Complete Vocal Technique in four pages

Singing is not that difficult and everybody can learn to sing. I have divided the singing techniques into four main subjects as listed below. By combining elements of these four subjects you can produce precisely the sounds you want. You will also be able to pinpoint your specific problems and mistakes, and you can focus on which techniques you wish to work on.

Here I have condensed ‘Complete Vocal Technique’ into four pages. You can return to these pages at any time to give yourself an overview of the contents of this book.

The four main subjects are:
- The three overall principles - to ensure healthy sound production.
- The four vocal modes - to choose the ‘gear’ you want to sing in.
- Sound colours - to make the sound lighter or darker.
- Effects - to achieve specific sound effects.

The three overall principles

The three overall principles are the most fundamental and important to perfect. They make it possible to reach all the high and low notes within the range of the individual singer, to sing long phrases, to have a clear and powerful voice and to avoid hoarseness.

The three overall principles must be obeyed regardless of mode, sound colour, and effect. They are:

1. Support
   This means working against the natural urge of the diaphragm to release the air that has been inhaled. This is achieved by resisting its movement. During singing, the waist muscles and solar plexus are pushed outwards whilst the abdomen around the navel is gradually pulled in in a constant and sustained manner and the back muscles are tightened.

   The muscles in the loin try to pull the pelvis backwards, while the muscles in the abdomen try to pull the pelvis up under your body. This battle created between the abdominal muscles and the muscles in the loin is a valuable and important part of support. However, the support must happen in a sustained and continuous manner as though working against a resistance for as long as a sound is being produced. When the muscle contractions stop being sustained and continuous, for instance if you cannot pull the abdomen around the navel inwards any further or push the muscles of the waist or solar plexus outwards any further, then there is usually no more support. It is important to conserve your support energy so you do not waste it or use it at the wrong point in time.
   Do not use support before it is necessary. Save it for when the singing gets difficult, such as on high notes or at the end of a phrase. Support is hard physical work so you should be in good physical condition.

2. Necessary Twang
   The area above the vocal cords forms a funnel, this is called the ‘epiglottic funnel’. When twanging, the opening of the epiglottic funnel is made smaller by bringing the arytenoid cartilages closer to the lower part of epiglottis (the petiole). As a result the sound gets clearer and non-breath, and you can increase your volume. You always need to use necessary twang in order to have correct technique and achieve easy and unhindered use of the voice regardless of the mode,
sound colour and effect used. Necessary twang makes it easier to sing in all ways. For many this necessary twang does not sound twanged at all.

3. Avoid protruding the jaw and tightening the lips
Avoid protruding the jaw and tightening the lips as it often produces uncontrolled constriction around the vocal cords. Achieve a loose jaw by bending your head back and placing a finger between the upper and lower jaw. Keep this position of the jaw as you sing. The lower jaw should be pulled backwards relative to the upper jaw. Be sure to open the mouth wider on high and low notes than on notes in the middle part of the voice.

Whilst avoiding tightening the lips, it is also important to form vowels with the tongue without altering the shape of the mouth too much. Consonants on the other hand are usually produced by narrowing the vocal tract and by tension in the lips, but as you do not stay on them for very long in singing they do not impair singing. It is important to be able to release the tension immediately going from consonants to vowels.

Neutral

Neutral is the only non-metallic mode. There is no ‘metal’ in the sound. The character is often soft, like singing a lullaby. Neutral is the only mode where you can sing using a breathy quality voice without causing damage. The two extremes of Neutral are called ‘Neutral with air’ & ‘Neutral without air’. For the sake of clarity, both extremes are sometimes shown individually. Neutral is found by establishing a loose jaw.

In popular music Neutral with air is used for quiet passages when a breathy sound is wanted. In classical music Neutral with air is only used as a rare effect. In everyday life Neutral with air is used when you speak in a breathy voice or whisper.

Neutral without air is often used in popular music when you want a sound without metal and yet be clear and non-breathy. In classical music Neutral without air is used by both men and women when singing quietly, i.e. in pianissimo and ‘thinning’ (the volume of the note is gradually decreased without the note losing its quality). Women use Neutral without air in classical music when they sing in the high part of their voice, regardless of volume. In everyday life Neutral without air is used when you speak quietly with no breathiness.

Four vocal modes

The use of the voice can be divided into four vocal modes: Neutral, Curbine, Overdrive and Edge (formerly ‘Belting’). The modes differ by having different amounts of metallic character. Most singing problems occur because of incorrect use of the modes. Each mode has a certain character, as well as advantages and limitations. To avoid mistakes and technical problems it is important to know and control the modes, to use their advantages and to respect their limitations. It is also important to be able to change freely between the modes in order to make the most of their advantages. You can change smoothly or make abrupt changes to achieve vocal breaks. Each of the four vocal modes should be trained individually and in different ways. Remember to obey the three overall principles regardless of the mode.
**Curbing**

72. Curbing is the only half-metallic mode. There is a slight ‘metal’ on the notes. Curbing is the mildest of the metallic modes. It sounds slightly plaintive or restrained, like when you moan because of a stomach ache. Curbing can be found by establishing a ‘hold’.

