The Seven Deadly Sings...

...and how to avoid them.

An Article from the
Singing Teacher's Perspective,
with some particular
Thoughts for the
Choir Trainer / Director

Things to look out for and eliminate from your singing:

And remember - All 'problems' are Opportunities...

- 1 Breathing problems
- 2 Breathiness
- 3-5 Difficulties of
 Range,
 Registration,
 Resonance the "three Rs" of singing
- 6 Pitch problems
- 7 Wobble, Tremolo and Constriction

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*Breathing problems.

Sometimes, people who breathe pretty well when they're not singing seem to have all sorts of problems when they are singing. The trouble starts when you think about taking a 'deep breath', which actually means literally what it says - taking a breath as deep inside the body as you can. To get the maximum amount of air into your lungs you need the diaphragm to descend as fully as possible - in turn this expands the stomach. If you pull your stomach muscles tight the diaphragm can't descend and you have to get air into your lungs by expanding the ribs and raising the shoulders (clavicular, or shallow, breathing). Most of it ends up trapped in the windpipe and pressing on your vocal cords, straining the voice. It is okay to expand the ribs (but not to raise the shoulders), but only if you've done a diaphragmatic intake first. For most phrases you don't need both, but it's useful for really long jobs.

Incidentally, if anyone asks you to "support the tone" ask them what they're talking about and see if they can explain it adequately. If they can, let me know, because I haven't many yet who do; when it boils down to it, it generally nothing more than "take a jolly good breath and let it out very slowly" - obvious stuff, really; ie better not use words which are nebulous!

As a director, encourage the 'pushing out' of the stomach muscles (not the arching of the whole body!), to eradicate the pulling in of the same.

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*Breathiness:

Breath coming out with the tone can result from the muscles which bring the vocal cords together being a bit weak and failing to close the gap adequately, particularly in young singers. Staccato exercises on one note are useful to strengthen these muscles. Be very careful not to let air escape between the notes, but not to be so aggressive the vocal cords kick together hard, causing an audible glottal.

The good news for singers and directors is that breathiness is the easiest vocal fault to correct, and the one which does you least harm in the meantime; so it's not a major worry in the 'early' stages of a singer's or a choir's development if there are other things on which to major.

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*Singing in the wrong range:

A voice killer!! Singing in the wrong range will damage a voice quickly. This can be a difficult one for young singers, because often the range doesn't really settle until the midtwenties. Remember that most people are of average height and weight, and are of average range too - i.e. mezzos, baritones. In choir singing you may have to compromise and go in the direction which 'feels' right, ie up to tenor or soprano if you're a high mezzo or baritone, and down if you're low. If you're a baritone you may be able to use a considerable amount of falsetto on high notes to help reduce strain, and even the beefiest mezzos are usually fine on top Gs and As so long as there aren't too many of them. Sometimes you need to beware of singing teachers who try to redesignate you to another voice type, especially if it's higher than you are used to.

However, there are times when inexperienced singers might classify themselves too low because they're afraid to sing energetically enough to reach high notes. The higher you go, the more your vocal cords have to stretch, and if you don't give the sound enough energy you may feel that you aren't reaching the notes properly. If you trust everything else your teacher says, trust them on this too. Sopranos, beware of choir directors who want you to sing alto because you happen to be the one who can sight-read well. Watch out, by the way, for pieces which look deceptively easy and low-ish, but which actually have a high tessitura and need bags of energy (Sopranos, the Fauré *Pie Jesu* is a good example of this).

As directors, a potential minefield – of course we may just 'need' that good reader to 'do x and y' – the most important thing is to be aware of our responsibilities. Certainly with developing voices and particularly those boys whose voices are changing we must be acutely careful and always nurture the voice (as well as the person, too, of course).

