A Technological Godsend to Counter Hearing Loss

The 'hearing loop' is a remarkable advance, but all too hard to find in the U.S.

By David G. Myers

The first time I clicked on my hearing aids' telecoils, it seemed like magic. It was 1999 and my wife and I were sitting in a historic abbey on Scotland's Isle of Iona. I had gradually become hard of hearing and had gotten my first hearing aid in my 40s, and the abbey wasn't built with acoustics in mind. The amplified voice of the worship leader caromed off the stone walls, reverberating into a fog by the time it reached my ears.

Then my wife noticed a sign with a capital T and an outline of an ear, which indicated that the abbey was wired with a "hearing loop" that could magnetically transmit sound from the PA

system to the telecoils in my hearing aids. When I flipped the switch to turn my T-coils on, the fog instantly dissipated. I could hear a crystal-clear voice speaking seemingly from the center of my head. The experience took me to the verge of tears.

Hearing loops are now ubiquitous in Britain. They're in churches and auditoriums, at tens of thousands of ticket windows, post offices and pharmacies and in every London taxi. At spacious Westminster Abbey, with my hearing aids' microphones turned off and my T-coils turned on. I hear better than most in the audience.

An induction loop system transmits magnetic energy to telecoil-equipped hearing aids through a wire that surrounds an audience.

After that epiphany on Iona, I became an evangelist: Why not loop America? Theaters and other public venues in the U.S. generally offer "assistive listening" devices. But that typically requires people with hearing loss to locate, check out and wear a conspicuous headset. I recently asked my local movie multiplex in Holland, Mich., how often these headset units get used. The reply: "Once per month, per theater."

That's a shame. Some 48 million Americans have hearing loss in one or both ears. For my mother it was socially isolating. She quit going out, except to church, where, amid others, she heard little. I can sympathize. When I remove my hearing aids I have a near deaf experience. In the gym locker room, the banter goes nearly silent. In bed at night, my wife's voice from the adjacent pillow is indistinct.

But unlike my mother, I am served by new ear-opening technologies. My hearing aids suppress background noise and amplify only the sounds I need. I can wirelessly transmit phone calls and

stereo music to them from my smartphone. I even looped my home TV room. With a simple press of a button, muffled sound becomes clear, thanks to the wireless speakers in my ears.

The challenge for hearing loops in the U.S. is inertia—existing installations of less convenient technologies are often already in place. Adding a hearing loop which involves running a coil of wire around the circumference of the coverage areas, costs money: several thousand dollars, perhaps, for a modest-size church or auditorium.

The airport 35 miles from me in Grand Rapids, the second largest in Michigan, looped both of its concourses and 15 gates and now broadcasts boarding and delay announcements directly to hearing aids. The cost to install the system was a little more than \$130,000—not a lot, in the grand scheme of things. Picking up the magnetic signal requires a \$2 telecoil, which came standard on 72% of the hearing-aid models sold in the U.S. last year and all cochlear implants.

With support from the Hearing Loss Association of America, the American Academy of Audiology, and other hearing loop advocates, the technology is spreading throughout the U.S. Nearly every worship place and auditorium in my community now has one, including at Hope College, where I work. One of America's largest hearing-loop installations is the 12,200-seat basketball arena at Michigan State University.

In New York City, subway fare booths are now looped, as are the new Nissan taxis and several Broadway and Lincoln Center theaters, including the Gershwin and Rodgers. In Washington, D.C., hearing loops now include the chambers of the Supreme Court and the U.S. House of Representatives.

On July 29 a committee of the U.S. Access Board recommended looping individual subway and railcars, if it proves technically feasible.

All of this represents a huge step forward for people with hearing loss. A survey last year <u>published in Hearing Review</u> asked 866 people to rate the performance of their hearing aids or cochlear implants using a 10-point scale. The average response was 4.9 in a non-looped setting and 8.7 in a looped environment.

It's easy to find similar stories. One person, after turning on his telecoil for the first time, said that it "felt like God was talking." Margaret Newton, the business manager of suburban Chicago's 882-seat Marriott Theatre, reports that after installing a hearing loop, she began to receive thanks from attendees after every performance. "I cannot begin to tell you the amazing difference this has made," she says.

With momentum now on the side of the hearing loop, I happily foresee a future my mother could not have imagined. Hearing loss need not be debilitating or isolating. As a campaign by the Hearing Loss Association of America says, "Get in the Hearing Loop." Hear ye! Hear ye!

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