Curbing is used in popular music when the volume is around medium and when a certain amount of metal is wanted on the notes such as in soft soul or R'n'B. Curbing is used in classical music by men when singing medium volume (mf) in their entire range and when women singing loud (f) in the middle part of the voice and sometimes in the low part of the voice. Curbing is used in everyday life when you wail, moan, or whine.

Men and women use Curbing through all the various parts of the voice. The sound colour can be altered quite a lot. All vowels can be used. However, in the high part of the voice, the vowels have to be directed towards ‘O’ (as in ‘woman’), ‘UH’ (as in ‘hungry’), and ‘I’ (as in ‘sit’) to stay in the mode. The volume in Curbing stays more or less in medium compared to the other modes, ranging from medium quiet (mp) to medium loud (mf). It is not possible to sing very quietly and very loudly in this mode (see ‘Curbing’ on page 96).

**Overdrive**

97. Overdrive is one of two full-metallic modes. There is a great amount of metal in the notes. The character of Overdrive is often direct and loud, like when you shout ‘hey’ at somebody in the street. Overdrive can be found in the beginning by establishing a ‘bite’. It is usually used when speaking or singing loudly in the low part and middle part of the voice.

Overdrive is used in popular music when the volume is loud and when a great amount of metal is wanted on the notes, such as in rock music. In classical music it is used by men when they sing medium loud to very loud (f-ff), and women use Overdrive in classical singing only in the low part of the voice if at all. Overdrive is used in everyday life, for example when shouting.

Overdrive is the most limited mode in terms of pitch, especially for women. The upper limit for women is D5/Eb5 and for men is C5. There is no lower limit. All vowels can be used in the low part of the voice, but in the high part of the voice you can only use ‘EH’ (as in ‘stay’) and ‘OH’ (as in ‘so’). The sound colour can, however, be altered to some extent. Although the volume in Overdrive is mostly loud, relatively quiet volumes can be obtained in the lower part of the voice. The higher the notes, the more distinct the loud, shouting character becomes (see ‘Overdrive’ on page 106).

**Edge**

120. Edge (formerly ‘Belting’) is the other full-metallic mode. There is a great amount of metal in the notes. The character of Edge is light, aggressive, sharp, and screaming, like when you imitate a diving airplane. Edge can be found by twanging the epiglottic funnel (e.g. sounding like a duck).

Edge is used in popular music in some styles, and mostly in the high part of the voice when the volume needs to be very loud and with a great amount of metal on the notes, such as in heavy rock and gospel music. Edge is used in classical music when men sing very loudly (ff) often in the high part of the voice such as the high C of a tenor. Women do not use Edge in classical music. Edge is used in everyday life when you scream.

Both men and women can use Edge in all parts of the voice. Only twanged vowels can be used as the twanged epiglottic funnel is a condition of Edge. This means that in the high part of the voice you can only use ‘I’ (as in ‘sit’), ‘A’ (as in ‘and’), ‘EH’ (as in ‘stay’), and ‘OE’ (as in ‘herb’). The sound colour can only be altered a little. In the high part of the voice you must not alter the light and sharp sound colour. The volume in Edge stays mostly loud. The higher the notes, the more distinct the screaming character becomes (see ‘Edge’ on page 116).
Sound colour

All modes can be lightened or darkened, though some more than others. The sound colour is created in the vocal tract, which is the space above the vocal cords extending to the lips and including the nasal passages. The form and size of the vocal tract is of great importance to the sound colour. All singers have different vocal tracts so all singers have their own personal sound colour. If the vocal tract is large, the sound colour will be darker with more 'body' to it. If it is small, the sound will be lighter and thinner. The shape of the vocal tract can be altered in many directions so there are many ways of changing the sound colour of your voice.

Remember to obey the three overall principles and to be in control of the chosen mode before changing sound colour.

Effects

These are sounds which are not connected to melody or text but are sounds that underline the expression or style of a singer. Many effects are produced in the vocal tract. All singers are different. Consequently, every effect must be specifically designed to each singer, taking into account their anatomy, physiology, fitness, energy level, and temperament.

Before you start working with effects it is important that you can control the three overall principles, the chosen mode, and the sound colour.

Effects might be:
- Distortion 222
- Creak 234 and creaking 240
- Rattle 245
- Growl 252
- Grunt 270
- Screams 276, 277, 278
- Intentional vocal breaks 284
- Air added to the voice 67
- Vibrato 295, 296
- Ornamentation technique (rapid runs of notes) 316

Trust yourself

Some of the main rules that cannot be repeated too often are:
- Singing must always feel comfortable.
- The technique must have the intended effect right away otherwise you are not working with it correctly.
- If an exercise hurts, feels uncomfortable or feels wrong, it IS wrong. Only you know how it feels so trust your feelings.