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*Registration difficulties:

Correct registration is the key to developing the voice, but it can also cause all sorts of problems. You have two sets of muscles which work your vocal cords. If you use them independently, the voice sounds pretty rancid. For example, in a woman's voice, there will be a foghorn sound at the bottom, followed by a few notes of wheeze, followed by something sweet but breathy at the top. The early Italian teachers occasionally heard this kind of voice (which is in the last stages of disintegration, by the way) and designated the high sound "head voice" and the low sound "chest voice". It's important to remember these represent muscle groups which tense your vocal cords. For the sake of simplicity it is worth thinking of the chest voice muscles as being a set which thicken the cords, and the head voice muscles as being a set which stretch them laterally. They need to be used together in exactly the right quantities for your own voice. This changes on every note, and it changes according to how loud you sing and which vowel you are singing, so the whole business is quite complex. If you like the powerhouse at the bottom of your voice and insist on carrying it up the range as far as you can, you will soon get into trouble. A 'break' will appear - you will not be able to hold the same registration all the way up and you will sound as if you have changed gear. After a short time of doing this kind of thing, you will give yourself vocal nodules and your voice will mysteriously (not really mysteriously, of course; rather predictably in fact) vanish. Some pop singers are prone to this - but presumably they've made so much money by the time it happens they aren't really worried about it... (sorry!!).

The 'gear change', the place where there is more head voice working than chest voice, needs to be low, around E-F above middle C, for all voices. Ladies have another gear change, around an octave or so higher, where the chest voice muscles stop actively pulling and start a holding action. Gents - not so much of a problem, actually; for basses the gear change barely exists. Tenors, you do need to introduce more head voice at the top of the range. This is not the same thing as falsetto (the relationship between the two things is detailed and complex!).

Having too much head voice in the tone results in a breathy sound, and one which probably means you have less carrying power than you would like. However, it's unlikely to ruin your voice.

From the director's point of view, many of the potential difficulties in this area stem from individuals singing the lower notes (which, as explained above, are 'easier' for them) too loud, and therefore having a registration problem when they need to move upwards. 'Don't sing too loud too low' is for almost all circumstances a good maxim. Thinking of where you are going in a phrase is always a good one. And there is a good analogy with car-driving; you can't go at 70mph in first gear (or at least you can't without causing a lot of damage both to yourself and to others...).

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*Resonance difficulties:

You will hear some people talk about chest and head resonance. This is generally a muddling of two concepts (i.e. resonance and registration). It's a moot point just how useful the chest can be as a resonator, as there's no means of escape for the sound. The sound does get to vibrate, however, in the space above the vocal cords, in the space above the voice box, the pharynx, mouth, sinuses and nose. Different vowels resonate best in slightly different places. However, though we can give some basic generalisations about this, it's going to vary a bit from one person to another, because we're all anatomically different. Ignore anybody who tells you "your top lip/hard palate, etc etc should vibrate" when you sing such and such a sound. Theirs might. Yours (and mine) probably won't! The resonance is right when you've got the most gorgeous, most pure vowel sound you can produce. You might not be the best judge of this, so, perhaps there is a use for a singing teacher after all... Some people do send the sound perpetually through one resonator at the expense of another. There are three major problems with resonance:

- a) If too much of the sound travels through the mouth and doesn't reach the nose or sinuses, the sound will be dull in tone and will not have a lot of carrying power. If you are a deep bass, it may sound cavernous or throaty. Humming exercises are useful here.
- b) If too much of the sound goes through the nose, the tone will be nasal. Beware of teachers who ask you to 'place' all the sound very far forward. If they go on and on about 'singing in the masque (or is mask?)', something that I've never heard anyone explain in terms which don't contravene all known laws of physics, be afraid, be very afraid... A very nasal tone is almost the hardest fault to deal with, and though it probably won't completely ruin your voice, no-one will want to listen to you. Also, try gently singing with your nose pinched between your fingers. If no sound is coming out through your mouth, you'll soon know. Just experimenting with this can help you get the knack of keeping some of the sound down in your mouth. Starting the sound from a yawn is sometimes helpful. If you definitely have a problem with over-nasality, find your least nasal vowel and work from it to the others, trying to keep the same 'open' feel.
- c) An 'ee' sound on ladies' top notes never resonates well (a shared problem we all have)
 it'll just sound teethy. Open the jaw a bit. It might feel gormless, but it'll sound better.
 Gents, tenors especially, you need to darken your high vowel sounds; it's the very bright open sound that makes many teenagers sound 'shouty'. This process, guys, is known in the trade as 'covering' the sound. It's just one of those mystical expressions singers like to use, and it isn't half so mysterious (or as hard to do) as they'd have you believe...

