

# Money Notes



HOW TO SING HIGH, LOUD,

HEALTHY, AND FOREVER

Meredith Colby

INTRODUCING NEURO-VOCAL, THE NEW METHOD BASED ON BRAIN SCIENCE

WISE *Ink*  
CREATIVE \* PUBLISHING

MONEY NOTES: HOW TO SING HIGH, LOUD, HEALTHY AND FOREVER © copyright 2016 by Meredith Colby. All rights reserved. No part of this book may be reproduced in any form whatsoever, by photography or xerography or by any other means, by broadcast or transmission, by translation into any kind of language, nor by recording electronically or otherwise, without permission in writing from the author, except by a reviewer, who may quote brief passages in critical articles or reviews.

ISBN: XXXXXXXXXXXXXXXX  
eISBN: XXXXXXXXXXXXXXXX

Library of Congress Catalog Number: XXXXXXXXXXXXXXXX

Printed in the United States of America

First Printing: 2016

20 19 18 17 16      5 4 3 2 1

Cover Design by Nupoor Gordon



Wise Ink Creative Publishing  
837 Glenwood Ave.  
Minneapolis, MN 55405

[www.wiseinkpub.com](http://www.wiseinkpub.com)

# TABLE OF CONTENTS

Preface	9
---------	---

## Part 1

---

<b>Chapter 1: No Magic Bullets</b>	<b>15</b>
Good Singing is Good Singing	16
Being Real	17
Why Change Your Singing?	18
Voice Lessons	19
Promises of Neuro-Vocal Method	19
<b>Chapter 2: What Kind of Singer Are You?</b>	<b>21</b>
Pop vs. Classical: What's the Difference?	21
An Extremely Short History of Opera	21
An Even Shorter History of Popular Singing	22
Bonding with the Tribe	22
Whose Name is on the Marquee?	23
Physiology of a Singer	23
The Bottom Line	24
You're Better Off With Opera?	24
Voice Lessons: Who Needs Them and Why?	25
Nobody Needs Them	25
Reality Check	25
There's Nothing to Teach	26
What Can You Get From Lessons?	27
What We're Going For	27
The First Big One	28
The Other Big One	29
Register This	29
The Skinny on Your Vocal Break	30
It's a Method, Not Magic	31

<b>Chapter 3: This is Your Body, Singing</b>	<b>33</b>
Brain Neighborhoods	33
The Way You Do the Things You Do	33
Let's Use You as an Example	35
The Valve That is Your Voice	35
How It Works	36
How It Works During a Vocal "Break"	37
Using Your Lizard Brain	38
Your Science Minute	38
So What's the Plan?	38
Tricking Your Lizard Brain	39
Wait...What?	40
Breath	40
Placement	41
Say That in English?	41
Overshooting	42
The Neuro in Neuro-Vocal Method	42
A Brain That's Singing	44
A Brain Making a Pitched Sound	45
A Brain Making a Pitch Pattern	46

<b>Chapter 4: Microphone Singing is Bad for You and Other Myths About Vocal Health</b>	<b>49</b>
Different is Good	49
What About Those Cancelled Shows?	51
Popular Singers over 50	52
The Aesthetics of Pop Versus Classical	53
Getting Good at One Thing	54
Belting Versus Pop Technique	54
Why Singers Get Vocal Problems and What to Do About Them	55
Using a Bigger Hammer	56
Ignoring the Signs	56
Vocal Trauma	57
Overuse	58
It Doesn't Mean You Were Naughty	58
Stick Up for Your Voice	58

## Part 2

---

<b>Chapter 5: The Banana Split of Singing</b>	<b>61</b>
Putting the Split Together	61
The Ice Cream - Registers, Placement, and Balance	62
Scoop #1: Registers	63
Chest Register	64
Head Register	65
Women	66
Men	67
Using the Head Register	68
Scoop #2: Placement	68
So How Does That Work?	68
Scoop #3: Balance	70
The Banana: Breath	71
Singer Breathing: The Hardest Thing About It is that It's Too Easy.	72
Let's Get Physical	72
Waking Breathing and Sleeping Breathing	72
The Bowl: Posture	75
What It's Not	76
Stoking Up	76
Your Voice Needs Room	77
The Whipped Cream, Nuts, and Sprinkles: Style	78
Singing, Plain and Simple	79
Adding to Your Vocabulary	80
<b>Chapter 6: Prepping for the Exercises</b>	<b>83</b>
Making It Work	83
Singer Breathing	84
Singer Breathing Exercise 1	85
Singer Breathing Exercise 2	85
Singer Breathing Exercise 3	86
Singer Breathing Exercise 4	86
Singer Posture	87
Singer Posture Exercise: Magnet Lift	87
The Easiest Route to Singer Breathing	88
Making It a Habit	88
Help! This Posture Thing Isn't Working for Me!	90

Anyone Every Call You an Ectomorph Before?	91
Getting the Feel for the Focal Point	92
Now We May Proceed	93
How Often and How Long?	93
Three Part Sessions	94

## Part 3

---

<b>Exercise Section 1: Warm-Ups</b>	<b>99</b>
Breathe and Buzz	100
Charlie Brown's Teacher	104
Puff Your Punim	109
Buzzy Neh	113
Hung-ah	117
Lip Trills	124
Head Register E's	130
<b>Exercise Section 2: Skill Development</b>	<b>135</b>
Nasty Vowel	140
Power Breathing	147
Register Separation	153
Disney Chipmunk	158
Ya-Ya Isolation	162
Single Note Balance	168
<b>Exercise Section 3: Working the Blend</b>	<b>173</b>
Nasty Triangle	178
Hee-ya Stretch	188
Skinny Triangle	192
Power Slide	195
Power Ha	199
<b>Exercise Section 4: Whipped Cream, Nuts, and Sprinkles</b>	<b>203</b>
Moving Ahead	203
The Model Student	203
Turning Yucky Sounds into Singing	204
Compound Vowels	204
Subset: R's	205

Vowel Modification	205
Power Breathing	206
Lip Trills	206
Camouflaging Your Break	206
Shameless Thievery	207
Wrapping It Up	208
<b>Afterword</b>	<b>211</b>
<b>Acknowledgements</b>	<b>215</b>
<b>References</b>	<b>217</b>
<b>Glossary</b>	<b>219</b>





# Preface

## I WROTE THIS BOOK WITH YOU IN MIND.

You're reading this because you want to improve your singing. You're a singer. Singing is not something you do as much as it is something you are. Because of this truth about you, your ability to express yourself accurately and authentically through singing is vitally important to you.

Maybe you've tried to improve your singing in the past. Maybe you've had voice lessons or coaching sessions that helped you a lot...or didn't. Leave that behind for now. In any voice work you've done before your focus was on training your voice. That's not what you're going to do here. This book is going to show you how to train your brain how to operate your voice efficiently so that you can sing with both freedom and intention. If your voice is working efficiently, it will give you all you need to sing: range, stamina, volume, and control.

You'll find even more support, ideas, and inspiration at my website, [www.MeredithColby.com](http://www.MeredithColby.com). You can also follow me on Twitter at @MeredithColby or on Instagram at MeredithColby.

“A bird does not sing because it has an answer. It sings because it has a song.”

—Chinese Proverb

“Sweetest the strain when in the song  
The singer has been lost.”

—Elizabeth Stuart Phelps Ward  
*Prolific author and courageous voice of reform  
for women and animals*

## ARE YOU READY TO CHANGE YOUR SINGING?

That may sound like a silly question to ask someone who's reading a vocal method book. But after more than twenty-five years of teaching voice, I know that

wanting to improve your singing is not the same as wanting to change your singing. And while any accomplished singer or voice teacher will tell you that the two go hand in hand, you may not be ready to actually change in order to improve.

I came to this conclusion because I've had a few students over the years whose singing hasn't changed a whit over several months of lessons. I admit this because I know I'm in good company; I've talked to other voice teachers whom I know to be excellent instructors and they've told me the same thing. Some people just don't seem to want to change. I used to turn myself into a pretzel trying to figure out how to help these students progress. After all, they were taking the time and making the effort to come to my studio, paying me for private lessons, and yet they weren't getting much better.

I now know there are some singers who want to get better without actually having to do anything differently; mostly because doing things differently can be scary and uncomfortable.

So take a moment (no, really, take a moment) and figure out if this describes you, because if it does, you're not ready. You'll waste your time and then blame it on the method. It's easier just to be honest with yourself and know it's okay. If you're not ready, you're not ready. You'll know when you are.

"I soon realized that no journey carries one far unless, as it extends into the world around us, it goes an equal distance into the world within."

—Lillian Smith  
*Musician, author, teacher, and  
valorous social activist*

### **OLD HABITS ARE HARD TO SHAKE.**

You've probably been singing since you could talk. You know how to sing. But here's the thing: changing something you already know how to do is harder than learning something new. So even though this method will help you get control of your voice quickly and organically, you'll still have to work at it. You'll run up against your old habits and have moments of frustration. You'll hear yourself making unfamiliar sounds and may feel

resistance to that. You'll be unaccustomed to some new feelings and wonder if you're on the right track.

You just need to know that going into this process. Know that change can be a bumpy road, and don't freak out about it. Just stay on the road and do your best to keep moving forward. I promise you it will pay off—in learning Neuro-Vocal Method or anything else you take on!

I really want you to make good use of the information in this book. I want you to get from it all that you hope. I've thought of you a thousand times as I've written it. I love you because you're a singer and your singing is a gift to you and to the world. Do not doubt for a second the good you can do and the joy you can bring with your

singing.

Whether you think your singing is just a hair from where you want it to be, or that control of your voice just seems to escape you altogether (or anything in between), keep at it. Use the tools and teachers that you can; some will work for you and some won't, but you won't know until you try. Keep trying. Your voice—both literal and metaphorical—deserves your attention and energy. I will be honored if I can help you along your path.

Meredith Colby

2016

“There is a vitality, a life force, an energy, a quickening that is translated through you into action, and because there is only one of you in all time, this expression is unique. And if you block it, it will never exist through any other medium and will be lost.”

—Martha Graham  
*dancer and groundbreaking choreographer*





# Part 1





## CHAPTER 1

# No Magic Bullets

Cards on the table: I'm lazy. Lazy and impatient. I like to say I'm ambitiously lazy, because I'm willing to do things that are a little difficult or uncomfortable in the short run if they'll make my life easier in the long run. Like, learning to drive a car, for instance. Learning to drive made me feel awkward and was a little scary at times. I had to learn some new skills that were specific to driving. It took time, money, courage, intention and focus. But now I know how to drive, and that skill makes my life easier.

In helping people learn to sing, my character flaws came together with my own personal need to help my students get what they want, which is, in nearly every case, money notes. High, loud notes. Notes that people in musical theater call "belting" and people in other genres call "frickin' awesome." Or words to that effect.

Money notes can't sound creepy or hurt singers' voices, though. The world of popular performance can be tough, especially if you sing in a band, where singing time can be measured in hours, in situations where singers can hardly hear themselves, and then might have to sing for hours the next day, too. If you're going to last as a singer, your singing has to be healthy and efficient. My method had to support that. It also had to get results quickly, make intellectual sense, and not mess with a person's singing while they learned it.

