegraph (text messaging), and encompass qualities of film, photography, music, gaming, and computer technology.

Regardless of the divergence between traditional telephony and smartphone technology, the invention of the telephone was a fundamental contributor to the emergent online-social-mobile communication technology as discussed by Rainie and Wellman. Although the "online" component developed later, the communication framework that the telephone ushered in directly addresses greater sociality. And, technically, landlines gave people greater mobility, although it seems counterintuitive now. Even the semiotics of the terms–online, social, mobile–carry strong relationships to the ideas of telephone cable lines and an increased sense of flexibility and accessibility.

From a Hauberian and "hacker-geek" cultural standpoint, the telephone's early history had utopian promise, or as suggested by Vanderbilt: the "grandiose pronouncements." Real-time information sharing–whether between business investors or housewives–was the primary affordance of the medium and all of the implications of free-expression and

democracy came along with it. In fact, "the telephone business in the United States [was] built up with an unusual degree of regard for public service as contrasted with private gain." Unlike the postal service or transcontinental railroad (which received government funding), "transcontinental telephone lines rose without government aid…[The] telephone made its way in the time honored American fashion through private enterprise." (Pound, 1926) Furthermore, Pound believed that, "had the telephone system reached its present [1926] perfection previous to 1861, the Civil War would not have occurred. The wires would not have let the North and South drift so far apart."

   "Just as there could be no continuous stream of thought development except for words and no leisure except for tools, so there can be no progress without communications." (Pound, 1926) Historically, eras have come to be defined by their materials (Stone Age, Bronze Age), the means of working to sustain a stationary life (Agricultural Age, Industrial Age), and by the means of thought transmission (Digital Age, Information Age). In the Information Age, smartphones are the primary catalyst for the formation of the modern Internet era. Instantaneous, constant access to the Internet is the main affordance of the (smart)phone technology today, for better or worse.

   One area to consider in the future, which is often overlooked, is how modern day smartphones utilize more senses than ever before. McLuhan pointed out that the early telephone required nearly complete participation from each party due to its auditory nature. The modern day smartphone has retained its audio capabilities but also introduced visual and palpable capabilities. Although outside of the scope of this analysis, cellular phones and smartphones are said to reinforce fragmentation and multitasking habits, a clear deviation from McLuhan's complete participation approach. This in combination

with the visceral investment people have with their devices is interesting and the

implications are largely unknown.

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