

Working on Breathing: Exploring its Relation to Vocal Production and Wind- Instrument Playing

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Breathing can be considered to have two main functions: one for the purpose of supplying oxygen to our system for the basic life-sustaining process, and the other for propelling an extended column of air out for speaking, singing, whistling, playing a wind instrument, etc.

In order to apply the principles of the Alexander Technique to supporting a column of air for speech, song, wind playing, it is first important to establish a sensitivity to a free operation of the life-sustaining, tide-like flow of breathing, which I like to call our natural resting rate of breathing (NRRB). This sensitivity should be the basis upon which any approach to vocal production or wind-instrument playing is founded.

Alexander realized that in most people their NRRB is functioning far below the minimum standard essential to sustaining a healthy metabolism and general vitality. He also pointed out that many people in the industrialized world are actually born with what was called a "low respiratory need" that he claimed was really a consequence of their generally poor coordination.[1] However, at any given moment, he realized that we are also usually able to improve our NRRB by positively directing our neck-head-torso-limb relationship in order to allow the NRRB to flow more freely and fully than when we are mainly caught up in our thinking, involved in emotional reactions, striving hard to achieve a goal, etc. One function of Alexander lessons is to progressively free and deepen this tidal flow of air in and out of our lungs. However, this happens *indirectly* as an improvement in the overall conditions of our neck-head-torso-limb relationship is brought about by a skilled teachers hands in conjunction with our own refraining from habits that interfere with this relationship and in conjunction with our projection of the directions for maintaining a "normal employment of the primary control," as opposed to its "abnormal employment." [2]

When we are quiet and not speaking, we have the best chance to experience and observe the left-alone tidal flow of our NRRB as it operates for the sole purpose of staying alive. To begin exploring this tidal flow, lie down on the floor in the customary Alexander rest position (on your back on a carpet with your head resting on a reasonable height of books, your knees bent, your elbows resting on the floor, and your hands resting at the sides of your lower ribs and

abdomen), it should be fairly easy for you to be aware of the rhythmic flow of the air coming in and out of your lungs as it occurs in the NRRB—preferably through your nose.[3] However, you may notice at first that attempting to be more conscious of your breathing may seem to cause a bit of restraint in it; but eventually it is possible to "allow" complete freedom of your breathing mechanisms without any intervention, manipulation, or interference on your part. You're merely "getting out of the way" by attending to your primary directions and letting your breathing happen *by itself* as it is designed to function.[4]

The most obvious place to be aware of the tidal flow of your NRRB is at your costal arch, the area where your abdominal wall meets the front rim of your lower ribs (behind which the front edge of your diaphragm is also attached). As you are resting on the floor, your hands or finger-tips should lie just across that juncture of lower ribs and abdomen so they can help you in assessing the quality of rib and abdominal movement accompanying the flow of air in and out of your lungs.

Anything that interrupts or restricts the free flow of your NRRB can be considered an interference. Sometimes, if you are too preoccupied with an involved train of thought or caught up in an intense emotional reaction, this can greatly hamper the functioning of your NRRB, and it can become shallow and labored as a result—although, it can often free up considerably once the thought or emotional issue is resolved. Of course, even making a single, quiet vocal sound interrupts this resting flow of breathing, and it often calls upon the muscular mechanisms of your whole torso to mobilize in such a way that many people make a great effort in their abdominal muscles, diaphragm, ribs (intercostal muscles), and often in their back and neck muscles as well.

After a few minutes of maintaining an unimpeded and interrupted flow of breathing through your nose, you may be able to become more aware of the difference between the steady tidal flow and an interruption of it. Try making a single vocal sound like saying "yes" or "no," and observe what happens beneath your finger-tips at this juncture of your front ribs and abdomen—as well as elsewhere in your lower abdominal wall, back, and neck. Observe especially how long it takes for these muscular areas to return again to their regular, even operation after you stop making the sound. Sometimes the NRRB doesn't return to its maximum, easy fullness until several breaths have come and gone while you've mainly focused on fairly continuously projecting the directions for the normal employment of your primary control ("neck free, head forward and up, back to lengthen and widen, knees to go forward and away").

The ability to know when you have fully recovered your NRRB after meeting the demand on your breathing mechanisms induced by *any* vocal production or sounding of a note on a wind instrument—no matter how well you execute them—is extremely important. Ultimately, this awareness becomes the standard for, or basis of, any further vocal production or wind-instrument playing as you gradually work on producing longer sounds and phrases. With practice and an improved manner and conditions of use,[5] it's possible for each in-breath during vocalization or wind-playing to be permeated by the character of the NRRB—instead of the audible gasp that so often comes with the habitual "taking a breath" that so many voice and wind instrument teachers believe is necessary.

This is a good place to cite Alexander's own description of what happens on the subject of allowing our in-breath to return by itself:

From the very first breath there is a more or less constant air pressure (atmospheric pressure) within the lungs, but not any air pressure on the outside of the lungs. Air pressure is sufficient to overcome the elasticity of the tissue of the air-cells, and to increase their size, when not held in check by the pressure of the walls of the thorax upon the lung-bag itself. The lungs are subject, however, to this pressure exerted by the walls of the thorax during the contraction [the propulsion of the out-breath: JA], and to the release of this pressure during the expansion of the thoracic cavity [as the in-breath returns: JA]. The pressure that can be exerted by the walls of the thorax on the outside of the lung-bag is much greater than that which results from the atmospheric pressure (air pressure) within the lungs. Therefore, when we wish, as we say, to "take a breath" (inspiration), all we have to do is to reduce the pressure exerted upon the lungs by the chest walls, and to employ those muscular co-ordinations [lengthening and widening: JA] which increase the intra-thoracic capacity of lungs (increased chest capacity), thereby causing a partial vacuum in the lung-cells of which atmospheric pressure takes advantage, by increasing the size of the cells and thus the amount of air in the lungs.[6]