I'm not trying to imply that I set out to create a vocal training method. I didn't. I read brain books for fun, watch laryngoscope videos on YouTube, and read medical papers on Google scholar. (I'm a nerd and have the Doctor Who t-shirt to prove it.) Once I had the notion that the focus of voice training could be purposefully neurological I had willing subjects, myself included, to experiment on. After twenty-or-so years of working with my theories it occurred to me, in the middle of a Qi gong class, that I did the same things for all my students and got predictable results. I realized I had a method.

## Studying with Mr. Miyagi



Remember Mr. Miyagi from *The Karate Kid*? In case you don't, *The Karate Kid* is an underdog-to-champion movie made in 1984 (and remade in 2010, but I'm going old-school) in which Daniel, the Kid, asks Mr. Miyagi, the unlikely sage, to teach him karate. Miyagi agrees. Training begins with Miyagi having his new student wax his car and paint his fence—tasks that clearly have nothing to do with karate. Miyagi insists that Daniel perform the tasks in very particular ways. Daniel works for hours at a time and over several months. He doesn't understand why he's doing these chores, or why Miyagi is so picky about their execution. He feels angry, frustrated, and confused. He doubts his teacher's sanity.

Then comes the scene in which Daniel has to defend himself against a Bad Guy, and what do you know? His defensive tactics use precisely the same movements he had been integrating into his muscle memory by waxing cars and painting fences for Miyagi-san. He knew what to do without thinking about it. His body had integrated the effective and efficient karate movements he learned when he was doing mundane and seemingly unrelated tasks: *when he didn't think he was learning karate.*

Because he didn't think he was learning karate, he was able to learn the most effective skills very quickly.

*You are the Karate Kid. Neuro-Vocal Method is Mr. Miyagi. Wax on, wax off.*

What Neuro-Vocal Method won't do is change the “you” in your singing. You'll still be yourself. You'll just be a better version of yourself. You'll be you with a bigger range, more control, more volume, and more endurance. Also, if you want to get those high, loud notes that the winners of the TV singing contests always seem to have, then you've come to the right place.

***Neuro-Vocal Method is not for those pursuing classical technique.***

***It is specifically for those singing popular genres.***

***It's also not for those seeking a magic bullet.***

***There are no magic bullets.***

## GOOD SINGING IS GOOD SINGING

Most voice teachers say that the method they teach is applicable to any type or style of singing. That can be true if you're a beginning singer. It's also true in that all good technique has a couple of things in common: breath support and placement. (Placement describes where in the chest, head, and face a singer senses the resonance of tone while singing—more on that later). But the thing is, the closer you are to knowing what your singing is about (for you) and how you want your music to show up in the world, the more important learning the right stuff becomes.

There are differences between genres, including the sound and the role of the singer, the situation in which the singing happens, and the culture of the musical style. If a voice teacher has never sung in a band, for instance, it's hard for that teacher to understand what the singer in the band needs to learn and know.

Singers should get instruction appropriate to the style they sing. If your voice teacher tells you that the appropriate, accepted style of singing for the kind of music you love is “wrong,” it can mess with your self-confidence. You’ve put yourself in the hands of an expert, and that expert may not be willing or able to teach you what you want to learn. If you want to sing popular styles but you’re studying classical technique it can reduce the level of skill you already have in your chosen genre. In extreme cases it can result in vocal damage. The most common problem, though, is authenticity. Authentic singing comes from being comfortable with your ability. If your voice feels out of control it can make you feel self-conscious and insecure. That’s not authentic. That’s not the real you.

## BEING REAL

When we open our mouths to sing, what comes out should be the right thing—an accurate reflection of how we want to express ourselves musically in the world. It’s got to be real. When what comes out of our mouths feels or sounds wrong to us, it’s...well, it’s not good. It’s frustrating and embarrassing. It keeps us from enjoying our singing and from fully expressing ourselves musically. It forces us to focus on ourselves and our voices instead of on the audience or the music.

When what flows from our lips sounds effortless and feels good, then all is right with our world. If we’ve really got it going on, we’re barely even aware of ourselves; we’re one with the music. It seems to emanate from us of its own accord.

I’ve often told my students, “If I could give you a pill that would make you feel, just for five minutes, the way your singing will feel when you master this method, you’d do anything I told you.” I don’t have that pill, unfortunately, but I know that if they’ll work with me, their singing will feel better than they’ve ever imagined. It’s impossible to describe what singers experience when their singing is easy, open, efficient, controlled, and real. There’s nothing yummier or more uplifting. There’s just nothing better. Including chocolate.

What’s most fun about Neuro-Vocal Method is that it seems to work by magic. You do these weird exercises. You sound bad on purpose. You change your focus from what you’re hearing to what you’re feeling as you sing. And then, after a few weeks, things start to happen all by themselves. You’re louder. That high note doesn’t feel so high. You’re not tired at the end of the gig. Your voice seems to be making these changes all on its own, and it’s really fun.

Later, after you’re more familiar with how your “new” voice feels and you’re sensing more (or a different sort of) mastery of your instrument, other people will start to notice too. That’s the bomb.

The bottom line is that if you’re willing to go through the weirdness and trust the

process, you'll be really glad you did. If you shortcut the process, try to second-guess the instructions, or temper the instructions with your own experience, you won't get the results I'm promising. Sorry. If you want what this method promises, you'll have to go with the program.

## WHY CHANGE YOUR SINGING?

Most people who work on improving their singing are already natural singers. If you're one of them, singing has felt good, made you happy, and gotten you attention. There are things about your own singing that you really like—things you know sound good and earn you compliments. But again, if you're a singer, you're probably more discerning than the average person on the subject of singing. So there are probably things about your singing that you don't like.

Some common frustrations are:

- Feeling that you can't sing loudly enough
- Wanting more range—reaching higher or lower notes
- Feeling that your high notes are quiet or weak
- Feeling that your voice is unreliable, that it won't predictably do what you want it to or sound the way you think it should
- Suffering vocal fatigue—your voice gets tired quickly
- Suffering vocal fall-out—your voice hurts or is raspy after you sing
- Feeling hindered by your “break,” the notes at which your voice radically alters in volume and timbre (tone color)
- Fearing singing out of tune

For most non-singing people, these issues wouldn't matter—if they were aware of them at all. But to a singer they matter a lot. To a singer, having any of these issues is troubling in a way that non-singers just can't understand. When we open our mouths to sing and what comes out is something other than what we intended, it can rattle us to our core. Most of us have ways to cover up or compensate for the stuff we don't like about our singing, but that feels bad too. It can rob us of our confidence, our sense of who we are, our desire to share our singing, even the joy we get from music. For a singer, a voice that ain't representin' is no small thing. And it doesn't seem to matter if a singer is having these experiences in front of large audiences or in the living room singing karaoke. It's never good.

Some singers just work out ways to live with it, but they never stop being bothered by it. Most singers will try to fix it. They'll try on their own or with books, online programs, DVD courses, or voice teachers. A lot of the time they'll be able

to make the changes they wanted and go forward in life, joyously singing for themselves and others.

## VOICE LESSONS

A lot of people are perfectly happy with the way they sing. There are also people who are mostly happy with the way they sing and feel that's good enough. And then, of course, there are people who'll dabble, trying to change their singing but not taking the plunge into private lessons. For those people the process isn't worth the time, money, commitment, risk, or any combination thereof. Some people take private voice lessons with a Trained Professional, either in person or through a program. Some of those find the process worth the investment: their singing improves. The rest will quit.

Some of the reasons people quit voice lessons are:

- The time commitment is too great
- The money commitment is too great
- The teacher or method doesn't meet their expectations
- The genre the teacher teaches isn't the genre they want to sing
- They realize that the teacher doesn't have a magic bullet
- The personalities of the teacher and the student don't mesh
- Things come up in their lives

Because I'm a singer and teacher of popular styles, and because I'm a Recovering Classical Singer, I've always been very aware of the fears people have around the issue of voice lessons. When I started voice lessons I didn't even know what classical singing was, but I ended up taking eight years of classical lessons. Then I had to learn how to sing normally again. I get it. Lessons can be scary. But they can also be so worth it.

## THE PROMISES OF NEURO-VOCAL METHOD

These are the claims I can make confidently about Neuro-Vocal Method. I'm confident that they're true because I've watched this method work (as I've been refining it) for a couple of decades now. And, as the saying goes, a man with experience is never at the mercy of a man with a theory.

## WHAT DOES NEURO-VOCAL METHOD DO?

- Neuro-Vocal Method alters your neural pathways. The exercises fool your brain into accepting new behaviors associated with an established intention. In other

- words, the command “sing” brings a different, better result. It seems like magic.
- Neuro-Vocal Method doesn’t change your style. You still sound like you, but your voice is a more authentic representation of you and your music.
  - Neuro-Vocal Method is healthy for your voice. You’ll be able to sing for hours and not get tired. You’ll be able to sing as long as you live. Your singing will feel really good.
  - Neuro-Vocal Method is about efficiency. It teaches the larynx to behave in as efficient a manner as possible while teaching the physical supporting structures to allow for that efficiency.
  - Neuro-Vocal Method gives you:
    - Increased vocal strength and stamina
    - Increased vocal range
    - Increased vocal control
    - Increased volume
    - Increased control over vocal breaks

I can guarantee these results. That’s a provisional guarantee, though. Neuro-Vocal Method will work for you if a) you’re ready to change, and b) you follow the program. It will not work for you if you try to interpret the method based on what your experience tells you is right, if you can’t stand to hear unattractive sounds come out of your mouth, or if you can’t make the time to do the exercises a few times a week. You’ll get the results if you invest some time and trust. If you don’t, you won’t.

If you want this to work, it will. I have YouTube videos to help you. I have audio support on my website. You can follow me on Twitter or Instagram. (If all that is old news by the time you’re reading this book, then look at whatever everyone’s using!) I know how important your singing is to you. You can do this!



## CHAPTER 2

# What Kind of Singer Are You?

## POP VS. CLASSICAL: WHAT'S THE DIFFERENCE?

When I say pop I do not mean exclusively peppy popular music sung by pretty girls in glittery costumes, though that music style does apply. When I use the term pop I'm shortening the word "popular." Popular music being any style that's sung into a microphone for performance. Metal, R&B, jazz, blues, rock, contemporary musical theater, alternative, hip-hop, punk, country, house, folk and all their subcategories and offshoots fall under the instructional banner "pop." Classical singing is the kind employed by opera singers. It's also applied to a number of other music styles, but most non-musicians know it as opera singing.

Sometimes people in the singing business say that "good singing is good singing," no matter what kind of singing you're doing. Sometimes they'll say that classical technique is across-the-board good, or that classical technique is a "good foundation" for all singing.

That sounds good. Wish I could say I agree. But I don't.

