Why can’t folk hear me?

You stand up in front of the congregation and some folk tell you afterwards that they could not hear all that you said; and you wonder why. After all everyone hears you clearly at home; and in the chapel you have a microphone, amplifier and loudspeakers. So what is the problem?

The Law of the Microphone
The sound reinforcement system cannot deliver a louder and clearer sound to the back of the church than you deliver to the microphone. In fact clarity and sound volume are significantly lower at the back of the church. Let me try to explain.

A. Some Homely Science
Feedback and Achievable Gain
If too much sound energy from the loudspeakers reaches the microphone, you get uncontrolled amplification of the sound and a loud squealing noise. If the gain is set too high, even if the system does not squeal, you can get significant distortion and an unpleasant ringing with loud sounds. So the gain you can achieve with a well behaved sound amplification system is strictly limited. In Ebenezer, at a safe setting of the volume control, the increase in perceived loudness at the back of the church with the sound system turned on is rather less than double that with the system turned off. The result: a weak voice or indistinct voice will not be heard clearly.

Reverberation
The chapel is a box with hard surfaces that reflect sound well. Sound echoes off the different surfaces and bounces around from surface to surface, creating a distinct reverberation. Clap your hands in the chapel and see how long it takes for the sound to die away completely. Reverberation has two consequences: it increases the amount sound reaching back to the microphone, and therefore increases the tendency to feedback; and it tends to smear speech and make it less distinct.

Background Noise
Although chapel congregations are not normally noisy, there is necessarily some background noise. The projector fan, traffic outside, people moving, coughing and turning pages: all of these create background noise which can add to the difficulty in hearing speech clearly. Furthermore, you may not assume that everyone has good hearing. Therefore, to be heard clearly against background noise you need to speak louder than in normal conversation.

B. Meeting the Challenge
It is worth reflecting that, before the advent of the sound reinforcement systems, earlier generations of preachers made themselves heard in large reverberant buildings, as well as

out of doors. Our problems are therefore fewer, but we still need to work at ensuring that we can be heard?

Speak Up

You need to speak louder than is necessary when speaking face to face in quiet surroundings. This does not mean that you need to shout, merely that you may not speak quietly and expect to be heard clearly.

Do Not Drop Your Voice

Native English speakers typically drop the voice at the end of a sentence, or even at the ends of some words within a sentence. By contrast, the South Walian or Frenchman often emphasises the final syllable and may be heard more clearly. So pay particular attention to keeping your voice from continually dropping into inaudibility. Final consonants are very readily lost in this way: I have on occasion heard Go', Spiri', meri', grea' etc. even when sitting at the front of the church.

Enunciate Clearly

Speech that is loud enough is not necessarily intelligible. Think of announcements over public address systems in railway stations (where there is usually both reverberation and poor system design): the speech may be loud but it is still often still unintelligible. If you want to be heard easily you must speak distinctly. You need to pay special attention to the enunciation of consonants as these are more likely to be misheard than vowels; and misheard consonants are more likely to result in misheard words: bad, bat, back and bag are different concepts!.

Do Not Speak Too Fast

Reverberation helps to make the music and singing sound richer and fuller, but can mask the later, often quieter syllables of a word. Speak more slowly and distinctly, and you are much more likely to be heard clearly.

Summary

Those who operate the sound reinforcement system cannot make a purse out of a sow's ear: all they can do is to help a good speaker to be heard a little more easily at the back of the church, and to feed a good signal to the loop system for the benefit of those whose hearing aids have a '*telecoil'*. It is up to you, the human speaker, if you have something that you wish to say, and which you consider is worth hearing, to speak clearly.

Tim Mimpriss – revised 27-09-2011.