Often in Alexander lessons, it happens that students experience a rather sudden change in the freedom of their in-breath as an improvement in their general conditions of lengthening and widening that is facilitated by a skilled teacher's hands—particularly while the student is receiving hands-on work while lying on a table. This contrast in breath flow is frequently seen when students have been very busy or under a lot of stress in their lives. They usually haven't realized how "clamped down" (shortened and narrowed in stature) they had become as a result of their reactions to these influences—their "reaction to the stimulus of living," as Alexander called it.[7]

The fullest potential of this NRRB in-breath action during vocalization was dramatically revealed to me in a private lesson I had with Walter Carrington while I was on his teacher training course and he was telling me a hilarious story about the time Alexander insisted on accompanying him to report to the draft board after the outbreak of World War II.[8] Walter had been working on me in the traditional way for a while, taking me in and out of a chair while constantly giving me direction with his hands. However, as I listened and allowed myself to start to respond to the tale, he kept gently curving the finger tips of his left hand under my front ribs in order to remind me not to keep holding in my abdominal muscles and diaphragm, which I was inclined to do as I listened in suspense to the tale. He also kept using his right hand either at the back of my neck and head or somewhere on my back or shoulders to reinforce my primary directions. The story was so funny, however, that I had an overwhelming urge to laugh loud and hard all the way through his telling of it—as I would usually do when laughing at anything hysterically funny. But somehow, with his finger-tips hooked just under my ribs and slightly pulsating that juncture of ribs and abdomen, he was able to interrupt my constant peal of laughter enough so that my in-breath would return in a normal, free fashion (the NRRB), creating a pause that I wouldn't ordinarily have thought possible.

Then another peal of laughter would come forth from me on my next out-breath as the story progressed. All the while, my whole rib-cage and abdominal wall remained much closer to their fullest expansiveness than they otherwise would have. It was a very unusual experience compared to what I had always considered to be my "natural" and "spontaneous" way of laughing (and probably most other people's as well), but the most astonishing aspect of it was that it hadn't changed the actual sound or character of my vocal laughter at all when it actually did peal forth. If anything, my laughing was only made more full, rich, and enjoyable throughout. In retrospect, however, I'm not sure if I would have been able to experience this realization in that lesson if I hadn't already spent a good deal of time (several years) working on applying Alexander's principles of respiratory re-education to his "whispered ah" procedure and to my daily flute practice. Instead, I think it's very likely that I would have stayed seized up in my ribs and diaphragm regions in a paroxysm of laughing throughout the whole story, and no matter what Walter would have done with his hands would have gotten me to remember to keep releasing my breathing mechanisms fully on the in-breaths until the story was well over.

Progressing from single to multiple sounds, then to phrases, sentences, and on through whole paragraphs (as in reading or reciting a composed text) is a good, progressive way to approach working at incorporating the freer quality of your NRRB into everyday speaking, song, and wind-instrument playing. I suggest marking a text with phrasing breaks as frequently as possible without disturbing its meaning too much. Once you can read all the phrases easily with the return of a full, resting breath on each in-breath, try increasing the demand by reading portions twice as long. Eventually, you may be able to build up to a natural rhythm of phrases as if you were reading the passage, or reciting it, to listeners. You will probably find that you have much more time to breathe easily and fully than you have ever allowed yourself to take advantage of, which can also often allow for a greater depth of expression of the meaning of the phrase and provide your listeners with a rendition that's much easier to listen to and comprehend.

When I introduce this procedure to my students, I use the first paragraph of Alexander's *The Use of the Self*, since it has three quite long sentences, each composed of several phrases. After I've worked with the students for a while as they are sitting and standing and their direction is working fairly well, I hand the book to them and ask them to read the paragraph straight through just as they would in their normal manner of reading aloud to a number of listeners. While they are reading, I continue to monitor with my hands what is happening in their overall use of themselves as I also continue to give them positive directions for improving and maintaining their normal use of their primary control. Almost invariably, though, (even with professional voice users and wind players), they read the paragraph right through and only breath in at the end of each long sentence. Of course, by the time they have finished the whole paragraph, they've usually become quite aware of the fact that their breathing mechanisms have become very tight because my hands have been continually supplying them with reference points for comparison all along. They often protest that Alexander's sentences are so long and convoluted that it would be impossible to read the passage aloud without getting so tight. After they've finished the reading, it usually takes at least a few minutes for their NRRB to return to its free flow in and out, and I make sure they are aware that it has returned to the freer, resting state before we go any further with working on the text. It's usually quite startling to them to realize how severely they had interfered with the use of themselves and their breathing mechanisms in the simple act of reading aloud a single paragraph of text.