## AN EXTREMELY SHORT HISTORY OF OPERA

Classical singing has its roots in European theater. In the early 1600s singers began to sing as soloists, accompanied by instruments, on the theater stage. It was great, people loved it, but there was a problem: it's hard to make one voice heard by lots of people in a large room. In 1637 the first proscenium-style stage—the kind we're used to now—was built in Italy to accommodate this new kind of performing. They did take acoustics into account, but with microphone technology still 240 years away, this solo-singing thing presented a challenge: how could individual singers be made loud enough to be heard in this new, theatrical way?

Enter classical technique.

Classical singers have a certain kind of sound. It is (as you know if you've ever been

## Because It's Classier?

Classical singing gets its name from the Italian composers who introduced monodic singing (a modern term) at the turn of the sixteenth century. In monodic singing, a solo voice presents a melody within a harmonic structure provided by instruments, or instruments and voices. Those Italians intended to create a Greek revival, what they thought was a return to classical Greek theater and music. They may have been right; any transcriptions of actual Greek music had long been lost to history.

Most of the aesthetics that have collected around classical voice over the last couple of centuries, in both composition and performance, have their origins in the need to be loud. These loudness tools include the pure vowel, the vibrato, the minimization of consonants, the “open throat” tone (a result of specific behavior of the throat and larynx that maximizes harmonic frequencies) and the vocal line.

near a classical singer in performance) loud. Very loud. Classical technique was developed with volume in mind. Of course it had to be beautiful as well, as measured by seventeenth-century European standards, but in order for singing to be considered beautiful it has to be heard.

## AN EVEN SHORTER HISTORY OF POPULAR SINGING

Popular voice has its origins in cultural storytelling. For the millennia before humans had written language, and later when hardly anybody knew how to read or write, (still true today

in many places), singing was the method of remembering. Histories, stories, instructions, religious texts—you name it—were passed from generation to generation through song. The transmission of cultural information from one generation to the next through song has existed in every culture in the world for thousands of years. So, at its roots, popular singing is a method of storytelling.

## BONDING WITH THE TRIBE

More recently and closer to home—say, in the past three hundred years in the United States—popular singing happened in living rooms and porches, in churches and temples, in cotton fields and apple orchards. In other words, popular singing was about regular people in small groups and venues sharing an experience through song. Because of this, the aesthetics that have grown up around what we now call pop singing are derived mostly from speech. Whereas an opera aria might take seven minutes to say “He’s dead and I love him,” a popular song might deliver the history of three generations in three minutes. A singer’s ability to sing beautifully or loudly wasn’t nearly as important as the ability to communicate the lyric of the song.

## There Will Be a Test

The Torah, the religious teachings of the Jewish people, wasn’t written down for the first thousand years it existed. It was communicated from one generation to the next through song. Singing the text made it possible for people to memorize large sections.

Understanding the lyric was also essential to the group sensibility that has, until very recently, been part of all popular singing. To learn the song so they can join with the group, new singers have to be able to understand the words. We see remnants of this way of thinking in the way that most songs are still written with a repeating chorus. That's the part of the song we learn and sing along with. These musical roots are also found in the ubiquitous presence of the background singer, who reflects the call-and-response style of singing historically found in churches, fields, and schools. Again, because it's all about the group, the lyrics and melody are way out in front and much more important. The skill and sonority of the individual singer? Not so much.

### **WHOSE NAME IS ON THE MARQUEE?**

A major difference between the two genres lies in the function of the singer. Classical singing is composer-driven. By that I mean that the focus, the selling point, or the driving force of an opera or a concert piece is the composer. The singer gets second billing, and the singer is never the composer. It's the singer's job to be a faithful vehicle of the composer's intent, and the singer is expected to adhere to some pretty strict rules about how to do that. While an accomplished singer may earn the right to interpret a passage in a certain song or aria slightly differently from the way everyone else has always done it, he or she is still obliged to be the voice of the composer. (Here it should be said that working within structure and rules is integral to all classical art forms. The beauty of the art is found within the structure imposed on the artist and the artist's ability to express within that structure. Classical voice is no exception.)

Conversely, popular singing (at least as it's existed since the invention of the microphone) is artist-driven. So it's the singer or group whose artistry is revealed through the interpretation of a song. When previously known songs are performed, or when a singer performs a song he or she didn't write, the focus is on the individual's interpretation of the song. (Think of all the different versions of Beatles songs that have been recorded!) Therein lies the window to the artist's heart and soul. If the singer and songwriter are one and the same, we see through that window even more clearly via both the song and the interpretation of the song. We, as the audience, seek an original, honest, or emotionally transparent interpretation of a song.

### **PHYSIOLOGY OF A SINGER**

Another difference between popular and classical singing methods is physiological. As classical singers rack up hours learning technique, their bodies—specifically, the larynx—change.

If you've ever seen a professional ballet dancer walk, you've probably noticed that along with the lithesome grace and balance comes a pointing out of the toes. Like a swan, if you will. Dancers spend thousands of hours teaching their bodies to turn the legs out from the hip joint. This beautiful and unnatural extension is an integral part of classical ballet, and a dancer will wear that physiological alteration all of his or her life. Similarly, there's a physiological alteration that happens to classical singers that affects, predictably, their voices.

The classical singer is working for a specific type of tone. Obviously, any sort of singing involves dozens of separate physiological functions, but there are two biggies that the teacher of classical technique listens for and that the singer can feel.

One is the relaxed larynx. During singing the larynx of an experienced classical singer is in a relaxed or "dropped" position and moves comparatively very little, despite extreme changes in pitch. The other is an increase in the resonant capacity of the laryngeal structure. Experienced classical singers will, over time and as a result of proper technique, create an unnaturally large space between the cricoid and thyroid cartilages. If you've ever heard a professional classical singer speak, you may have noticed a slightly yawny tone to his or her voice. That's what I'm talking about. That yawny tone is a natural and direct result of that unnaturally large space in the larynx. It's not a bad thing; it's just a predictable part of getting good at that particular art form.

Popular singers, on the other hand, don't experience those sorts of physiological changes. Because the genre has its roots in speech, the larynx moves with the same freedom exercised in speech. The laryngeal structure also remains the same as a non-singer's, which you can tell by listening to the speech of very seasoned popular-music singers. There's typically nothing in their speaking voices that sounds unusual or that would set them apart as singers, even to the expert ear.

## THE BOTTOM LINE

The skills and aesthetics involved in a speech-oriented, artist-driven method are naturally very different from those needed for a theatrical, composer-driven method. A singer needs to sing in a way that's both healthy and appropriate to the genre. If you don't, you not only sound bad but can also do damage to your voice.

"Good singing" is not necessarily good singing.

## YOU'RE BETTER OFF WITH OPERA?

There's a myth that says that classical (or opera) training is inherently good, appropriate, foundational, superior, and classy. It says that anyone who "has opera training" is by definition a better singer than someone who doesn't. It also says that you

can't go wrong by building your vocal technique on a classical (opera) foundation.

For the sake of mastering your singing in the shortest time, I'd encourage you not to buy into that myth. If you love the sound of classical singing, you should study classical singing. But it doesn't make much sense to study classical singing in order to master popular technique. Study the technique that will help you sing the way you want to sing.

## **VOICE LESSONS: WHO NEEDS THEM AND WHY?**

People who teach singing for popular styles have a couple of inherent challenges:

1. nobody needs popular voice lessons, and,
2. there's nothing to teach.

## **NOBODY NEEDS THEM**

When I say that nobody needs voice lessons, I mean that most people don't think that popular singers should need them. In the United States particularly, we have this idea that good popular singing should come "naturally." This idea is supported by our culture every time a Barbra Streisand, Axl Rose, Michael Jackson, Bruno Mars, Ariana Grande, Jennifer Hudson or Jon Bon Jovi pops into the cultural consciousness. And yes, for some people singing comes very naturally and at a higher skill level than most people could ever hope for. So people tend to buy into the belief that if they were born to sing they would naturally be good, and if they're already singing then this is as good as it's gonna get and there's no point working on it.

## **REALITY CHECK**

If you were going to learn a new sport or art or musical instrument, taking a few lessons or a class would be normal. If you began as self-taught in any discipline, you'd probably find no shame in asking for help once you were stuck at a certain level. If you wanted to learn hip-hop, you wouldn't think it was pointless to find someone to teach you. If you wanted to learn how to shred, you wouldn't be embarrassed to take guitar lessons. In some pursuits, like scuba diving or glass blowing, you could get seriously hurt if you tried to figure it out on your own. But for some reason, popular singing is different.

When it comes to singing, people often think that what you know is what you know, and if it needs to change you'll change it yourself. In some communities of musical amateurs (active musicians who aren't getting paid to be musicians) a singer who seeks help with singing can be looked down upon. In these communities there's a very strong belief in individualism and "honest," artist-generated songs and performances. Inviting a professional teacher to help you improve your skills creates

a risk that you'll be musically polluted; that you'll be influenced by an "expert" such that your music will no longer be completely yours.

Sometimes singers feel that taking lessons is communicating a musical or moral weakness to fellow musicians. Unlike in the professional music world, where collaboration and instruction are valued, the world of amateur musicians sometimes supports the notion that if you're good you don't need lessons, and if you're taking lessons you must not be good.

So when I say "nobody needs voice lessons," I'm acknowledging that attitude that a "real" popular singer works through instinct and raw talent alone. I hope that if you have that attitude, even a little bit, you can let it go. The greatest musicians throughout history have put effort and study into their craft, even those who began with simply raw talent. Music is a collaborative art in which people are always learning from one another and expanding their musical knowledge and views. Being open to all kinds of influences and teachers will help you become the musician you want to be.

## THERE'S NOTHING TO TEACH

There isn't really a set of rules separating good from bad in popular voice. In fact, there is no "good" or "bad" singing in popular voice.

There's healthy and unhealthy. There's efficient and inefficient. That's about it. If you sing in a certain way with conviction and it turns out that a certain number of people like the way you sing, then you've got fans. If you have fans, you're doing something right.

Cite any standard measure of music or singing—tone, pitch, time, vibrato, timbre—and I'll name between one and a handful of famous singers that have a "bad" version of that measure. But those singers are famous because their fans either don't care about this "bad" thing or they actually enjoy it—it resonates with them. The singer's musicality is communicated as part of an authentic whole. If a given singer rubs you the wrong way, you don't have to try to like them or justify why you don't. You can just be a fan of other singers. The singer defines his or her own style, and the listener is free to enjoy, or not.

It's important that singers understand this concept so that they don't waste their time trying to be all things to all people. It's tiring, impossible, and thankless. Trying to be the singer for everyone means you'll be the singer for no one—least of all yourself.

I've seen lots of singers get frustrated by trying to "do it right" or sing in a way that's beyond criticism. It breaks my heart because there's no such thing. Even if you're singing beautifully and musically and authentically, there will be people who

don't like it. That's just how it is. You'll find joy and authenticity in your singing if you're true to yourself and answer to your own standards and goals.

So if singers who sing popular styles are just dandy despite their musical and vocal deficits, then why would they take voice lessons?

