

The voice is not a difficult instrument to work with as it responds immediately to right or wrong technique. Indeed, 95% of all vocal problems we meet are caused by insufficient technique and can be solved within a few hours. However, it is crucial not to confuse taste and technique. Today we have techniques for all of the sounds the voice can make. In this article, we provide an introduction to the Complete Vocal Technique (CVT), with a particular focus on repairing damaged or worn-out voices.

Coaching the Singing Voice

Background to the Complete Vocal Technique

Born with heavy asthma, Cathrine Sadolin was far from a naturally gifted singer. The reason her mother first sent her to a singing lesson at the age of 17 was the hope that she might learn to breathe properly. At this point, Cathrine could produce only five notes. These were unstable and squeaky at best, and she didn't have air enough to hold them for more than two to three seconds. Not surprisingly then, the motherly frustration did not decrease when, after the lesson, Cathrine proclaimed she was now determined to become an opera singer.

Cathrine studied with many teachers and they all said something different: 'In with the stomach'; 'Out with the stomach'; 'Imagine you are a little boat'; 'sing from your knees', etc. Throughout this period, she learned a lot about the art of singing, but it didn't help her much technically. Determined to solve the problem, she continued to study all of the available literature on the subject including anatomy and acoustics, analysed thousands of recordings and explored numerous techniques in search of a logical system for understanding and controlling the behaviour of the voice. Cathrine finally found a system and solved her problems, and has since toured Europe as a classical, folk and rock singer, and she has recorded several albums.

With a radically new approach to singing technique, starting in the mid eighties, Cathrine developed the system further into the Complete Vocal Technique, so titled because it covers all of the sounds the human voice can produce. In 2005, the first 23 Complete Vocal Technique teachers received authorisation, and another 42 are on their way.

Complete Vocal Technique in short

Singing is not difficult and everybody can learn to sing. CVT divides singing technique into four subjects, listed below. By combining elements of these four subjects, a singer is able to produce precisely the sound she or he wants. The singer is also able to pinpoint problems and mistakes.

The four subjects are:

1. The three basic principles to ensure healthy sound production: 'Open throat', 'Support' and 'Avoid protruded jaw and tightening of the lips'.
2. The four vocal modes, to choose the 'gear' the singer wants to sing in: 'Neutral', 'Curbing', 'Overdrive' and 'Belting'. The four vocal modes are the four basic settings of the voice,

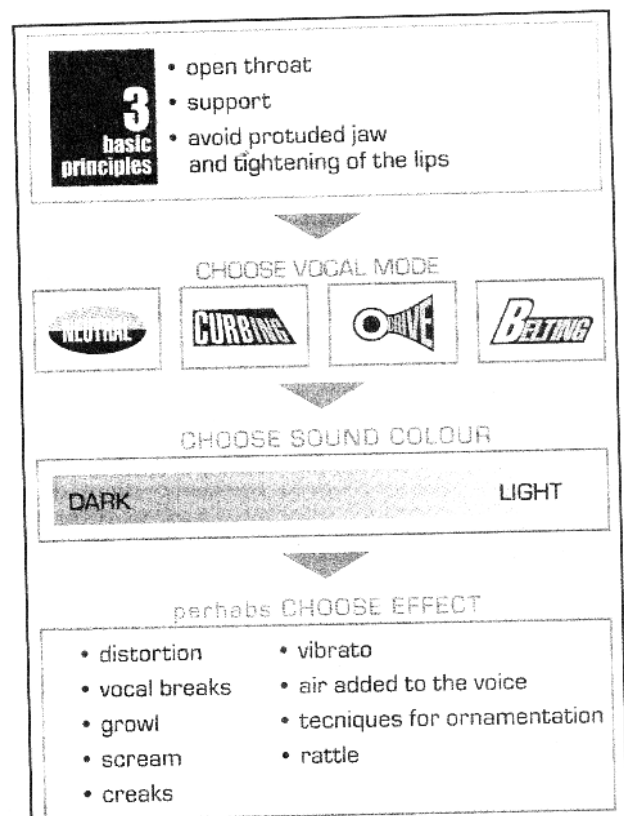


Figure 1: An overview of the Complete Vocal Technique.

each with their distinctive character, and they have different rules regarding volume, vowels, pitch, etc.

3. 'Sound colours' to make the sound lighter or darker. A bigger mouth cavity makes the sound darker, a smaller mouth cavity makes the sound lighter.
4. 'Effects' to achieve specific sounds: full and half-distortion, rattle, growl, vocal breaks, air added to the voice (breathiness), screams, hoarse attacks and creaks, vibrato, ornamentation technique (rapid run of notes).