Next, I ask the students to let me take responsibility for deciding where they should pause in order to allow their breath to return freely while they're reading the same passage. I have them make the breaks quite frequently—being sure to say to them "wait" just before each break, so that they don't go charging on ahead—and all the while I continue to give them directions with my hands for maintaining and improving their primary control so that they can notice if they start to get into that squeezed condition that their first reading brought about and so that they can notice when they're really ready to echo me with their fullest and freest possible in-breath as their source of "true motive power"—as Alexander referred to the source of full breath support in his early articles on breathing and vocal production. Here is the paragraph marked with breaks where I usually ask the students to wait until their NRRB is fully restored (I usually have to say "wait" a number of times, just so they can relinquish their impulse to go right ahead and pronounce the next phrase):

My two earlier books Man's Supreme Inheritance and Constructive Conscious Control of the Individual, contain a statement of the technique which I gradually evolved over a period of years in my search for a means whereby faulty conditions of use in the human organism could be improved. I must admit that when I began my investigation, I, in common with most people, conceived of body and mind as separate parts of the same organism, and consequently believed that human ills and shortcomings could be classified as either "mental" or "physical" and dealt with on specifically "mental" or specifically "physical" lines. My practical experiences, however, led me to abandon this point of view and readers of my books will be aware that the technique described in them is based on the opposite conception, namely, that it is impossible to separate "mental" and "physical" processes in any form of human activity. [9]

If there is enough time, I might go on to ask the students to read the paragraph again by taking less frequent breaks—maybe after every two word clusters—so that they can begin to get a sense of how they could practice building up the more constructive breath support on their own and come closer to rendering the passage in an even more natural and meaningful way.

Later, I often use poems in a similar way with students—as Frank Pierce Jones did sometimes with me when I worked with him in the early 1970s.[10] I first say the phrase for the students myself and then have them echo it back to me—again, making sure that they have waited until they have taken the necessary time to be in touch with their NRRB and their overall primary directions before they respond. I find this awareness can be developed especially effectively while I work with students as they lie in the Alexander rest position on the teaching table. There they have an even better chance than in standing and sitting to perceive what's happening in their neck-head-torso relationship as I continue to work on them in the traditional way, often putting a hand just across their costal arch or tapping them lightly on their breastbone if I see them holding their ribs and abdominal wall tight instead of leaving them free before and after they speak the phrase. For this procedure, it seems especially useful to choose a poem that students don't know—or at least one that they do not know by heart so that they won't be tempted to think of what words are coming next and get prepared ("set," to use Frank Jones's term) for saying them ("end-gaining"). Eventually, when students begin to be able to inhibit the tendency to jump in immediately to echo me (by "taking" a quick, gasping breath), and when they are able to maintain their overall direction all the way to the ends of the phrases of the

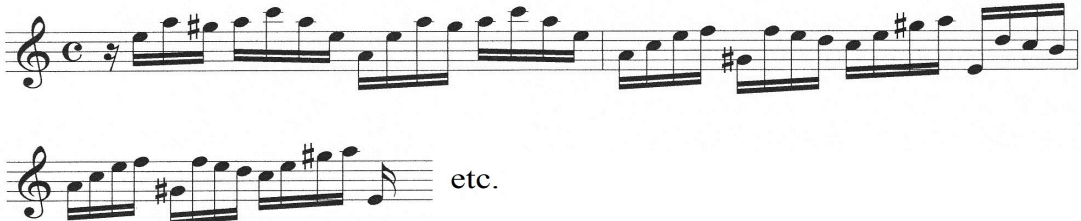
poem, I start to give them somewhat longer ones—again, to help them develop their power for making the return of the NRRB their main focus and guide.

A similar process works well for wind players, such as the exercise that Alexander Murray gave me when I was studying flute with him and having my first Alexander lessons with his wife, Joan. It is a set of basic scale sequences in which you first play only three notes of the scale at a time in eighth notes at about mm. 60—allowing as much time as you need for your NRRB to return fully through your nose before you go on to play the next sequence of three notes that begin with the last note of the previous sequence (e.g., C,D,E. then E,F,G, GAB, etc.)—never "taking" a quick catch breath just before you start a sequence. Then, once you have become proficient at playing the scale ascending and descending in those three-note patterns with a return to the free-flowing NRRB in between them, you play it as a five-note sequence in sixteenth notes on each breath (e.g., C,D,E,F,G, then G,A,B,C,D, etc.), then a whole octave in sixteenths on one breath, then two and three octaves, etc. until you can play the whole scale up and down without forcing or squeezing the breathing mechanisms. The same idea of pausing to allow the breath to return through your nose can also be used very effectively for building up good breathing habits while practicing a composition phrase by phrase—or even figure by figure—again, by taking plenty of time between phrases or figures to allow a full, free breath to return and avoiding getting into any squeezing of your breathing mechanisms toward the ends of the phrases. I often remind musicians that music has "end-gaining" built into it merely because playing a piece fully means going from beginning to end without stopping—no matter what. The music *must* continue—even pieces that seem to "stand still." And often, with most wind players, it only takes playing three or four fairly easy phrases in a row—with quick breaths in between them—for all their breathing mechanisms to become so tightened that they are functioning in a much more constricted way than they need to be. So it is an inherent "disposition" that we very much need to "re-educate" breathing mechanisms out of.


Take, for example, the "Allemande" of Bach's A-minor *Partita* for solo flute, which is one continuous flow of separately articulated sixteenth-note motifs for more than two whole pages (with repeats of both the first and second sections!). If it is practiced "straight through," or even page by page, it is nearly impossible not to cultivate restrictive breathing habits that will carry over into an actual performance (possibly being exacerbated by performance anxieties). So it really behooves flutists to practice the whole piece many times "figure by figure" and to take all the time they need between playing each figure for a fully free breath to return by itself through their nose (even though the breath will come in through their mouth in performance). The same goes for the remaining three movements of the *Partita* that are also written in one continuous flow of notes. Another valuable aspect of following this approach is that you have much more time and more freedom to allow each figure or phrase to be filled with its fullest expressive capacity. When there's a constant struggle with breathing going on, it is much harder to allow the fullest expression to come through on each figure or phrase—particularly when they are all coming along in equal sixteenth notes as they are in the "Allemande." By practicing in this way, you are actually giving yourself a doubly good chance at preparing for the best and freest possible performance of this tremendously demanding movement.