## WHAT CAN YOU GET FROM LESSONS?

What a voice teacher can teach in popular styles is vocal efficiency that results in a natural phonation and overall vocal health. In less fancy words, if you sing in a way that's in harmony with the way your body behaves naturally, then you can create, enhance, or improve the things that singers want: range, strength and volume, stamina, control, and ease.

If you think one or more of those elements in your own singing isn't up to par, then you have two choices: live with it or try to fix it.

Many singers just live with whatever's bugging them, or live with it until they experience vocal damage. If vocal damage occurs they'll probably look for help to fix the habit (or habits) that caused it. Sooner or later, though, many singers just get tired of whatever they feel is hindering them vocally and musically.

These singers are aware that their potential isn't reflected in their performance. It needles them that they hear the song a certain way in their heads, and that's not the way it comes out of their mouths. Or the recordings they hear of themselves are horribly at odds with what they believe they sound like. The musically astute or ambitious singer will only put up with that for so long. The ability to match their musical intentions to their musical expression is vital, and that need often moves them to take voice lessons.

## WHAT WE'RE GOING FOR

People who take voice lessons usually want one or both of the Big Two:

1. Freedom from vocal strain and/or fatigue
2. An increased range of strong notes (i.e., overcoming their vocal "breaks.")

Sometimes they're looking for other things as well, like controlling or accessing vibrato, breathing technique, style techniques, and so on. It's been my experience, though, that any improvements singers want to make in their singing skills either rely upon, or are in addition to, the Big Two. Sometimes new students can't exactly say what it is that brings them to my studio, but a little listening and a few questions always brings it down to the Big Two. I've observed over the years that when students master these two basic elements of singing, their own personal style seems to fall into place. Which, by the way, is incredibly appropriate for popular styles. Whether singers express music as simply as a folk singer or as floridly as a gospel

singer, when their voices are set free, their singing is going to follow.

## THE FIRST BIG ONE

Neuro-Vocal Method teaches singers to avoid vocal strain by using the larynx for what it is: part of the respiratory system.

Some vocal methods teach that learning to breathe intentionally, and in a particular way, isn't necessary for

good singing. They say that if the vocal technique is right, then the breathing will just happen naturally.

I completely agree with this view, as long as the singer in question is already a naturally great singer. I've watched many great singers who never had a lesson and never gave a lick of thought to their technique. There are people who are just born knowing how to sing, sound great, never have to deal with their break, and never suffer vocal damage. (We resent them, of course, but they do exist.) These singers seem to naturally know how to "move a lot of air," as they say in both the voice and recording studios. These naturally great singers know how they expect their singing to feel, and their body provides the breath support to deliver the feeling they expect. Good for them. They're not reading this book. And here's the truth—those singers are only a teeny-tiny percentage of the singers out there.

"*Can anybody sing?*" is a question I've been asked many times. By now my knee-jerk response is to try to figure out the real question. "*Can anybody sing?*" can mean any number of things, and I've figured out a few of them. Here's the first—you'll find the rest scattered through the book.

### Can Anybody Sing #1:

When "*Can anybody sing?*" really means "*Could I (or my loved one) sing better than I (they) currently do?*"

Answer: Yes

Singing may seem like a single action, but there's a whole lot going on when you sing. Your brain is perceiving, decoding, and reproducing beats and rhythms, pitch and volume, sound quality and shape. Your body is responding in intricate and specific ways to stimulus from your brain. Accurate singing is no small thing.

There's also the fact that singing is a learned behavior. Some studies show that children raised in homes in which they aren't exposed to music suffer a permanent deficit: they can never learn to discern and reproduce pitch as well as people whose early environments exposed them to music. This doesn't mean that they can't learn to enjoy music or sing for enjoyment. It just means you probably won't see them stunning audiences at Lollapalooza.

I believe down to my bones that we humans are not inclined to pursue activities in which we have no talent. I, for one, have never once thought I'd like to become a trapeze artist or a chemist. I'm completely confident that I'd be really bad at those things. But there are activities and skills I would like to explore. And if an interest motivates me to actually get off my behind and take some action, then I have the capacity to improve upon my current ability. So do you.

What do you want to do with your singing? Join a choir? Audition for a show? Join a band? Record the songs you've been writing? Get a record deal? Be honest with yourself and know that it's all good. There's a heck of a lot of room between the shower and *The Voice*. You'll definitely improve your singing if you give yourself something to shoot for.

For the rest of us mortals, learning how to breathe in a way that supports our singing really is necessary. Of course, we don't want to think about our breathing as we're singing. We want to forget about the technique of "singer breathing" as quickly as possible so that it can do its job of delivering the sound we want. Neuro-Vocal Method works with the way you already naturally breathe, so your breath support integrates quickly and easily into your singing. As your intentional posture and breath support create a new and easier feeling when you sing, you become accustomed to expecting that feeling. When you expect that feeling, your body complies, giving you the support you need to attain that feeling. If that sounds strange, don't worry. We'll get to more of that later in the Posture and Breath section.

Vocal strain and fatigue are, for the solo singer, a result of one or more of the following:

1. Lack of breath support
2. Habitually dropping the sternum and/or reaching out or up with the chin
3. Singing in keys that are too high or too low for the voice
4. Inability to hear oneself adequately in a rehearsal or performance situation
5. Repeatedly trying to sing through the natural vocal break(s) using sheer force
6. Overuse or strain of the speaking voice

There may be others, but these are the reasons I see all the time. Luckily, other than number five, which can take some time and effort, these things can all be changed pretty easily. That is, they can if the singer is willing to develop some new habits. We'll get to that later.

## THE OTHER BIG ONE

What almost all Microphone Singers want is to have control over their break—to use it or not as they choose. This is especially true of women and of men with a lower vocal range, whose breaks fall between B $\flat$  and B (B3 for men, B4 for women) and therefore right in the middle of almost everyone's range. Avoiding that break makes it almost impossible to sing most songs, or makes the singer sing in keys that are unnaturally low or high. What singers of popular genres want, both male and female, is to have two or more usable octaves. To get that means you'll have to conquer your break—the transition between different vocal registers.

## REGISTER THIS

There are five vocal registers. I'll describe them here, and you can go to my web site if you want to hear examples. From the lowest to the highest they are:

- The vocal fry, also known as the glottal scrape or the pulse register: the sound representing the loosest your vocal folds can be and still make noise. I describe

the sound this register makes as the “opening the haunted house door” noise.

- The chest, modal, or lower register: the register most Americans and virtually all men the world over use for their speaking voice. This is also the aesthetically preferred sound for pretty much any kind of popular singing.
- The head or high register: the register used for speech by many women and soft-spoken people, and a preferred speaking sound for women in many non-Western cultures. It also embodies the aesthetically preferred sounds for the female classical singer.
- The falsetto or flute register: like the head register, only lighter. It usually starts about F#4 for lower male voices, B4 for higher male voices, and F#5 for women.
- The whistle tone: the sound you hear emanating from elementary school playgrounds—that crazy-high whistle-like scream. In adults it results from a unique behavior of the voice and will occur on F#6 and higher for women and F#5 and higher for men. Some adults can also make that sound, and make it singing rather than screaming. It’s not really common, nor does it really matter to the artistry of your singing. It’s kind of cool if you can do it, though. Good party trick.

## THE SKINNY ON YOUR VOCAL BREAK

The natural way your voice changes between these registers is sort of like the gears on a car. (If you don’t know what I’m talking about, listen to your car as you accelerate to get on a freeway. The mounting pitch followed by an abrupt shift to a much lower pitch is the sound of your car shifting gears. If you have a newer car that doesn’t do that, then listen to a motorcycle speeding up. You can hear them change gears from a mile away.) When the revolutions per minute (rpm) reach a maximum for the gear the car is in, the car shifts to the next gear, which allows it to function more efficiently. Likewise, when your vocal folds reach a certain maximum of vibrations per second your larynx “shifts” to a different functionality. That functionality is referred to as a register. That abrupt shifting is what we identify as a register break. It was bestowed upon us by the gods to drive singers crazy.

So, this “shifting” is the natural way for your voice to behave. When you ask your voice to learn to do that high, loud “chest blend” sound, you’re asking your larynx to do something unnatural. On the one hand, who cares? Ballet is unnatural. Snowboarding is unnatural. Skydiving is definitely unnatural. On the other hand, you’re trying to beat Mother Nature, and there’s no magic bullet for that. And it ain’t gonna happen overnight.

You’re going to have get your brain to “teach” your larynx to behave in a new way, and you’re going to have to support it physically regardless of what your ego

tells you is right or wrong. (More on that later.)

Neuro-Vocal Method uses breath support and exaggerated placement to identify and strengthen the pure head register and chest register tones, and then to teach the larynx to move smoothly between them. There are predictable phases to this process, and I've seen them many, many times. Some people just skate right past some of these phases. But for most people one thing seems to follow the next, and Neuro-Vocal Method offers tools to accomplish and then transition through each phase.

## IT'S A METHOD, NOT MAGIC

Changing the way you sing can be a big deal. For one thing, as we'll discuss in the next section, you've established a specific and unique physiological response to the intention *sing* over the years.

**To change that response, you have to change the instructions your brain is giving your body. Your brain will both steer the process and be shaped by it. How to do that is the primary focus of Neuro-Vocal Method.**

But there's obviously more to singing than physiology. There's also the sound we've become accustomed to hearing in our heads and the way we're used to having our singing feel. Our voices are a big part of our identity and self-image. When we start trying to change how we sing, we often find our identity and self-image throwing a hissy fit. Although the voice may physically feel better when phonating in the Neuro-Vocal Method exercises, the singer responds negatively to what they're hearing. That can hold you back, so we want to get past that as soon as possible.

Here's an example. It's what I call the Outgoing Message Syndrome.

You've listened back to your outgoing phone message, or heard yourself talk on a video, haven't you? (The outgoing message is better, because there's no visual information.) What's your response to that sound that you know must be your voice? If you're like pretty much everyone, you hate it. You think it doesn't sound like you. You think the voice you're hearing sounds high and probably nasal or squeaky. Interestingly, however, everyone else sounds like themselves on their outgoing messages and videos, and nobody has ever commented on how weird you sound on yours.

Right?

That, my friend, is proof that your opinion of how your voice sounds doesn't count. You are the **ONLY** one who hears your voice the way you hear your voice. So using how you sound to yourself as a way to gauge how you sound to others is intrinsically faulty. Holding on to your ideas about the familiar and beautiful qualities

of your voice will just keep you stuck where you are. In order to adopt new behaviors that will get you the results you want, you're going to have to trust in the process and put your ego aside.

I've had students who've been able to adopt these techniques in just a few lessons and integrate them in just a few more. I've also had students whose self-image had them in such a stranglehold that they stayed stuck for a year or more before quitting or conquering. The difference lies in a willingness to trust the process, as well as a willingness to change.

So, here's the deal. In Neuro-Vocal Method, you're going to make some really weird noises. You're going to have moments when you think to yourself, "Really? This can't possibly be right! It sounds so bad!" That's normal. It does sound bad, and you're doing all this so you can sound good. Very counterintuitive, I know. But the sound that is not singing is actually what you're going for. You have to pay attention to how you feel. If it sounds bad and feels bad you should stop. Review, go back and try again. You should never feel a strain coming from your voice.