There are some core rules that cannot be repeated too often:

- All sounds can be made in a healthy way.
- Singing must always feel comfortable.
- The technique must have the intended effect right away; otherwise, the singer is not working correctly.

- If an exercise hurts, feels uncomfortable or feels wrong – it is wrong. The singer is the one who knows how it feels and should trust her or his feelings.

Do not confuse taste and technique

Besides being familiar and experienced in the practical use of CVT and able to demonstrate all sounds in a musical manner, it is crucial that a CVT teacher does not confuse taste and technique. Many sounds are considered damaging simply because some teachers or doctors don't like them or understand the musical purpose of their use. In Europe, the western classical sound ideal has dominated for many years, and other ways of singing has been considered 'wrong' or damaging. In other parts of the world, experts have classified the western classical sounds as damaging and wrong. It is not helpful for a singer to be told that she or he must change the artistic performance because desired sound will ruin her or his voice. Hence, the aim of CVT is to provide techniques that incorporate *all* of the sounds the human voice can make.

Repairing damaged or worn-out voices with CVT

Hoarseness is the first sign of a singer going wrong. Even very experienced singers can suddenly create constrictions around the vocal cords, sometimes to such an extent that the singer cannot utter a sound. In most cases, the hoarseness caused by such constrictions has laced up but not yet damaged the voice. Therefore, although the singer sounds hoarse, there may not be any damage. A part of our job at the Complete Vocal Institute is to perform 'Emergency Aid'. This often means that we are called out to recording studios, theatres and concert tours where singers need help, either with technically difficult assignments or because they have acute vocal problems.

The course of action depends on the circumstances. We always first recommend that the singer seeks an ENT doctor to have his / her voice examined for a diagnosis.

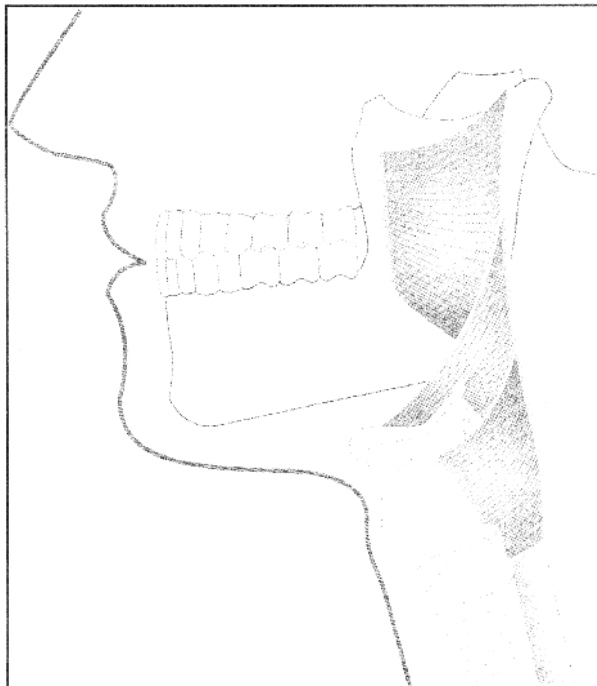


Figure 2: It is essential for all singers to prevent the constrictor muscles from interfering while singing.

1. When a singer is hoarse and unable to go through with a concert, often the report from the doctor will show no apparent damage to the voice. In this case, just a half to a few hours with the 'CVT Programme for Emergency Aid' will restore the sound of the voice as if nothing happened.
2. When the vocal cords are inflamed and irritated but there are no signs of distinct wear, in most cases 'Emergency Aid' will solve the problem.
3. Sometimes the voice shows distinct wear and the vocal cords are severely swollen, perhaps with developing nodules. There is not much we can do right away as the vocal cords need to rest. We recommend a voiceless period.
4. In rare cases, the diagnosis is nodules or bleeding. The vocal cords need rest. Medical treatment or surgery might be necessary, but we recommend starting out with a voiceless period as experience has demonstrated that this can solve the problem.
5. In very rare cases, the diagnosis is a more severe disorder, to which CVT has no cure.

'Programme for Emergency Aid'

The goal for 'Emergency Aid' is to get the singer to let go of the inappropriate constrictions arising from the misuse of the voice that are hindering a smooth vocal function. When the singer complies with the rules of the voice, the constrictions will go away and the hoarseness will disappear.