Here is a suggestion for working on the Bach, and, following the practicing procedures of oboist, Fernand Gillet,[11] I recommend keeping a steady beat going during the repeated bars of rest while your fullest NRRB is re-establishing itself:

Original



Practice Version



It is particularly astonishing to see and hear Alexander Murray's demonstration of playing the whole of the "Allemande" with only a slight and inaudible in-breath after every sixteenth note—something that would be practically impossible to do if he weren't maintaining his fullest lengthening and widening as a constant throughout the performance.

Vocal and Respiratory Re-Education

Alexander was convinced that the majority of people living in urban settings suffer from a very poor functioning of their respiratory mechanisms—the outcome of a poor use of the self in general in reaction to the stimulus of living in this type of environment. And in attempting to improve his students' breathing function in the context of helping them to improve their general use of themselves, he found that a sequence of extended whispered tones on a vowel sound can have a freeing and vitalizing effect on our respiratory mechanisms if we practice them according to the principles of inhibition and direction of the primary control. Daily work on respiratory re-education should become a regular part of every serious Alexander student's activities—particularly if he or she suffers from respiratory troubles such as asthma, emphysema, hay fever, sleep apnea, etc. Freeing our breathing/vocal mechanisms (ribs, diaphragm, abdomen, larynx, tongue, lips, etc.) is fundamental to a basic standard of health, if only from the simple standpoint of ensuring an adequate supply of oxygen to our blood.

In speech, singing, and wind-instrument playing we can often see some of the most detrimental effects of poor use of the respiratory mechanisms as a result of an abnormal employment of the primary control (our neck/head/back/limb relationship). Even in ordinary daily communications and conversation, a great interference usually occurs simply as a result of a poor use of the self in general. Excessive and subconscious mannerisms of head, neck, arms and hands are often bound up with everything people say—even if they only speak one word. It

seems to have become impossible for many to express themselves through a vocal sound alone that is free from a constant and habitual gesturing of head, neck, and hands. Therefore, when they need to make any fuller expressive gesture of hands, arms, head, etc., it is often hampered by being confined within the few continual "half gestures" that usually serve more to reassure or comfort the speakers as they search for words than the "full gestures" that would illustrate their point at important moments. A whole matrix of neck, head, trunk, arms, and hands is often subconsciously engaged even before a conversational vocal sound is uttered—much like Alexander initially discovered himself doing when he merely thought of reciting, as first-generation Alexander teacher, Lulie Westfeldt points out:

Alexander went over very carefully in his mind [*sic*] what actually happened [just before he began to recite—the “critical moment”] and decided that he had no control over what he did with his body [*sic*] once the *idea* of speaking had come into his head [*sic*]. It was the idea that caused the trouble and brought about a reversion to the old pattern in spite of all his intentions and desires. He then decided that the *idea of speaking and the body patterns he had always used when speaking must be inseparably fused*, and that to eliminate the old faulty pattern he would have to eliminate the idea of speaking. His problem was to get rid of the idea of speaking and yet speak! What a staggering feat of control lay before him! [12]

Often this subconscious "gesturing," or preparation to speak, occurs as much when we are merely listening to someone else speaking—particularly in a one-to-one conversation. Subconscious guidance rules for the duration of the conversation and usually long afterward. [13] It's interesting to compare these youtube videos in terms of how the presenters manage their head (and overall) direction while speaking.

Tony Spawforth, a first-generation Alexander teacher, may seem somewhat reserved as a person while speaking or whispered "ahs" here, but I think he manifests an overall constant direction of himself that is a superb example of what the Alexander Technique attempts to cultivate as a basis for speaking.

Tony Spawforth: <http://www.youtube.com/watch?v=5-XKr1-y4Tc>

Walter Carrington exhibits a good example of speaking without extra head and limb gesturing in this workshop. It is also clear that he is allowing plenty of time for his NRRB in-breath to return, and this must be a central factor in his ability to speak continuously about the Alexander Technique to his students and his trainees without ever suffering any kind of vocal strain. Some may find his manner of speaking rather "halting" because he pauses quite frequently between phrases, but it always seemed to me that he did this deliberately so that his listeners would have the best chance to take in and think about the points he was communicating to them: Walter Carrington: <http://www.youtube.com/watch?v=VNLm69CLvBQ>

F. M. Alexander, in this short clip from a silent film (narrated by Walter Carrington) made of him in his later years—I believe after he had recovered from a stroke—he is shown speaking only little at the beginning, but it certainly represents well the constancy of directing he advocated that is not overcome by head and neck gesturing, although he does nod and turn his head from time to time:

F. M. Alexander: <http://www.youtube.com/watch?v=bbeXjewVmME>

Beginning With a Whispered Tone

The whispered tone is useful because it takes us the farthest away from our vocal/speech habits. Often the very act of setting our vocal chords into vibration elicits a tensional response in our neck-head-torso region that is extremely difficult to inhibit and direct towards greater freedom. Alexander used a whispered "ah" sound as the basis for his respiratory and vocal re-education—not only with singers and actors, but with his ordinary pupils as well. (Professional voice users and wind players often suffer from an "overuse" of the respiratory mechanisms because of the various manipulative approaches to breath support and breath control that they have learned from their teachers or that they have acquired over many years of practice.)