Please remember as you're doing the exercises that nobody hears what you hear. They hear what you feel. So if you feel strained, you sound strained. If you feel like you're pushing, you sound like you're pushing. And if you feel open and easy, then you sound great!



## CHAPTER 3

# This is Your Body, Singing

This isn't a biology book; it's a singing method book. But I need to explain the basics of the way Neuro-Vocal Method works in your body. You have to understand it at least a little bit, or you won't apply it effectively. Seriously. There will be a test, so please read. If you don't get the "why," then you probably won't do the "how" in a way that gets you what you want. The test is whether or not Neuro-Vocal Method works for you.

I'm going to describe the biology and physiology with as much Regular Person language as possible. I promise I'll be as brief as possible, and I'll avoid being unnecessarily specific. Just enough to get the point across.

## BRAIN NEIGHBORHOODS

Your brain is comprised of three parts: the old brain, middle brain, and neocortex. Part of the old brain is called the cerebellum. The cerebellum is a big contributor to regulating and coordinating movement, posture, and balance. It's called the old brain because we share this anatomical feature with our four-legged brethren all the way back to our evolutionary grandparents, the reptiles. For this reason I lovingly refer to the old brain as the "Lizard Brain." We're going to be seducing your Lizard Brain—which is really only interested in the way things feel to you—and get it to influence your motor cortex.

## THE WAY YOU DO THE THINGS YOU DO

There's a piece of real estate in your brain called the motor cortex. It's in charge of a whole lot of files, all collected under the heading "How You Do Stuff." So, for instance, when you catch something that's been tossed at you, you don't think, "I'll now flex this muscle, then this muscle, now relax this tendon, and adjust for this trajectory, etc." Nope. You just reach out and catch. That's because you have a unified

motor response to the instruction “catch.” It’s called a motor action plan. It means that as you learned to catch things flying your way, your brain bundled all the individual physical movements—along with the visual and tactile information—into one unified action.

To get a sense of what I’m talking about, think about signing your name. You exclusively sign your name with either your right or left hand. Do it with your other hand and it becomes someone else’s signature. (Probably someone who’s, like, two years old.) That’s because you have a motor action plan called *Signing My Name* housed in your motor cortex, and it applies only to one hand. Attempting the same action using the other hand—the one that doesn’t have that motor action plan—produces very different results.

Once you have a motor action plan for a specific activity, it’s pretty hard to change (as you may recall from when you were fifteen and you tried to change your signature to make it cooler). That’s because that motor action plan initiates in response to your intention, not the actual movement. Those ball-catching or name-signing neurons start firing about 100 milliseconds before there’s any actual motor response. Then, to make things even harder, you have another neighborhood in your brain called the somatosensory cortex. The somatosensory cortex anticipates how your physical actions are going to feel to you and how objects will feel when you touch them. That’s called a forward model.

That, for good or bad, is why it can be very hard to change your singing. You’ve been singing all your life. You have a seriously complex and unique file in your motor cortex called *Sing*. You have a forward model of *Sing* that anticipates what you’ll be feeling when you sing. Your intention to sing opens the *Sing* file, which results in a manner of singing that you’ve been learning and reinforcing your whole life.

Therefore, if you want to change your singing, you have to change your unconscious motor response to the command *Sing*. You have to carve new neural pathways. You have to build a new—or change your existing—motor action plan; your *Sing* file. To do that effectively you’ll need a basic understanding of how things work, and you’ll have to (at least temporarily) agree with some of the premises of Neuro-Vocal Method.

Of course, singing isn’t the same as signing your name. Singing is an art form. Catching a ball, though miraculous in its way, is gross motor movement. Singing requires a finer coordination as well as a more specific and (often) emotional intention. Because singing is so complex, change can be more difficult. But the payoff is fabulous.

## LET'S USE YOU AS AN EXAMPLE

Let's look at your golf game. Or your guitar playing or cursive writing or tap dancing or basketball or trick bike riding or tennis. Call up anything else you might be good at: it doesn't have to be fancy, it just has to be something at which you've reached a level of physical ease.

When you were first learning, and were tackling something basic:

- Playing golf: learning to putt accurately.
- Playing guitar: learning your open G chord.
- Learning cursive writing: connecting your letters.
- Tap dancing: learning your first combination.
- Basketball: learning a layup.
- Trick bike riding: learning a barspin.
- Tennis: learning a backhand shot.

Do you remember what it felt like when you first learned these moves, or some specific physical expression for another pursuit? In the beginning your body felt awkward and wooden. Each time you willed your body to make this particular physical motion, it took time and intention. It also lacked fluency or grace.

And then there was the matter of doing it in such a way that you'd have the option to improve the skill once you mastered it. If you didn't throw in the towel because it was too hard, it started to become more physically familiar. Your body began to anticipate what you would be feeling (forward model) when you went to make that G chord (motor action plan) and you didn't have to think so hard about it. Your effort began to translate into energy, and it all began to feel more enjoyable.

At that point you could focus on your intention for what you were doing rather than simply what you were doing. Instead of just hitting the ball or making the chord or finishing the combination in time with the music, you were able to focus on the manner in which you hit the ball or made the chord or finished the combination. You were able to focus on your intention for the behavior rather than simply the behavior itself. You went through the process of creating a new motor action plan and then improving on it. You made a file for a finer and more familiar execution of that skill, and now you express it in a way that's utterly unique to you—be it a hip-hop dance or pottery throwing, basketball or oil painting.

## THE VALVE THAT IS YOUR VOICE

Your body is composed of a bunch of systems—vascular, digestive, nervous, and eight others—each responsible for its unique department. Your voice is part of your respiratory system. Technically it's a valve. Its primary function, biologically and evolutionarily speaking, is to keep stuff out of your lungs. Ever have a choking fit on

a drop of water? Or on nothing? That was your larynx freaking out because some little something got past the first two lines of defense that protect your lungs and made it to the final and most serious sentry—your vocal folds, which are housed in the larynx. As something, however small, touched your vocal folds, a whole series of reflexive responses kicked in and you coughed and coughed until your larynx was satisfied that your lungs were safe.

### Where It's At



If you're not sure where your voice lives in your body, do this: Put your hand across your throat, with your hand gently pressed against your neck. Swallow. Feel that knobby thing going up and down? That's your thyroid cartilage, and behind it lie the vocal folds (another name for vocal chords). If you hum while gently placing a finger or two against your neck and directly on top of that cartilage you'll feel the vibration of the folds.

### HOW IT WORKS

Have you ever blown up a balloon and then stretched the neck of the balloon so that as the air escaped it made a whining noise? If you haven't, try it. (Or watch someone else do it online.)

I know it sounds silly, but that's an excellent model of how your voice works. If you got the balloon to make the whining noise, I'm confident you went the extra mile and pulled it wider and narrower to make it whine at a higher and lower pitch. When you did that, you made a model of singing.

No kidding. That's how your voice works. The balloon filled with air plays the part of Your Lungs, and the pinched section of the balloon plays Your Vocal Folds. As the air passes through the neck of the balloon it pushes apart the bits you're holding together. The pushing apart and coming back together causes a really fast vibration. The faster the vibration, the higher the pitch. So

when you pull your fingers away from one another you create a longer, thinner membrane that then vibrates faster than it did when it was shorter and fatter. When the balloon is out of air, you're out of sound.

In your body, the pinching fingers are cartilage and the balloon neck represents vocal folds. Operating that cartilage are muscles that pull or relax to make the vocal folds longer and thinner (high pitches) and shorter and fatter (low pitches).

Your body is obviously much more complicated than the balloon, but the balloon model gives you an idea of the basic functioning of the vocal folds and how they make sound. Many people don't know where in their body their voice origi-

nates, and most don't have a good idea of how it works. If you'd like more specific and accurate details about the workings of the vocal mechanism, there's much to be found online. Have at it.

## HOW IT WORKS DURING A VOCAL "BREAK"

In the last chapter in the section called "Register This," I described how the larynx behaves when it's naturally shifting gears, or allowing for "breaks," in the voice. The vibrations per second reach a certain frequency, which represents a certain degree of tension of the vocal folds, and then the whole mechanism shifts to a different way of behaving, or a different vocal register. This change is sometimes described by singers as a "different voice" because of the radically different timbre they hear and physical sensation they experience.

### Can Anybody Sing #2

When "*Can anybody sing?*" really means "*Should people who sing really poorly be allowed to sing?*"

Answer: Yes

Because, really, what are your options? Be nasty and rude? Inflict bodily injury on them? Are you really ready to become a member of the Music Police? Sorry, but somebody else singing beneath your standards is beyond your control. So in situations where your delicate sensibilities are offended, you can accept it, relocate, or say a little prayer. What you can't do is tell the offending singer your opinion. Well, you can, but don't. It's mean. And it's not your job.

That's what almost every singer is going for: a voice that accurately represents their musical intention.

The journey may shake up your world a little, but if you want to get there, you can get there.

## The Colors of Sound

When musicians talk about the sonic character of a sound, they use the word timbre. It's used to describe the quality of tone distinctive to a particular singing voice or musical instrument. It's pronounced "tamber." Color, texture, weight, and quality can be synonyms for timbre. The timbre of a musical sound can also be described with words like bright, dark, warm, harsh, clear, and so on. Since it can be difficult for us to describe sounds (at least English speakers) we tend to use words from the physical or visual vocabulary to try to describe what we're hearing.

Compared to the balloon-pinching model of your voice, the model of the vocal break would be more abrupt. In the balloon model your fingers move toward and away from one another in a fluid and balanced way. That's not the way we're put together, and it's not the way your larynx wants to behave, but it is what we want to achieve as singers. We want to be able to access qualities of the chest register (color, richness, and volume) and qualities of the head register (focus, clarity, and nimbleness) anywhere in our entire range. Ideally, we can access all that as an artistic response to the music rather than a technical one.

## USING YOUR LIZARD BRAIN

Back when I was talking about your Lizard Brain, motor action plans, and forward models, I also made some tantalizing promises: I promised you'd be making some ugly noises, that your ego would work against you, and that you wouldn't be able to think your way around this process. All that just makes you really excited to dive in, I'll bet.

No?

Well, then, remember instead the part where I said that this is a really short and healthy route to what you want as a pop singer: a strong voice, control over your break, and vocal stamina. Focus there.

Over the years that you've been a singer, you've probably been focusing on what you sound like when you sing. You've been talking about your singing in terms of your voice and how it sounds. You've made changes to your singing, or not, based solely on your perception of how it sounds. You may have kept your sound even if hurt to sing, or left you scratchy, or made you vocally tired. But any changes you made were probably little changes, a change here and there to a word, a phrase, or a style of song. The bigger changes you want, the changes that will give you more volume, range and stamina, are going to come from altering the way you produce sound. That means you'll have to get used to different methods producing different sounds.

## YOUR SCIENCE MINUTE

Earlier I talked about the forward model. It's your built-in prediction system for knowing how it will feel when you do something physical. You anticipate escalators, handshakes, car doors, keyboards, and hundreds of other things every day. Familiar motor activities like these have a unified impression in the motor cortex, so you experience "open the door" not as a series of movements and reactions, but as one unified motor response—or motor action plan—to your intention: Open the Door.