A CVT teacher will assist the singer by correcting the technique until she or he sings a perfect note in 'the centre of a vocal mode' where the mode works best and most efficient, meaning that the sound can be made with minimum effort. In which of the four vocal modes this is achieved is not important. Thus, in nearly every case the teacher will go for the singers 'favourite mode', the mode the singer is using most and knows best. When the centre is obtained in one mode, the others will follow quickly. Using the 'Programme for Emergency Aid', this might take from a half to two hours, depending on the problem and how experienced the singer is.

The programme is primarily based on audible analysis of the sound compared with the rules of the voice: volume, vowel or pitch might not be suitable for the particular vocal mode. Special vowel sounds or the presence of certain overtones or abnormal sounds might point to a certain problem that needs correction. The singer might be straining too much for a certain sound. In some cases it is possible to see that a singer has wrong support, or is protruding the jaw, etc. Often there is more than one problem, and then the task is to find the main problem. When the main problem is solved, the other problems usually follow automatically.

A case story

I was called out to a recording studio where a singer was having problems. As always, I asked him to see a doctor before I arrived as there is no reason to spend money on 'Emergency Aid' if the voice simply needs rest. When I arrived the singer had a photograph of his vocal cords and a statement from the doctor. The cords were not infected, but they were red and very swollen so I did not think I could help. We started by carefully removing the constrictions that tend to occur when the sensation or sound of singing is different than usual. It is important to remove these constrictions, but I was not sure it

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would have a large effect. After an hour the singer and producer said the voice sounded normal again and they could continue the recording. They asked me to stay during the rest of the recording so that we could work on removing the constrictions as soon as they appeared. Within a couple of days the swelling had disappeared.

The reason for vocal problems

Dried out mucous membranes, too much mucous and bad monitoring systems can give the singer the impression that the voice is not working as it should. When the voice does not respond normally, the singer often compensates with greater tensions, which make the voice sound unusual and which again can lead to constrictions. The constrictions further prevent the voice from working, causing the singer to create still more constrictions. It is important not to go astray and start this vicious circle where techniques are replaced by constrictions.

The importance of physical strength

Often problems occur because a singer runs out of strength. If a singer starts getting tired on tour or during extended recording sessions, she or he will lack the necessary strength and energy to support the notes and thereby keep an open throat.

Many singers experience this at the end of a concert. With no more physical strength left, the voice fatigues. The accompanying constrictions put further strain on the vocal cords and you have to use even more strength to sing, which is yet more tiring. Typically, the high notes are the first to fail and the volume decreases.

Sleep

It is essential to get enough sleep, especially on demanding tours. Without enough sleep the vocal cords do not get time to regenerate or heal the irritation that might have developed. Sleep is also necessary for rebuilding the physical strength vital to support.

How much sleep a singer requires varies. The singer must know and respect her or his individual needs if she or he wants to survive a demanding period without harm.

Stick to correct techniques

The best a singer can do, whatever irregularities she or he is subjected to, and even if the voice does not sound normal, is to keep using techniques that are familiar and have worked previously. If the singer is becoming hoarse and the notes require double the normal amount of strength, then she or he should give them double the support and maintain an unconstricted way of singing.

The voiceless period

If a singer has been diagnosed with nodules on the vocal cords, we recommend a voiceless period of a week or two depending on how developed the nodules are. By a voiceless period we mean: 'Do Not Make A Single Sound!'. The singer should not whisper because this tires the voice even more than ordinary speech. And even clearing the throat should be avoided. Let the singer give the vocal cords a rest and write little notes instead. This method is very efficient and has no side-effects. Many discover that it is actually a valuable mental experience not to speak for two weeks.

If it is absolutely necessary to speak, the singer should do so clearly, with plenty of support. It is not a good idea to whisper or be 'cautious'. Often singers put more constriction on the voice by being cautious. They forget all about supporting the voice when they speak quietly. It requires a lot of technique to speak quietly in a correct manner. It is better to add a bit more sound and to support well.

There are still some exercises the singer can do during the voiceless period, and after the period has concluded, the singer is recommended to follow certain directions, among them getting a new diagnosis from an ENT doctor.

For more information on the *Complete Vocal Technique*, visit <http://www.completevocaltechnique.com>

Declaration of Competing Interests: Cathrine Sadolin and Henrik Kjelin are co-owners of Complete Vocal Institute and the copyright for both the book and CD of the Complete Vocal Technique in all languages.

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