In my own teaching of the Alexander Technique, I have found that the "ah" sound and the accompanying directions Alexander employed are often too complicated for many beginning pupils to carry out until they have first built up a better grasp of its various speech and respiratory components in a logical sequence. The jaw particularly presents a problem because most people tend not to open it very far in their everyday speech and this makes them have to focus harder on opening it wide enough for making a really full "ah" sound without severely distorting their head direction. Therefore, I've tried to devise a way of approaching the opening of the jaw by graduated amounts so that pupils can ultimately arrive at an "ah" formation easily and freely with less excessive tension than usually occurs when they immediately attempt to open their jaw widely—especially while trying to maintain a "smile" at the same time, as you will see later that Alexander's procedure requires.

Before beginning any of the following exercises, it is of utmost importance to be able to assess when your propelled out-breath begins to add excessive abdominal and thoracic tension in speaking, singing, and wind-instrument playing. Although you may be able to sing or play a very long phrase on one out-breath, there is often a point beyond which you cease to lengthen and widen for the support of the out-breath and you begin to shorten and narrow and "pull down" to further propel your breath out for the remainder of the phrase. You should never pass beyond that point in any of these exercises. If you do exceed it, you will defeat their main purposes, and you will merely tend to further ingrain the faulty habits of breath support that the Alexander Technique is attempting to re-educate.

Once you have exceeded the limit of lengthened and widened support of your out-breath as you propel a vocal or instrumental sound, it usually takes a much longer time to return to the free flow of the NRRB than if you have stopped the producing the sound just short of that point where you would begin to pull down and become fixed in your abdominal wall, ribs, etc. Therefore, do not try to *finish* a phrase or sound if it's going to cause you to get tight in your mechanisms of breath support.

So if you begin letting your lips rest together (while breathing in and out through your nose) and very simply, slowly, and gently allowing your breath to part them with the least amount of effort from your ribs, abdomen, back, neck, etc., you have an excellent starting point for all the following procedures. (I sometimes ask students to imagine allowing their breath to part their lips no more than the amount of space that would be taken up by the tip of a straight pin.) The friction of your breath passing through this very narrow opening between your lips also helps you to experience a form of whispered sound that can be independent from any activity in your

throat and laryngeal area. If you begin on any open vowel sound (*ooh, oh, ah, uh, ay, eh, or ee*), you are still tempting your tongue, larynx, and pharynx muscles to come into play—if only slightly. *To relieve the larynx of all necessary pressure is one of our main goals* (to inhibit any "depressing of the larynx" as Alexander phrased it),[14] and realizing that a form of whispered sound can also be made much higher up in our oral cavity at the lips can be extremely useful as a basis for producing all vowel sounds. The awareness of a friction of the breath as it parts your lips also helps to bring the awareness and focus of attention up away from the throat (off the "voice" region, where singers often say the "voice" exists—their "instrument," as they sometimes like to call it). We could depict this sound of the breath parting the lips and traveling between a small aperture as (with the italicized letters representing the whispered tone):

p – oo – oo – oo – oo – oo – oo – oo – oo

To move the friction of breath away from your lips and progressively closer to your throat region, you can proceed gently and smoothly to an "h" sound, visualized and placed as far as possible forward and up in your mouth away from the throat—it can easily occur near the middle of the or back of your tongue where you might pronounce the sound "ghoo." Be aware, too, that if you were to bring a vocal sound (a vibration of the vocal chords) into this procedure, it would automatically pull the "h" sound farther back and down toward your throat/larynx.

Try: *p – oo – oo – oo – oo – oo – h – h – h*



Open the lips slightly here—but continue to make the whispered "oo" sound right at the opening of your lips as you let the "h – h – h" begin to sound. The focus of friction changes here from the lips to the tongue (and sides and roof of the mouth) via the vowel sound "ooh" [u][15] as you merely open the lips slightly after the whispered *p – oo – oo* sound is established at the lips.

Proceed next to a gentle "h" sound at the beginning and end of the whispered vowel sound:

h – h – h – oo – oo – oo – oo – h – h – h

Be sure to remember that at all times we are trying to stay completely away from the "glottal shock" in the throat and larynx, a phenomenon that usually occurs very strongly at the beginning of all sounds that start with a vowel. You can get a fairly clear idea of the effect of the glottal shock by placing your thumb and forefinger on either side of your hyoid bone and thyroid cartilage ("Adam's apple") and pronouncing words like:

"angry, either, only, ugly, other, in, oops," etc. Beginning a sound—even a whispered sound—on a vowel without an excessive glottal shock must be one of our ultimate goals. Very little, if any, depression of the larynx needs to occur with a glottal attack on any vowel.

Progress gradually from the more closed to the more open whispered vowels. Work on each vowel until it becomes clear and easy to produce—always returning to your NRRB between each attempt.

1. *h – h – h – oo – oo – oo – h – h – h* [u]
2. *h – h – h – ō – ō – ō – ō – h – h – h* [o]
3. *h – h – h – u – u – u – u – h – h – h* [ə]

4. *h – h – h – a – a – a – h – h – h* [ɑ]

Then try putting all of the above together on an out-breath with equal time on each of the different whispered vowel sounds:

p – oo – oo – h – ō – ō – h – u – u – h – a – a – h – h

This should prepare you well for the more complex whispered "ah" exercise that Alexander devised since it involves a progressive opening of the jaw, rather than a sudden one. It can also help a great deal to increase the vitality of your breathing mechanisms, which is also one of the main purposes of doing the regular whispered "ah" exercise.

Whispered "Ah"

The practice of whispered "ah" requires a specific projection of directions in sequence ("one after the other" and "all together"[16]) that also serves to improve your ability to apply the principles of the Technique to any activity. Alexander supposedly claimed that if you could do the whispered "ah" procedure well you understood fully the application of the Technique (inhibition and direction of the primary control).

