



An Acoustician's Experience of Using a Hearing Aid

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A personal account of the experiences of wearing a single hearing aid to control Tinnitus.

By a non-expert, who however, comes from a career in engineering acoustics, both as a researcher and teacher.





However, as President of IOA, presented an award to Claus Elberling in 2020 for his work on audiology and hearing aid design.

At the annual meeting of the Danish Technical Audiology Society (DTAS).

Brings together R&D groups from universities and from hearing aid manufacturers and clinicians.





Denmark has three major manufacturers, which make 50% of the hearing aids in the world.

Presentations were on electrophysiology and hearing aid design.

Also, on patient pre- and post-usage behaviour.







The Tinnitus was the result of the onset of Ménière's disease 45 years ago, consisting of: Tinnitus, Vertigo, progressive deafness in the right ear.

The Ménière's disease was severe at the beginning and early treatments included: micro-surgery, Betahistine, acupuncture, calming strategies, etc.



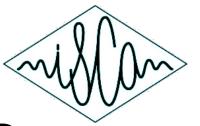


The Tinnitus has remained, has been less severe, but with episodes due to colds, stress, etc.

The Tinnitus is high-frequency and broad-band in character, and is confined to the right ear.

With presbycusis, the Tinnitus recently became louder, again only in the right ear.





On the recommendation of the NHS, a hearing aid was fitted three years ago, which, after some adjustment, suppressed the Tinnitus quite well. Two years ago, a commercial digital hearing aid provided personal control of both the volume and frequency content.





The use of one hearing aid has compromised my binaural perception:

- Difficulty in locating external and internal sound sources: vehicles, speakers, etc;
- Reduced appreciation of live and recorded classical music;





 Reduced speech perception – sometimes improved if the hearing aid is removed.

Might be the result of the phase change introduced by the single hearing aid.





Questions (to myself):

- Does wearing two hearing aids preserve binaural perception?
- Are hearing aid pairs phase-matched and to what degree?





Questions (to myself):

 Given time, does the brain adapt to restore binaural perception?





Final comments:

- My use of a single hearing aid has reduced the effects of Tinnitus.
- Surprisingly, am using the simpler NHS hearing aid more than the controllable aid.





Thank you for your attention and all success to the Clarity 2021 Workshop.