Neurons in the primary motor cortex, which is the part of your brain responsible for complex voluntary movements, fire before a movement is initiated. That means that those neurons aren't firing in response to a movement, but rather in anticipation of it. They're firing in response to your intention. They're initiating that motor action plan—a specific, unified, and learned set of instructions that enable you to express complex movement.

Just because a motor action plan is unified, though, doesn't mean it can't be un-unified. If you want to alter your way of doing something you already know how to do, you'll have to break it up into (at least some of) its component parts. Consciously or unconsciously, that's what has to happen to create change in a learned

behavior.

## SO WHAT'S THE PLAN?

It's possible to break apart the motor action plan by confusing it with different sensory feedback. Therein lies the magic of Neuro-Vocal Method. With the exercises explained in this book you'll be phonating (which means "any sound you make with your voice") on specific sounds. These sounds are isolated components of singing. Not singing. As you phonate on pitches, you'll focus on physical feelings rather than on singing and listening to the sounds of your singing. This will send new sensory messages directly through your cerebellum and brain stem, your Lizard Brain, and allow you to sidestep your existing motor response to the intention *Sing*. You'll be able to learn new skills quickly and easily outside the boundaries of your existing skill level and beliefs.

## TRICKING THE LIZARD BRAIN

All physical movement, whether conscious or reflexive, is initiated in the Lizard Brain. There's a hierarchy of motor function in the brain: simple and autonomic stuff begins and ends in the brain stem, while more complex actions get wired on through the front part of the brain, the cerebral cortex. I'm going to use that fun fact—as well as the fact that I'm a voice teacher, not a doctor or scientist—as my excuse for referring to the system of your unconscious motor responses (your motor action plans) as your Lizard Brain.

Your Lizard Brain speaks the language of physical sensation. You can't use logic or manipulation on it. You can't talk sense to it. It doesn't give a rip how talented or smart you are. You have to get in there and speak to it in its own language if you want it to change or learn. So, since we know that every intention to sing will continue to enlist the exact same result from our motor cortex and its slavish devotion to the motor action plans it already knows, then we'll have to trick it.

Yep, that's the plan: to teach the Lizard Brain new physical feelings and to associate those new feelings with making sounds on pitches. As you feel those new feelings and your Lizard Brain gets happy about them, you'll be sending messages from the Lizard Brain and the somatosensory cortex to the motor cortex. Those parts of your brain that love the new feelings will mess up your existing *Sing* file, allowing it to change as the feelings become familiar. Once familiar, the new, easier feelings organically make their way into your singing and your singing begins to get easier, louder, and



higher. Those feeling parts of your brain reach in and reconfigure the motor response to the intention *Sing*.

If that all sounds difficult, don't worry—it's not. We just have to confuse your brain by giving it different sounds to make and different feelings to focus on. This doesn't give you carte blanche to passively observe the changes. You'll have to help them out consciously as well. But you'll know what you're looking for, and what you're looking for will be based on physical sensation, not sound.

Short version: in order to improve your singing, you'll have to stop singing.

## WAIT...WHAT?

In a nutshell, you're going to make noises on pitches. Since you won't be intending to sing, your Lizard Brain won't recognize what you're doing as singing. It will recognize, however, that you're phonating (making sounds with your voice) and that the way you're phonating feels good.

You'll also do some exercises that your Lizard Brain could easily recognize as singing, because they won't sound awful and they'll involve predictable pitches and rhythms. In those cases we'll try to distract the ol' LB. You'll keep your focus on the specific goal of a given exercise—a goal in which the physical feeling represents as much of your attention as possible. So instead of telling your Lizard Brain, "We're singing now," you tell your Lizard Brain, "We're going to be vocalizing on these patterns and we're going to focus on this particular element of how that feels." If you can do that, I guarantee you'll get 100 percent compliance. Your Lizard Brain will be so happy that you're speaking its language—the language of physical feeling—that it will use everything at its disposal (including the sonic information it's receiving) to give you what you're asking for, and give it to you quickly.

Remember, your Lizard Brain really doesn't care how you sound. It leaves that for your neocortex to judge. It cares only about how things feel, and the easier and more natural a motor response is, the happier your Lizard Brain will be. If you've ever had the experience of doing something one way and then discovering an easier way to do it, then you know what I mean. There's a deep-seated sense of relief and recognition that goes along with, "Oh! That's much easier!" We're cut out to do physical things in really efficient ways: when we don't, we really struggle, and when we do, we know in our bones that it's right.

## BREATH

Earlier I referred to the fact that breathing efficiently and powerfully is the foundation necessary for intentional, controlled singing. In the case of breathing for singing there's no need to trick the Lizard Brain. It's really good at efficient breathing.

It's been breathing efficiently for millions of years.

Although you'll consciously go through the process of learning to breathe like a singer, you'll soon let that new understanding of an old behavior go back to where it came from. But when it goes back on autopilot, it will be working for you in a different way. Sure, you'll be able to work it consciously any time you want to if the situation calls for it, but if you've got a bunch of eyes staring at you while you sing, are you really going to be thinking about your breathing? Absolutely not. And you shouldn't be! You should be aware of your singing and performance, and your breathing should just work for you. The next step, of course, is not having to think about your singing—to simply be one with the expression of the music.

## PLACEMENT

If you've been a singer for a while, and especially if you've taken voice lessons, you've probably come across this word before. It's a very handy concept in singing, and Neuro-Vocal Method makes good use of it.

Placement refers to the singer's experience of the resonance of their own voice. Obviously the "place" the voice originates is in the larynx, with your vocal folds chopping the air into sound. But your vocal folds are responsible for only a part of the unique sound that is your voice. The rest of the sound is determined by your resonant capacity—that is, how you're put together and how the sounds move around in there. That vibrating air you're moving through your vocal folds will bounce around in your pharynx (throat) and your nasal cavities. It will reflect off the hard and soft tissues in your face, head, and neck. It will even resonate, sympathetically, in your thoracic cavity (chest). Aside from your actual vocal folds, it's the size and shape of these cavities (some of which you can change to a certain degree), as well as the hard and soft tissue that surrounds them, that determines your vocal timbre and volume.

## SAY THAT IN ENGLISH?

Okay. Imagine you're holding an acoustic guitar and you pluck the E string. It has certain timbre (tone color) that is the result of the string itself, plus the finger that's plucking it, plus the resonant capacity of the instrument (in this case the hollow interior of the guitar, along with the size, shape, and character of the wood creating it). Now put that same string on a violin, and then a cello, and then a soapbox. Even though the string and the plucking finger remain the same, the sound the string makes changes as it resonates with each new instrument.

So it is with you and your singing. Your physical experience of this vibrating air is referred to as placement. Just as the changes to a guitar affect how easily and

efficiently the air within it vibrates, so too can a singer affect the ease and efficiency with which they make use of their own resonant capacity. When you learn to maximize your resonant capacity, it's like pulling a towel out of a guitar. Singing becomes so much easier! Using ease of resonance, or "good placement," is a great way to measure how efficiently you're phonating. Relying on that feeling is a fast, effective, and lasting way to make your singing feel easy, strong, and free from strain.

## OVERSHOOTING

There's one more thing I want you to be ready for before you start with the exercises.

Most training in most disciplines, including voice, teaches with the premise that if you're here and you want to get there, then you point and follow in the direction of what you want and eventually you'll get there. Or close.

That probably works well for a lot of things, but not for the Neuro-Vocal Method. After reading the section on motor action plans and how your Lizard Brain works, you can probably see why. Taking little baby steps toward your goal while holding your goal in mind will make your progress very slow. Sometimes it might even keep you from reaching your goals. Remember that you already have a very specific physiological response to the intention *Sing*, and as long as you continue to hold that intention as you open your mouth to sing, you'll keep getting the same response you've always gotten. What changes you do achieve will happen at an infuriatingly slow rate.

In the interest of tricking your brain (and of being impatient and lazy), we're not going to focus on where we're going. Mostly because it doesn't work, but also because we don't really know where that is yet. The sound and feel of your voice resonating efficiently might be very different from what you've felt before, and you'll just have to see what it feels like when you get there.

In the meantime, don't focus on an endgame. As much as possible, try to release your attachment to your current experience of your voice—just allow for the possibility of change. You should focus on mastering the exercises such that you can really work with the "feeling center" of each one. Know that they're not pretty, don't try to make them relate to singing, and just do them.

Then watch the magic happen!

## THE NEURO IN NEURO-VOCAL METHOD

Now that you know more about how the brain makes your body sing, let's look at what singing makes your brain do. For those of you who don't scour the neurology blogs, let me fill you in a little.

Our understanding of the human brain has progressed by leaps and bounds

since the final decade of the twentieth century. Although the Greek philosopher Plato was the first guy we know to have written it down, people have believed for a long time that humans do their thinking with this organ called the brain. And since we humans are very interested in our own selves and what we think, considerable time and energy has gone into the study of the brain over the last couple of millennia. But in all that time we learned hardly anything compared to the discoveries of the last few decades. That's primarily thanks to functional magnetic resonance imaging (fMRI), a relatively new technology which allows scientists to "look" at the brain of a living person while the person is actually using their brain.

You've probably heard of MRI, the diagnostic technology that's largely replaced the x-ray. It uses radio waves and magnetic fields to create images of the body. The fMRI uses the same sort of technology. It measures brain activity by detecting changes in blood flow. Different parts of your brain are activated depending on what you're doing, thinking, or feeling. When you use your brain, the parts you're using ask for more blood flow, and an fMRI can see that.

I had the opportunity to talk with some doctors of the brain persuasion about the Neuro-Vocal Method and why I think it works. They responded exactly as any self-respecting scientists would: they listened and nodded and said things like, "Yes...that sounds like it could be." Which, in case you don't know any scientists, is almost like getting an agreement. So I was very encouraged. A charming, piano-playing neurological researcher named Dr. Doug Burman thought my theory was interesting enough to put me in an fMRI and look at my brain as I executed the elements of Neuro-Vocal Method.

If you're interested in the "Neuro" of the Neuro-Vocal Method, then read the rest of this section. If you're not, then I'll just sum it up, and you can look at the creepy brain pictures and move on.