At each juncture of the procedure, the most important thing is to reiterate the projection of the primary control directions before each specific step of the whispered "ah" so that they are all sustained (and, we hope, improved) throughout the entire sequence. No single aspect of doing the whispered "ah" should be allowed to gain predominance over our primary control directions or over any other part of the procedure. However, I have found that the one aspect of the whispered "ah" directions that most often overrides the others for pupils is the opening (or "dropping") of the jaw. This frequently results in a pulling back of the head and a loss of the "smile." Often students automatically tilt their heads back and up off their jaw, instead of merely releasing their jaw forward and downward from their head. Using mirrors to check yourself (as Alexander did) so that this does not happen is often better than relying on your own sensory appreciation (inward feeling) of what is happening. However, I suspect that many people, if not most, usually tilt their head backwards in order to open their mouth fairly wide, rather than merely lowering their jaw forward and downward from the upper part of their head (cranium).

Preliminary Instructions for Whispered "Ah"

1. Establish your primary control directions as a basis:
 - neck to be free
 - head to go forward and up
 - back to lengthen and widen
 - knees to go forward and away
2. Establish your "natural resting rate of breathing" (NRRB), the regular tidal flow of air into and out of your lungs, without any interruption or interference from your speech/vocal mechanisms. Breathe through your nose while you establish your NRRB as your main mode of breathing.

3. Resolve not to "take" a special preparatory breath to begin the whispered "ah." Let the "ah" begin at the culmination of a natural, resting in-breath. Alexander wrote of it as *preventing*, or "inhibiting," the gasping, sniffing, or sucking in of air that is usually quite audible in many singers, actors, and wind-instrument players.
4. Resolve to sustain the direction of your primary control—particularly your lengthening and widening—all the way to the end of the whispered "ah."
5. Resolve to *allow* the air to return through your nose, closing your mouth at the end of each "ah."
6. Resolve to sustain your smile during your in-breath, if possible, even though your mouth is closed to allow air to return through your nose.

Alexander's Instructions for Whispered "Ah"

- 1a. Think of something funny (happy, delightful) to make you smile, so that your upper lip comes up off your upper teeth.
- 1b. Retain your upper lip up off your upper teeth.
2. Let the tip of your tongue come to rest at the inside tips of your lower front teeth.
3. Allow your jaw to (free forward and) drop down.
4. Whisper "ah" on the very beginning of an out-breath for as long as you can sustain it without squeezing (shortening or narrowing in stature).
5. Retain your smile and allow your lips to close so that your in-breath will return through your nose.

With my pupils I have found that it is often helpful to suggest that they can maintain a more genuine "smile" by thinking (or imagining) something delightful or happy throughout the "ah" instead of thinking of something funny. In many cases, thinking of something funny often causes them to chuckle or laugh and only contributes to a momentary genuine smile at the beginning of the process, whereas continuously imagining something delightful or happy can sometimes work better for supplying the steady energy needed for sustaining the smile and enlivening the face and eyes.

In a *New Yorker* article about dealing with the effects of Bell's palsy on his ability to smile, Jonathan Kalb's comments and citing of G.B. Duchenne Boulogne's 1852 work "The Mechanism of Human Facial Expression" are quite significant in support of Alexander's use of the smile in doing whispered "ahs":

Duchenne was the first to observe that a spontaneously joyful smile cannot be faked, because it results from the simultaneous contraction of two muscles, only one of which is ordinarily under conscious control. Most people can voluntarily lift the corners of the mouth, but authentic joy lives in the eyes. It requires contractions of the orbicularis oculi, the sphincter muscle surrounding the eye socket, which, Duchenne wrote, "is only put in play by the sweet emotions of the soul." The effect of this muscle is unmistakable: it subtly lifts the lower eyelids and pushes the skin around the eyes inward, and the eyes seem to sparkle.

Certain people, it turns out, do have the ability to activate this muscle voluntarily. Method actors, for instance, can produce radiant smiles by force of imagination, just as they produce hot tears, shrieks of terror, gusts of indignation, and blasts of rage. Watch Meryl Streep laughing in "The Bridges of Madison County"; she later told Oprah Winfrey that she was able to do so convincingly by thinking about the times that Clint Eastwood forgot his lines. In general, the presence or absence of these eye-muscle contractions makes all the difference between a real smile and a forced one—an observation that social scientists today consider to be so fundamental that they refer to the smile of spontaneous joy as the "Duchenne smile." [17]

Ron Murdock's video, curiously, does not include the smile in his demonstration of whispered "ah." It's also interesting to watch Murdock speak during his explanation, because he seems to be engaging in the constant gesturing with his head that I refer to above. Since I understand that he is a certified Alexander teacher and a professional singer, I wonder if he is consciously choosing to allow this to happen as part of his way of communicating his ideas or if it is merely habitual and he is not aware of doing it. Whatever the case, it appears to be an "interference" with the normal employment of his primary control, and he doesn't seem to gain anything vital from doing it—either vocally or communicatively.

Ron Murdock: <https://www.youtube.com/watch?v=J1ga2ThmuE8>

Eileen Troberman gives a fairly complete and standard explanation of whispered "ah," in the following youtube video, and she manages to maintain her overall direction fairly well too without interfering with her head-neck relationship while speaking. However, she speaks of "taking"

the in-breath after the whispered "ah" is completed—instead of simply "allowing the in-breath to return on its own." Her demonstration of the rib-cage movement in her back also seems to bear out her instruction to "take" a breath, rather than merely allowing the in-breath to return as a reflexive response to having propelled the out-breath on the "ah."