Note to Choir directors (very important) - if you warm up your choir on the same vowel sound all the time, that sound starts to permeate everything they sing. If you want your choir to sound hooty, using 'oo' as a warm-up is the way to do it; likewise, 'ee' will give you a permanently teethy sounding choir. 'Ah' is ok, though a mix of the three is much better. Generally avoid humming as a major part of your exercise routine, especially as a first exercise; it will encourage nasal production; though you will find it quite prevalent and quite in order in countries and languages with that sort of production overall.

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* Pitch problems:

If you sing perpetually flat or sharp without realising, your singing teacher should kindly point this out to you. If not, choir directors and colleagues will, but possibly less kindly! (Surely not...!). If you sing flat, you may simply not be giving your singing enough 'welly'. Singing is energetic stuff, even when the music is marked pianissimo; particularly when the music is marked pianissimo. If you sing sharp, you may be overblowing, though this is rather rare. There is a period many young sopranos, and some boy trebles, go through when they do go sharp for a few weeks as the voice suddenly develops a bit more lung power. Just watch out for this. If you're a choir director, draw their attention to it, point out it's natural, and ask them to 'keep on the flat side' of the note until it settles. Very often people who sing habitually sharp or flat are actually hearing themselves as singing in tune. They need to do an internal 'recalibration' for a few weeks - deliberately singing what for them is out of tune, until they hear it right.

People who sing odd individual notes out of tune tend to have less honed aural skills and can work on this. Having said that, all singers need to be aware that some notes are more difficult to tune than others (e.g. thirds in major keys, descending semitones etc.). If you anticipate these situations, you can avoid a degree of apoplexy on the part of your choir director. If you are a choir director, try to pin-point it before you do have apoplexy... (and of course, at least for the most part, keep your apoplexy private!!). A very useful thing to suggest to choir trainers is that often it is better to explain how you want the singers to sing (in order to avoid the flatness etc) rather than going on about the fact that they are flat – because it can cause tension and a tentative approach; which of course in turn causes them to sing flat....

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*Wobble, tremolo, and constriction:

When muscles are heavily loaded (eg when you pull them taut and then pass a whole whack of air across them, as you do every time you sing) they can become strained. In most walks of life, you don't even notice the strategies you use to avoid muscle strain. If you're carrying something heavy, for example, you will change the position of your arm regularly to distribute the load. In singing, when the voice becomes strong enough, and if you've avoided vocal faults listed above, it sorts the whole problem out by itself by alternately flexing and extending the singing musculature around about 6-7 times a second. We hear this as vibrato. Not only does it release the strain on the muscles, it also warms the tone. A big voice without vibrato is strident and can be grotesque. However, if you try to make it happen, what is likely to occur is a wobble - the diaphragm wobbles and bumps the tone (you've all heard it). It's slower than a natural vibrato, and not as regular.

A third kind of vocal movement is the tremolo. This usually arises from strain around the jaw and tongue, and for some reason, it's particularly prevalent in tenors (sorry, guys!). It's faster than a natural vibrato, rather machine-gun-like, and you may actually see the jaw shake. That kind of strain can seriously damage your voice. The voice itself needs to be energised. However, you need to keep the non-participating muscle groups as relaxed as you can - probably the hardest job for any singer, and again, a good reason for having a singing teacher you can trust to tell you if your tone begins to sound constricted or strained.

Very good points for choir directors to pick up on here are firstly 'singing naturally' – too much complication often simply destroys naturally good tone-quality. The science of the working voice is indeed detailed; but singing with good line, cleanly organised intonation and a feeling and understanding for registration, puts so much of that detailed working on place 'naturally'. Secondly take care if you demonstrate vocally yourself to the singers – they will be very good imitators of your tone, your pitch, etc etc. So, for example, if you are a brilliant tenor with an enormously vibrant voice, take care if you are demonstrating to trebles who won't have the physical capacities to 'copy' your excellent tone without harming themselves; and if you are a Bass or an Alto, think carefully if you are trying to demonstrate a high phrase to Sopranos and Tenors...