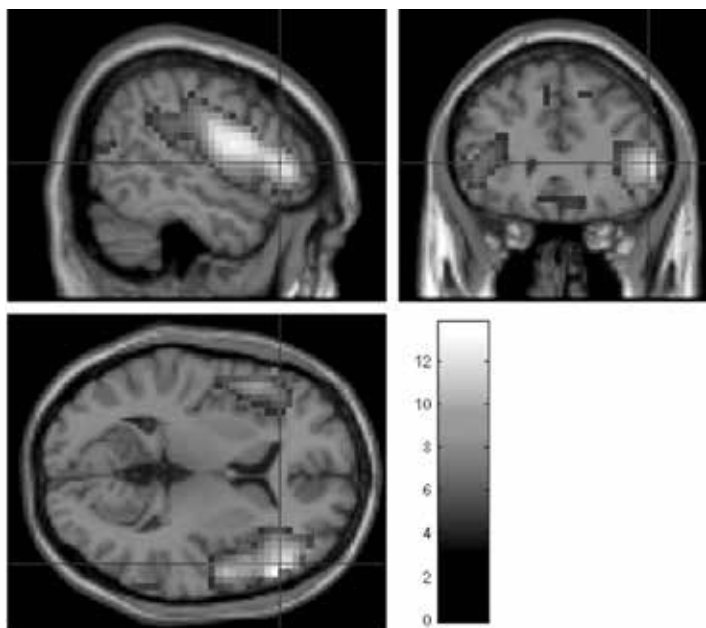
The upshot is this: the brain knows when it's singing and when it's not.

The difference in brain activity between singing and doing Neuro-Vocal Method exercises is very easy to see in an fMRI. The underlying theory of the method is that if you can make sounds and patterns in a prescribed way and on given pitches, you will allow your brain to create new neural pathways in response to the intention *Sing*. If the sounds and patterns you're making use your entire vocal mechanism in the most natural and efficient way possible, then that physical behavior must integrate with the similar behavior of singing. The new feelings and behaviors influence the singing so that it becomes more natural and efficient. Natural and efficient translates to louder voice, bigger range, more stamina, and better vocal health.

## A BRAIN THAT'S SINGING

When you express the intention to sing, that expression represents a very complex neurological response. Really. A lot goes on in your brain when you sing.

Here's an fMRI of a brain singing "What a Wonderful World." The colored parts are the most active regions of the brain. If you've never looked at this sort of picture before, you should know that this is a very busy brain. Singing produced activity in an unusually large number of neurological neighborhoods.



Apparently brains are very interested in singing; it really keeps a brain busy. Especially interesting is the degree to which the activity is bilateral, meaning the same areas are active on both the left and right sides. That's pretty unusual. Not many activities create that mirror-image activity between one side of the brain and the other.

Here are the regions of the brain activated by singing, and the stuff those sections are busy doing:

### **Bilateral inferior frontal gyrus**

- A lot of activity here (bilaterally). Activity encompasses Broca's area (language) and extends to areas for vocalization.

**Orbitofrontal**

- Pleasure. Emotional response.

**Medial superior frontal**

- Feedback-related self-monitoring of task performance.

**Brainstem**

- Motor function.
- Motor and sensory to the face and neck.
- Cardiac and respiratory functions.

**Somatosensory cortex**

- Touch, physical feeling. Anticipates and processes sensations.

**A BRAIN MAKING A PITCHED SOUND**

This is a picture of a brain holding a tone on the Nasty Vowel (Exercise 5.1). There's no melody—just a single pitch—and the sound being made isn't a singing sound. It's much more like a pitched speaking sound with no intention to be musical or pretty. You can see how much less is going on by how few areas of the brain are active. The brain just isn't working as hard or in the same ways it does when it's singing.



Here are the regions of the brain activated by the activity of holding a single tone on the Nasty Vowel and the work they do.

#### **Bilateral anterior temporal lobe**

- Not conclusive, but area includes sensory association cortex. Probably indicates the singer feeling what she's doing as well as measuring the physical sensation.

#### **Orbital frontal region**

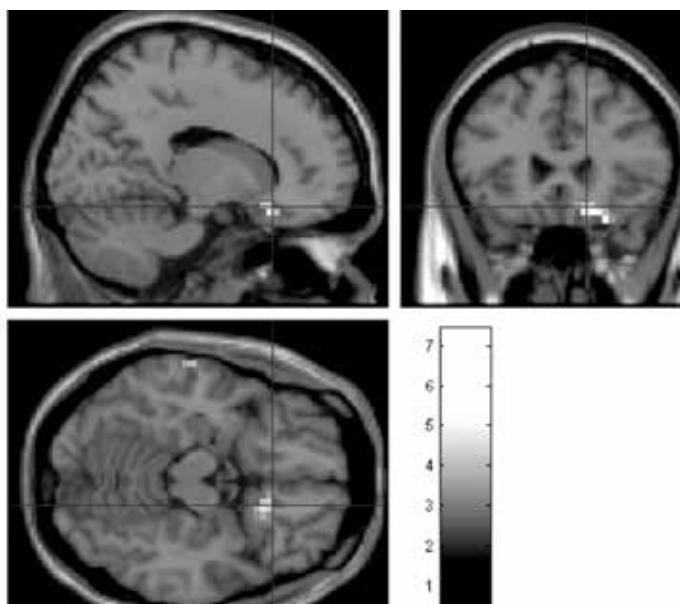
- Pleasure area. Signals information about expected outcomes. Integrates information in real time to make predictions or estimates about future outcomes.

#### **Lateral inferior frontal**

- Speech area. Motor function of making sound, physical coordination for speech. Also hearing and language.

### **A BRAIN MAKING A PITCH PATTERN**

In this picture the phonation being made is the Nasty Triangle (Exercise 1 in the Skill Development section). Compare these pictures to the pictures of the singing brain. Most importantly, there's very little activity here. The regions activated here are also not the same as the regions activated by singing. This brain is allowing the singer to make pitch patterns (like singing) and efficient vocal sounds (like singing), but it doesn't seem to think that it's singing.



The regions of the brain activated by the activity of doing the Nasty Triangle exercise follow, along with what those regions do.

### **Superior temporal gyrus**

- Activity primarily in auditory area, involved in auditory processing. This gets activity any time you phonate because you hear yourself.

### **Orbitofrontal cortex**

- Small amount of activity here can represent information about the specific features of expected outcomes of behaviors. Indicates learning about reward-relevant events.

These fMRI images are basically illustrations of what I described earlier with regard to the Lizard Brain.

Although these pictures are pretty darn science-y, they don't represent actual data. You'd need a whole bunch of people doing exactly the same thing, along with some who are not doing the same thing, and a certain number of them would have to get results similar to one another to support a scientific theory. And even then, it's still just a theory.

Luckily, I'm a voice teacher and this is a vocal method theory. I know that Neuro-Vocal Method is powerful and fast at getting the promised results. The part that's still a theory is the "why." The results are reliable.





## CHAPTER 4

# Microphone Singing is Bad for You, and Other Myths about Vocal Health

I use the term microphone singing as a way to avoid using the terms pop or popular singing. Hopefully you're clear by now that when I say "popular" I mean "all that is not classical." In the world of voice education, "popular" means pretty much anything sung into a microphone, including jazz, rock, R&B, metal, indie, hip-hop, power pop, country, and most contemporary music theater.

It's possible that you've never thought or been told that singing non-classical music will hurt your singing or your voice in any way. It's possible you're taking lessons and your classically trained voice teacher is super cool and helping you with the kind of music you like singing. So if that's true for you, just stop reading right now and go on to the next section.

However, if you've been told that singing popular styles will ruin your voice and you're worried about that—even a little bit—read on.

## DIFFERENT IS GOOD

Different art forms and genres require different training. A ballet dancer learns and trains one way, a hip-hop dancer another. A painter might study different styles but will usually get really good at just one or two. Similarly, a singer will be drawn to one or more of the popular or classical styles. Those styles are different, and if you want to get command of your singing, you should find training that's right for the music you want to make.

You may have had a teacher who warned you off singing non-classical music. You might wonder why, especially if it was someone you know to be really smart or experienced, or someone you love and trust. The next section explains a little bit why they might have done so. All you really have to know for now is that if the music you like to sing is in a popular or music-theater style, and if someone has told you that this will destroy your voice, and if you're worried about that... then don't

worry. They're wrong.

Why is it that some voice teachers seem so closed-minded about singing popular styles? I don't know for sure, but let me offer one obvious explanation.

Most people who teach voice and singing are college educated singers. Almost all college educated singers learned classical technique. That's because almost all universities that have music schools or departments teach classical music. In fact, if you were to go looking for a college at which to study music, you'd have to assume in your research that "music" means "classical music." If the school teaches any other music than classical, that type of music is indicated as its own degree program, course of study, or class. Classical is the default in higher education.

So if you took lessons in high school, you probably studied with a classically trained singer who told you what "correct" singing was. If you took lessons in college, you studied with a college professor who almost certainly taught classical technique and who instructed you to sing "correctly." And if you left college with a vocal performance degree and started teaching professionally, you probably taught clas-

sical technique, because that was all you knew.

The sad truth is that, even as late as the writing of this book, the number of Western conservatories or universities that offer degrees in non-classical music is only a small fraction of the institutions that offer music degree programs. That fact is especially perplexing in the U.S., where our people's major contribution to the world of art has been through innovative popular music. While it's true that the thinking regarding popular music is changing in higher education, it's changing very slowly.

Let's face it: we all tend to hold very strong opinions on a few subjects about which we know very little. Especially when we believe we should know about that subject, or when that subject falls under a bigger umbrella with something we actually do know a lot about. I can't tell you how many musicians I've heard con-

## How Voice Teachers are Made

Colleges teach creative writing, music performance, graphic design, and other subjects that virtually guarantee that the person earning the degree will be self-employed—or at least partially self-employed—if they are to make a living in that field. They do not, however, teach you how to be self-employed or make a living.

Every year, music colleges and conservatories turn out thousands of bright, talented singers with degrees in vocal performance. Overwhelmingly, these singers are trained in classical voice. There is very, very little paid, professional work for classical singers... as most discover in very short order. Classical or not, singers with a performance degree have to figure out a way to make it in the world with no instruction on how to do that. Typically, they either get a job in another field, or they teach voice—and then try to find time to continue to participate in their art. They probably weren't taught how to teach voice; they were taught how to sing. They probably don't love the idea of teaching voice. (After all, they didn't get a performance degree to teach. They got a performance degree to perform.) But here they are, teaching voice, because singing is the one thing they know how to do well, and you can always find people who want to learn to sing.

fidently disparage and denigrate all different kinds of music. Music which, incidentally, is not the type performed or enjoyed by said musicians.

People are people.

## WHAT ABOUT THOSE CANCELED SHOWS?

There are plenty of headlines about high-profile shows canceled due to singers' vocal damage. Stars as successful and varied as pop divas Adele and Celine Dion, Dan Reynolds of Imagine Dragons, country star Keith Urban, Scott Weiland of Stone Temple Pilots, and hip-hop artist Young Jeezy have been treated for vocal injuries. Look further, however, and you'll find opera and classical singers facing the same problems. Professional singers risk injury, just as professional athletes do. And, like athletes, most singers can recuperate from injuries with proper care and come back as strong as ever.

Beyond injuries, though, there's the issue of whether popular singing will doom your voice to disaster. For your consideration, I present the following list of empirical evidence that people can sing popular styles for decades and still sound the same. Or better. Sounding the same after singing professionally for a few decades, by the way, is a good indication that nothing permanently damaging has happened to your voice. Now, some of them sing a little lower than they used to—particularly the ones over seventy—but that happens as you age regardless of your training or the music you're singing. (Unless, of course, you're Tony Bennett.)