Eileen Troberman: http://www.youtube.com/watch?v=_n2kdZCR5iQ

The Ultimate Challenge to Doing Whispered Ah

Once you have the basic whispered ah procedure fairly well mastered, you can challenge yourself to improve it further by doing a series of whispered ahs while maintaining the procedure Alexander described in *Constructive Conscious Control of the Individual* for "taking the support of the torso with the arms." [18] This can be done either while sitting at an inclined angle behind a straight chair back or while standing behind the chair in the position mechanical advantage nick-named "monkey" with your knee-, hip-, and ankle-joints flexed and your torso inclined forward over your knees and toes. You can establish a balanced distribution of subtle "pulls" by gently grasping the top rail of the back of the chair, keeping your fingers as *straight* as possible from their first joints to their tips and quite flat against the wood of the front portion of the top rail of the chair and by also keeping your thumb as straight as possible to "do duty" on the back portion of the top rail of the chair while you allow your wrists to be curved slightly inward toward each other. Then proceed to build up the subtle forearm pulls to the elbows by directing your elbows outwards and slightly downwards and by directing the upper parts of your arms (above the elbow) away from each another (your right arm towards the right and

your left arm towards the left), in such a way that you will be "supporting" your torso with your arms.

As you support your torso with your arms in this way by maintaining the various directional and slightly antagonistic pulls, you have a chance to allow your NRRB to flow more in and out more freely, and when you continue with the pulls on the back of the chair while doing the whispered ahs, it will help you maintain a much more open rib cage during the ahs—particularly as you come closer to the end of an ah. As you maintain the pulls all the way through to the end of each ah, this will also allow for a fuller and deeper in-breath to return *by itself* through your nose—an in-breath that also allows for your back to continue to improve in its lengthening and widening. This entire combination of directions and subtle, antagonistic pulls can also contribute to an overall improvement in your use of your self as a whole.

Vocal Re-Education

For making a very gradual transition over from producing whispered sounds to producing gentle vocal tones, practice the earlier whisper exercises on the various vowel sounds by adding a corresponding soft vocal sound to each one. You can begin this most effectively by using the first whispered exercise and merely "focusing" the vibration of the vocal sound at your lips right where you produce the friction to sound the whispered "p – oo – oo – oo – oo – h – h – h," and if you do it well, you may feel as if the vocal sound is vibrating more at your lips than in your larynx/throat.

It could be done like this:

p – oo – oo – oo – oo – oo – oo – oo – oo – oo – oo – h – h – h – oo – oo – oo
(whispered sound ↑) (↑ vocalized sound)

The most important thing here is to *maintain* the whispered sound of the breath passing through the lips while gently beginning and ending the vocal sound. Often this is very difficult for people to do, and as soon as they bring the vocal sound into the whispered sound, their attention subconsciously drops to the throat region and the friction of air producing the whispered sound at the lips is lost completely. You should achieve full competence in this exercise before proceeding any further.

Next, practice gently adding vocal sound to each of the following whispered vowel sounds:

1. h – h – h – oo – oo – oo – oo – oo – oo – oo – h – h – h [u]
oo – oo – oo
2. h – h – h – o – o – o – o – o – o – o – o – o – h – h – h [o]
ō – ō – ō
3. h – h – h – u – u – u – u – u – u – u – u – h – h – h [ə]
u – u – u
4. h – h – h – a – a – a – a – a – a – a – a – h – h – h [a]
a – a – a

Then try adding a crescendo and a diminuendo to each of the above while the vocal sound is being made, going from very soft to fairly loud and back to very soft again.

For those interested in applying these principles to improving their vocal range, a change in pitch of a half-step can also be made in the middle of each vocal sound in the exercise above. Connect the changes in pitch with the smoothest possible slide (glissando) between the notes instead of making a steady separate tone on each pitch. Begin in the register or on a note that is near the speaking pitch that you produce most spontaneously and naturally without thinking of "singing" in any way. Gradually you can work to the top and bottom of your range, going only a half-step up or down on each breath. Begin each successive attempt on the last pitch of the previous attempt (as in the wind-instrument scale exercise I described above) so as to make the most gradual transition from pitch to pitch on each breath.

Apply the same procedure to increasingly larger intervals (major seconds, minor thirds, major thirds, etc.) still employing the smoothest possible glissando between the pitches. Arpeggios are a logical next step along the same lines. Then working on all the intervals in a particular song in this same way could be very useful (especially on the wide and difficult intervals) before ever attempting to sing the pitches without sliding from one to the other as is usually required in performance.

I urge singers to *exclude all vibrato* if possible [19] (both cultivated and so-called "natural") from these vocal exercises, particularly since many modes of producing vibrato involve an undue depression of the larynx and an excessive movement of the lower regions of the throat and base of the tongue. Many classical singers (and flutists) have no expressive control of vibrato because they have subconsciously ingrained their mode of vibrato into every note they play. (The singer Dietrich Fischer-Dieskau is an exception worth listening to with this in mind.)

Notes/References

[1] F. Matthias Alexander, *Constructive Conscious Control of the Individual*, "Respiratory Mechanisms," (Kent: Integral Press, 1923), II:5:121.

[2] For Alexander's extensive description of these terms, see his chapter "Physiology and Physiologists" in *The Universal Constant in Living* (London: Mouritz, 2000), pp. 108–112.

[3] In one of my first lessons with Walter Carrington when he came to teach in the U.S. several years before I joined his teacher-training course, he spoke enthusiastically of how he had read that Native Americans believed that nose breathing was very important for good health—especially because it warms and moistens the air that we inhale, as well as helping to filter out dust and other matter.

[4] This psychophysical disposition was referred to as "leaving yourself alone" during my training with Walter Carrington.

