

Structured Breathing

by Catherine Fitzmaurice

What is it?

"Structured breathing" and the "focus line" are terms I coined in the early 70s as part of a vocal technique ("Destructuring/Restructuring") which combines appropriate choice with spontaneity as well as focused attention. "Structuring" partially uses techniques taught as bel canto in singing, and brought into the field of speaking voice in the late nineteenth century by Elsie Fogerty at the Central School of Speech and Drama in London, England, where I learned it and later taught it. "Structured breathing" modifies the bel canto pattern in three main ways.

"Destructuring" exercises reveal "structuring" as the preferred pattern of a free torso when speakers are engaged in speaking from their own imagination. Through "destructuring", awareness develops of the chemical and emotional needs of the body and mind to a.) breathe varying amounts at varying times, and b.) express desire and purpose. "Structuring" freely incorporates such requirements.

"Structuring" differentiates between the active actions of exhalation of the transversus abdominis (which lifts the ribcage) and that of the rectus abdominis, the obliques, and inner intercostals (which squeeze the ribcage).

"Structuring" involves awareness of an imaged "focus line", which assists with harmonic range and clear intentionality.

How does one do it?

The inhalation in autonomic (ANS) silent breathing is dependent on a raised level of carbon dioxide in the blood to stimulate the phrenic nerve in the diaphragm. This causes an active diaphragmatic downward contraction, and a passive widening of the ribcage by the resulting slight enlargement of the diaphragm's circumference, thus expanding lung tissue three-dimensionally. The abdomen is moved passively a little outwards by the viscera.

The "structured" inhalation in intentional breathing for speaking is activated by the Central Nervous System (CNS) and is primarily stimulated by ideas formed in the mind, so that the regular rhythm of respiration is altered to express the complex rhythms of thought. (The word "inspiration" denotes both mental and physical activity.) There is generally a quick intake in preparation for a sustained outflow which vibrates the somewhat approximated vocal folds. In this inhalation the CNS effects the active contraction of the external intercostals, lifting and widening the ribcage, which pulls the now mostly passive diaphragm wider and down, thus expanding the lungs. The seventh through twelfth ribs, where the lungs are largest, are the most flexible, because they are

not attached in front to the sternum but only jointed at the spine, so this intentional inhalation focuses effort at the center of the tuxedo cutaway-like portion, but the entire ribcage may be somewhat involved. (When the intercostals are familiar with this action, I use an image of "separating the kidneys".) As in silent breathing, the abdomen follows by being moved outwards, passively only, and not very far, as a result of compression of the contents of the stomach from above by the diaphragm, and not as a reaching for air. It may dip inward a little first, in a whiplash effect resulting from the outwards movement of the ribcage.

The exhalation in autonomic (ANS) silent breathing is simply a release, with the diaphragm and ribcage returning to a rest position.

The "structured" exhalation for speaking follows the quick structured inhalation almost instantly. The CNS effects an active quick contraction (and resulting inwards movement) of the transversus abdominis only, which holds this contraction steady throughout vocalization. Because of the accompanying relaxation and rise of the diaphragm the abdominal wall will move further inwards during phonation, but the initial action moves inwards immediately as far as it comfortably can. (I use the image of a trapdoor, hinged at the end of the sternum, drawing inwards and upwards to create a floor for the thorax -- the same action as when one tries to appear skinny if standing sideways and looking in a mirror.) One can see at the same time, in a whiplash effect, a passive continued outward movement of the ribs, if the inner intercostals and/or other abdominal muscles are not unnecessarily bracing them in place or starting a contraction to squeeze the ribcage inwards. The outer layer of the abdominal wall (the rectus abdominis) and the middle layer (the obliques) remain uncontracted, soft, and passive, but of course, as an integral part of the abdominal wall, they move inwards together with the innermost layer, the transversus. As the vocal folds adduct and partially engage and vibrate, the external intercostals "float" down slowly, in a delayed release, not a collapse, and not a squeeze. But the focus is on the action of the transverse.

The "focus line" (as a mental image only) then extends from the dynamic action at the abdomen down and around the pelvis and up the spine into the head and out of the "third eye", so the attention is not on oneself, nor on the vocal tract, but on the point(s) of communication.

If speaking is to continue, one can restart the entire cycle immediately with another quick inhalation, or there can be a pause after the out-breath. In either case breathing for speaking is always activated by the CNS as the result of thoughts one wants to express, and its size and rhythm depend on the thoughts.

Why do it?

The above is a mechanical description of highly organic and fluid motion, which (once the specific actions have been identified and practiced sufficiently) is always available as a choice when there is need. Need may arise from physical effort, as, for example, when speaking with high volume or unusual pitches, or dancing or fighting; or

in charged emotional speaking; or from stage fright; or when sustaining long thought patterns and complex sentence structures; or when the tone of the voice may be intentionally altered as a result of physical tension -- for character work, for instance; or the body may have chronic poor breathing habits. Or, finally, the simple act of standing upright and speaking can in some people cause so much tension in the back, the shoulders, the chest, the neck, and/or the abdominal wall that the breathing is compromised -- either held, hindered, or helped in unhelpful ways such as gasping or squeezing.

"Structured breathing" -- in constant interplay with varying breath patterns arising from any such situations -- is also useful when no extraordinary demands are placed on the voice, such as in speaking with a microphone, or in small spaces, or quietly, or on the telephone. The inhalation with the lower third of the external intercostals is simply the fastest and most efficient way of taking in the appropriate amount of air needed for vocalization, because it directly expands the lungs where they are largest. The exhalation when speaking, using the described abdominal action, engages the speaker at the center and expresses authenticity, with directed focus.

All of these actions are economical, become automatic as a response to choice or need, and can happily work together with individual breathing habits and vocal requirements of all kinds.

(See my article "Breathing is Meaning".)

(NB: my teachers, including Cicely Berry, used to refer to the upper part of the abdominal wall as the "diaphragm", and the diaphragm proper as the "internal diaphragm". The way they described the bel canto version of this abdominal action -- as pulling in the "diaphragm" to exhale -- would otherwise be impossible to accomplish.)

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Published in VASTA Newsletter, Spring 2003, Vol. 17, #1.