

A PHONE
OF OUR OWN



THE DEAF INSURRECTION
AGAINST MR BELL

HARRY G. LANG

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The Deaf Insurrection Against Ma Bell

Harry G. Lang

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Frontispiece: The founding fathers of the acoustic coupler technology that
brought telephone access to deaf people: (*seated*) Robert H. Weitbrecht; (*left*)
Andrew Saks; and (*right*) James C. Marsters. Courtesy of James C. Marsters.

I dedicate this book to all the deaf and hearing people whose countless hours of labor brought us the telephone. To mention you by name would turn the story into a phone book.

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FOREWORD

In the late 1960s, the deaf community made a historical breakthrough in the world of telecommunications with the introduction of teletypewriters (TTYs) with acoustic couplers. This technology helped us gain access to the regular telephone network some ninety years after Alexander Graham Bell invented the voice telephone. Despite the obstacles that we faced within a monopolistic telecommunications environment, we managed to obtain TTYs from phone companies and volunteer organizations, enabling us to communicate with each other on the telephone infrastructure. The resulting telecommunications movement initially endured a time of skepticism, reluctance, and fear from some members of the deaf community. But that changed as experience over the first few years led us to accept the TTY with enthusiasm, and scores of consumers and professionals began contributing substantially to marketing the technology, developing new products, and improving access. Among those that lent invaluable support were such resource groups as the Telephone Pioneers of America, who played an instrumental role in providing training on the use and maintenance of TTYs.

Little did we realize then how significant this movement would be to the nation's deaf and hard of hearing populations in the areas of empowerment, cohesiveness, and cultural enlightenment. Equally important, the movement has been the foundation for major initiatives in innovation, design, and policy development for today's accessible products and services for the nation's citizens with disabilities, not only in telecommunications, but also in education, employment, recreation, and other life activities.

The TTY movement subsequently led to advanced products and services that now effectively address our informational needs and ensure functional equivalence for us in the mainstream of society. We currently have closed captioning on television and in movie theaters. We have relay services for regular communication with non-TTY users. The 911 centers have TTYs available to respond to emergency calls from deaf people. We work with the Federal Communications Commission (FCC) to ensure that we have full access and opportunity in the telecommunications systems. We are becoming partners with the private sector in the design, development, and implementation processes for new, accessible telecommunications products and services.

A Phone of Our Own describes the events and the individuals that enabled deaf people to enjoy regular communication on the telephone. Robert H. Weitbrecht, James C. Marsters, and Andrew Saks, who together began the first TTY business, Applied Communications Corporation in California, and I. Lee Brody, who established Phone-TTY, Inc., in New Jersey, epitomize the perseverance, resourcefulness, and commitment this development required from deaf people. The book reviews the legislative and regulatory successes from the 1970s to the 1990s that resulted from the tireless advocacy efforts of numerous individuals, such as Karen Peltz Strauss, Alfred Sonnenstrahl, H. Latham Breunig, and Barry Strassler.

The history of the TTY is very much intertwined with the history of another crucial entity—Telecommunications for the Deaf, Inc. (TDI). TDI played a prominent role in the TTY movement, which led to TDI's current stature as a nonprofit, national telecommunications advocacy organization of, by, and for individuals who are deaf or hard of hearing. During TDI's early years, an army of agents was made available across the nation to distribute TTYs and repair them as needed. As the number of TTYs owned by deaf and hard of hearing people grew, the need for a directory of TTY numbers was recognized. The first directory came out in 1968 with 174 listings. Today, the "Blue Book" includes more than 55,000 listings, fax numbers, e-mail addresses, pager numbers, and Web site addresses. TDI advocates to ensure that deaf people have full access and opportunity with main-

stream society on the Internet, in the wireless environment, on digital television, and with other technologies that may come our way in the future.

TDI commends Harry Lang for his commitment, vision, and support to produce such an important resource as this book, *A Phone of Our Own*. It is a culmination of thousands of hours of research, solicitation of materials and photos, and face-to-face interviews. Unlike most other book projects where the resources are more readily available, Dr. Lang had to reach out to numerous communities in America and Europe to produce a document that meets the standards of historical research and analysis.

A Phone of Our Own is a celebration of human dignity and personal courage in the life-long struggle for equal access and higher standards of living for the nation's deaf and hard of hearing citizens. May it reinforce or instill in you the responsibility and commitment to build and maintain a brighter telecommunications future for all citizens—regardless of disability—in America and the rest of the world.

Claude L. Stout
Executive Director
Telecommunications for the Deaf, Inc.

ued inexplicably, “but in providing one more way to make it possible for them to communicate by telephone.”³⁰

Even some of the hearing Bell Telephone system technicians shared the views of Weitbrecht and Breunig. Carl Argila had developed a special interest in the needs of deaf people and was instrumental in bringing several Phonotypes to the Philippines for the first trans-Pacific TTY call. In a memo to Bell Telephone Laboratories scientists and



The Code-Com set was another in a long line of devices developed by Bell Telephone Laboratories for use by deaf people. It had three components, a flashing light in the center, with a circular vibrating pad on the left and a sending key, used like a telegraph key, on the right. Property of AT&T Archives. Reprinted with permission of AT&T.



On July 31, 1970, the first intercontinental TTY call was made between the National Association of the Deaf (NAD) and the Philippine Association of the Deaf in Manila. At this historic call in Minnesota were (*standing left to right*) Gordon L. Allen, Albert Pimentel, Frederick C. Schreiber, Edward Carney, and Boyce R. Williams, and (*seated left to right*) Jess M. Smith and NAD President Robert O. Lankenau. Courtesy of National Association of the Deaf.

other professionals, Argila summarized non-Bell System efforts and championed the APCOM Phonetype coupler. He recommended that the Bell System become more involved with the TTY.

The author feels that, in the past, the Bell System probably could have responded more fully to the needs of the deaf telephone user. Services such as teletypewriter and facsimile have been offered to the deaf, but not adapted for the deaf. Such services are offered at the commercial rates, making them nearly unobtainable for even the well-to-do deaf person. Furthermore, the only unit developed explicitly for the deaf, the CODE-COM® unit . . . appears to be of practical use only to a minority of the deaf population.³¹

Argila told the Bell system that, with regard to the older TTYs, deaf people were generally reluctant to “bring into their homes such large quantities of equipment which they themselves must maintain and re-

pair.” He described the advantages of Weitbrecht’s Phonetype modem, a “sophisticated analogue of the Bell System DATA-PHONE® unit,” and how he had constructed a duplicate at an estimated cost of thirty dollars for parts. Based on a survey of eleven deaf people with an estimated average monthly phone bill of thirty-five dollars, he explained that the Bell System was collecting lucrative revenue “it otherwise would not have seen.” Argila reported, “If one out of every ten persons with no usable hearing acquired a teletypewriter, the resulting market of 200,000 such installations would net the Bell System approximately \$7 million in revenue annually, not including revenue collected for any special equipment.” He recommended that Bell Telephone Laboratories manufacture and lease a compatible TTY unit.³²

Again, a champion for appropriate telephone technology for deaf people could be found within the Bell system, but again a voice went unheard.