[5] See my article "Manner and Conditions of Use: A Crucial Distinction."
<http://www.joearmstrong.info/MannerAndConditions.html>

[6] *Constructive Conscious Control of the Individual*, II:5:125.

[7] *Universal Constant in Living*, p. xxvii. Often, the hands-on work from the teacher in an Alexander lesson can allow releases in a pupil's breathing mechanisms without even addressing

breathing specifically. And this greater freedom in breathing can also bring with it a release from any thinking or emotional reacting a pupil may be caught up in at the time. I recall one instance very early on in my teaching that illustrates this well. It was during a lesson with a pupil who was a very experienced actress who was involved with the final rehearsals before the opening of a play. She usually did not discuss anything about what was happening with her work, but when she came into my studio that day, I noticed that she seemed somewhat distracted and maybe even a little upset or frustrated. But we proceeded with the lesson as usual and chatted about various subjects that had no particular "weight" to them. Of course, during the course of the lesson—particularly with the table work portion—her conditions of use changed markedly, which also brought about a concomitant freeing in her breathing. When she was getting ready to leave, she suddenly said to me, "You know, it's so interesting that I can come into a lesson all caught up in thinking about a problem, but when I leave here I feel so *reasonable*, and we haven't even discussed the issue that was troubling me!"

[8] The story took place at the beginning of World War II, when Walter was working as Alexander's assistant at Ashley Place, his teaching studio near Victoria station. One day, F.M. saw Walter putting on his coat and getting ready to leave, and F.M. asked him where he was going. Walter said, "To report to the draft board." F.M. said, "Wait a minute. Let me get my coat. I'm going with you." So they took the subway together to the outskirts of London where three elderly gentlemen served on the draft board in a kind of quanset hut at the edge of a football field. Walter said that as soon as he had introduced himself to the board, F.M. immediately took over and started explaining why he felt Walter should be allowed to receive a deferment in order to continue teaching the Technique as his assistant. And in a matter of minutes F.M. actually began giving each of the gentlemen a hands-on experience of how the Technique is taught! As you might expect, they quite willingly granted Walter the deferment. Then, when he reported to the draft board again after his deferment had expired he went there alone, and the gentlemen, seeming very disappointed not to see Alexander again, said, "Where's that charming man who came with you before?"

[9] F. Matthias Alexander, *The Use of the Self* ([1932] London: Victor Gollancz, 1985), p. 21.

[10] I particularly remember Frank's reciting a passage from "Through the Looking Glass" for me phrase by phrase and having me echo each one after him while he was directing me with his hands to improve and help me maintain my primary directions.

[11] See my article "Oboe Master Fernand Gillet's Remarkable Contributions to Woodwind Playing," *The Flutist Quarterly* (Santa Clarita: The National Flute Association, Winter 2004), pp. 28–33. <http://www.joearmstrong.info/GILLET21rtf.htm>.

[12] Lulie Westfeldt, *F. Matthias Alexander: The Man and His Work* ([1964] London: Mouritz, 1998), p. 148.

[13] This subconscious gesturing—particularly with the head—is certainly noticeable in people from other cultures too. It can even be found among some people claiming to teach the Alexander Technique and can be seen on videos of teachers presenting aspects of the Technique. However, in my own study and training in the Technique, maintaining one's head direction while speaking was certainly considered to be a crucial facet in developing the improved standard use of the self from moment-to-moment that should be a fundamental requisite for teaching the Technique to others. Of course, it does not mean that one "holds one's head still" and that we never allow ourselves to gesture while communicating; it's just that if we are engaging in a habitual, subconscious, and automatic gesturing it usually

constitutes an interference with the normal working of the primary control. It means, instead, that we maintain *all* of our primary directions as a constant intention and merely "leaving out" the habitual head gesturing—or *any* habitual movements, for that matter.

[14] *The Use of the Self*, p. 9 et seq.

[15] The International Phonetics symbols for these vowel sounds are [u] = "ooh"; [o] = "oh"; [ə] = "uh"; [ɑ] = "ah."

[16] *The Use of the Self*, p. 42.

[17] Jonathan Kalb, "Give Me a Smile: Trying to Laugh When Your Face Won't Move," *The New Yorker* (New York: January 12, 2015), pp. 34–37.

[18] *Constructive Conscious Control of the Individual*, II:4:108–117.

[19] Some people believe that there is a natural vibrato that comes into an adult's singing voice that can't be stopped, but I think this may not be true. If it were, so many popular singers, for instance, wouldn't be able to begin a long note without vibrato and then bring it in toward the end of the note as you often hear them doing. I think that what is called a "natural vibrato" may, in fact, probably be a habitual one that may have been subconsciously adopted—just as people have developed the subconscious habit of stiffening their necks in response to various stimuli. If you ask most people (who haven't had Alexander instruction) to stop stiffening their necks and pulling back their heads in relation to stimuli, they would most likely also say that they know no way to stop doing so—even if they are able perceive that they are doing it. In my explorations and examinations of various types of flute vibrato I have also found habitual, constant vibratos to occur in many flutists' playing, even though they did not produce a vibrato when they first began to play the flute. Those types of vibrato can also be "left out" or varied if they are studied closely. See my article "Carl Petkoff and His Technique for Creating a Subtle and Expressive Flute Vibrato," *The Flutist Quarterly* (Santa Clarita: Spring 2002), pp. 56–63. [http://www.joearmstrong.info/petkoff_vibrato\[3\].htm](http://www.joearmstrong.info/petkoff_vibrato[3].htm)).

<http://www.joearmstrong.info/breathing.html>