

The Official Publication of the Canadian Academy of Audiology

## Let's Hear It for Old Technology

Published September 7th, 2016

John Woodgate, BSc(Eng), CEng, MIET, SMIEEE, FAES, Hon FInstSCE

The world has changed almost out of recognition in the last hundred years, yet we still depend on technologies that were introduced so long ago that their age is somewhat uncertain. The earliest ploughs (plows) date from before 5000 BC, while the earliest transport wheels date from around 3200 BC. Where would we be today if those technologies were discarded simply because of their extreme age? Moving on, two major technologies are around 110 years old now, the airplane and the automobile. Can we discard them?

There is a technology that is less than 80 years old world-wide, but less than about 60 years old in the Americas, that is all too often condemned simply as 'old', with no further justification seen to be required. And the most influential people doing the condemning are, astonishingly, audiologists, for the technology in question is the hearing loop system (audio-frequency induction-loop system). This system communicates by magnetic induction, live speech or music, or recordings, direct to hearing aids *fitted with telecoils and with the telecoil program enabled*.

Unfortunately, due to misapprehensions (fostered by the complacency and prejudice of non-professionals), many audiologists are not aware of the immense boon hearing-loop systems are to their patients. There is a very active 'Loop America' movement in being, but in spite of glowing testimonials from hearing-aid users introduced to hearing loops, there is an on-going struggle against misinformation. For example, it is claimed that Bluetooth is a substitute for hearing loops. It very definitely isn't; Bluetooth is basically a one-to-one communication system. Hearing loops are one-to-many (a single speaker in an auditorium) or many-to-many (a choir in a concert hall or place-of-worship).

There are two other communication systems for assistive hearing that are not limited to one-to-one, FM radio and infra-red. Both of these do not communicate with the hearing aid – the users have to obtain and wear special receivers, which have to be provided and maintained by the managers of the venue. The additional receivers are very often socially unacceptable to the people who need them, so are simply not used. The receivers do not, of course, incorporate the frequency-response correction that is set up in the user's hearing aid(s), so are often of less help than might be supposed.

Audiologists would be well-advised to see hearing loops as an opportunity to give a more comprehensive service, by recommending and providing hearing aids with telecoils, and having in their offices a simple hearing loop system fed from a TV set, so that patients can immediately experience the advantages.

## **Suggested Reading**

Kaufmann T, Sterkens J, Woodgate JM. Hearing loops the preferred assistive listening technology. J Aud Eng Soc 2015;63(4):298–302.