These well-known pop singers, male and female, were, and are (as of the writing of this book) active in their performing careers at ages over fifty. Some significantly over fifty. This list is in no particular order and by no means comprehensive. Nor does it feature singers from any particular style. It's merely meant to illustrate that singing popular styles does not doom you to vocal damage, does not mean you're singing incorrectly, and does allow for a long career of singing beautifully and healthily.

## POPULAR SINGERS OVER 50

Barbra Streisand	Tori Amos	Eric Clapton
Aretha Franklin	Vanessa Williams	Steve Winwood
Tina Turner	Gladys Knight	Lionel Richie
Diana Ross	Gloria Estefan	Paul Simon
Chaka Khan	Dionne Warwick	Rod Stewart
Cyndi Lauper	Billy Joel	Alan Jackson
Dolly Parton	Stevie Wonder	Vince Gill
Cher	Garth Brooks	Phil Collins
Jennifer Warnes	Tony Bennett	George Michael
Donna Summer	Bruce Springsteen	Loretta Lynn
Emmylou Harris	Alan Jackson	Tom Petty
Jennifer Holiday	Tom Jones	Grace Jones
Debbie Harry	Smokey Robinson	Sade
Grace Slick	Billy Joel	Deniece Williams
Chrissie Hynde	Mick Jagger	Billy Ocean
Reba McEntire	Seal	George Strait
Stevie Nicks	Julio Iglesias	Pat Benatar
Barbara Mandrell	Paul McCartney	David Lee Roth
Anita Baker	Bryan Ferry	Shania Twain
Martina McBride	Sting	Bryan Adams
Carly Simon	Mandy Patinkin	Randy Travis
Annie Lennox	Elton John	Bono
K. D. Lang	BeBe Winans	Dave Mustain
Sheryl Crow	Kenny Loggins	James Taylor
Joan Osborne	Randy Newman	Judy Collins
Madonna	Peter Gabriel	Sammy Hagar
Bonnie Raitt	Clint Black	James Hetfield
Robert Plant	Jeffrey Osborne	

I believe that when classical singers assert that pop singing will “ruin your voice,” they mean (though they may not be aware of it) “for classical singing.” I also believe that they’re probably right. At a professional level, anyway. I think it’s fair to say though, that the people in the list above didn’t set out to be classical singers. They started out singing popular styles and decades later their voices sound great, and their years of experience have improved their artistry.

## THE AESTHETICS OF POP VERSUS CLASSICAL

Healthy pop technique and healthy classical technique share two things across the board: breath support and placement. That's what classical voice teachers mean when they say that singers can get the foundations of all singing from classical training. Breath support is breath support, and all singing requires it. Stringing notes into phrases, a basic skill that all singers need, requires breath support and isn't something everyone does naturally. Breath support and healthy placement are crucial for singing in tune. Any good voice teacher can help you to learn those fundamentals.

Placement is also very similar across genres, but the way classical singers do placement is enough to leave you with that break in your voice that drives you nuts. Placement in pop technique is different and, taken at face value by anyone, classical or not, is aesthetically unappealing.

Classical singing is beautiful. You may not have enough familiarity with classical singing to hear it as beautiful, but as in all classical art, singers are going for a certain kind of beauty. People who sing and teach classical music work to create that beauty in the singing voice. Conversely, the actual sound produced by pop singers when they're hitting their money notes is not beautiful by anyone's reckoning. It's cool. It's impressive. You probably like it. But it's not a beautiful sound. It's basically pitched yelling. Which is not bad: it's just how it is. So you see the conundrum. A person who's spent their life singing beautifully and years teaching others to sing beautifully would, very understandably, feel a little challenged getting behind the idea of teaching pitched yelling.

### Can Anybody Sing #3

When "*Can anybody sing?*" really means "*Can anybody achieve fame with their singing?*"

Answer: No

Singers who attract national or international attention (along with big dollars) are to singing what major league athletes are to sports. They are an immeasurably small percentage of all the people who sing. They're born with talent, probably raised in a musically supportive environment, and then those things are added to the Success Soup of drive, confidence, hard work, resilience, tenacity, and belief. Along the way they invariably get outside help (through accident of birth, luck, or very determined networking), and then they're somehow able to keep it together (or not) when they find themselves in this foreign land called Fame. There are exceptions to this description, but they're just that: exceptions.

You might be that person: either the person I described or the exception. But what I hope you'll remember is that you don't have to hit that mark to legitimately call yourself a singer. There are a lot of great singers who aren't, and maybe never wanted to be, famous. Singing can have lots of applications. It can bring new people and experiences into your life. It can be for your own pleasure, to become part of a community, to share with other people, to make money, or to realize a goal. Whatever you want. It all matters, and it's all good. If you're moved to become a better singer and you don't know why, then just go for it. The "why" will probably show up down the road. If you're shooting for a particular target, then keep that target in your sight. If your goal is to become widely known and well-paid, then do something toward that goal every day. If you want it badly enough, the Next Big Thing might be you!

It's a history problem, a personal taste problem, a training problem, a skill problem...call it what you will. But the obvious outcome for the classical singer teaching the pop singer is that teacher and student are probably not on the same page. It's not surprising, and it's very understandable. Awareness of this reality benefits both teachers of classical technique and students of popular styles.

## GETTING GOOD AT ONE THING

Classical singers and singers of popular styles tend to see the world of music in different ways; they have different values, perspectives, and aims. (See the beginning of Chapter 2 for clarification.) Unless you're a singer the caliber of Renée Fleming (which I'm pretty sure you're not, unless you, too, are an alien from another planet) you're probably doing all you can just to wrap your head around one kind of singing, never mind other genres or classes of singing. Also, if you love a certain kind of singing, then that's probably what you want to listen to and learn more about and sing. To get really good at even one kind of singing is a huge accomplishment, and it deserves your attention and commitment.

Working with a voice teacher is a good investment for any singer who wants to get proficient. If you want to get good at a popular style or contemporary music theater, you should find either a teacher who specializes in it or an open-minded classical teacher who actually listens to and enjoys popular styles. If they teach Neuro-Vocal Method then that's even better!

## BELTING VERSUS POP TECHNIQUE

One of the problems with the whole discussion of pop technique is the use of the word "belt" (also belting and belt voice).

Some people use this word to describe the tone produced by hauling the chest voice up as high as it will go by sheer force. This kind of belting sounds bad, hurts, and eventually causes vocal damage. Female and baritone singers who use that method to hit high notes might be able to sing a C# but are generally stopped at C due to the limits of physiology. For tenor voices the top would be F. Additionally, singers who sing that way will typically begin to lose notes at the top of their range after a certain age (forty-five-ish). People who write about the dangers of the "belt voice" aren't wrong to warn singers of possible vocal problems—if that's what they're actually describing. But these harbingers of bad tidings usually don't define what they mean by "belting." They just share their views, assuming that we all agree on what that term means.

The other use of the word belting describes the currently desirable sound for singers in the pop and music-theater realms. This sound, by the way, is produced

in a way barely different from the way operatic tenors hit their glamour notes at the end of the arias. This is the sound of a “chest up” blend and is perfectly healthy when executed properly, a fact demonstrated by centuries of successful operatic tenors. And Stevie Wonder. I’m pretty sure that the complaint lodged by classical teachers who refer to this technique as “belting” is based on their cultural bias.

There’s a huge difference between these two definitions of the word belting when it comes to microphone singing of any kind. And that, my friends, is why you won’t see that word in this book. It’s a word without a real definition, so it’s not really helpful.

## WHY SINGERS GET VOCAL PROBLEMS AND WHAT TO DO ABOUT THEM

I know there’s a lot of information out there warning singers of all the dangers that can befall their voices. It’s enough to make a person paranoid! Or just want to ignore everything. A lot of the reason that you hear so much about celebrity vocal problems, besides the news cycle being desperate for content, is that we know so much more now than we used to. Since the beginning of the twenty-first century, the use of digital laryngeal stroboscopy has become commonplace. So instead of relying on experience and a pair of eyeballs examining the throat with a little circular mirror, doctors can stick a little camera right down in there, next to the vocal folds. There’s nothing that thing can’t see. Together with a good doc, it can catch the tiniest anomaly or problem. Most importantly, the laryngoscope can show the behavior of the vocal folds. The result is that diagnoses of vocal problems are more specific and accurate, and issues are identified much earlier than they used to be.

Always be aware that different people come with different physiological and genetic makeups. Your voice might naturally be more or less susceptible to vocal fatigue or damage than the average person’s. It’s nothing to freak out about, but it is something to be aware of so you can make decisions that are right for you.

The focus of this book isn’t vocal problems, so I’m not going to devote space to them. There are many books and internet resources available to give you more information than you ever wanted to know about vocal problems. But I will tell you this: if in the wake of seeing your doctor your problem still persists, please go see another doctor. I have heard more stories than I care to count from new students who were underdiagnosed or misdiagnosed on their initial exam. A healthy voice singing with a healthy technique should feel divine. Anything short of that is worth fighting to fix.

Vocal trouble is almost entirely avoidable. There are basically four things that get singers into trouble: using a bigger hammer, ignoring the signs, vocal trauma and overuse.

## USING A BIGGER HAMMER

It's the answer to the question, "What should I do if it doesn't fit?" In other words, if something isn't working, the bigger hammer will force it to work. Exerting force against something that isn't moving will make it move. While this is often true, you may well end up with your square peg in a round hole, wedged in there so tightly that it's stuck for good.

You might be the owner of a Bigger Hammer, which you pull out every time you have to hit a high note. If the high note in question is in your range, then you give it all you've got and force it out. If it's even one half step beyond your range then you're out of luck. It ain't gonna happen. Other indications you might be this kind of singer are that you tell people you can't sing softly or have "no high notes," that you frequently lose your voice after gigs, or that you've noticed your range getting smaller. If any or all of these describe you, then I assure you that your vocal problems won't change until you do.

Solution: study this method or take at least enough voice lessons to learn how to use other tools. Not a hammer.

## IGNORING THE SIGNS

Your voice will let you know when all is not well. If it feels or sounds different from the way it's always felt or sounded, you should pay attention. If it hasn't changed

### Can Anybody Sing #4a

When "*Can anybody sing?*" really means "*Am I silly to imagine I could (or deserve to) improve my singing?*"

Answer: No

Say it again, ya'll. No, you are not silly for thinking you could improve your singing.

You might be thinking:

**I don't deserve it.** You think you aren't special enough to sing well. (It is a pretty glamorous hobby, after all.)

Bring this little demon out into the light and watch it shrink like a slug in salt. Once you say this secret out loud—once you own it—you'll probably find that it loses its power. Deserve to sing well? Plug in any other word and watch that balloon deflate. Do you have to deserve to dance, ski, draw, skateboard, game, knit, canoe, garden, jog, roller skate, or paint well? Of course not! Those are skills anybody with a desire can learn, cultivate, and gain pleasure from. So is singing.

**I shouldn't spend that kind of money and/or time on something with no extrinsic value.** It's often easier to justify the purchase of something in the *Stuff* category than the *Enhance My Life Experience* category. It takes a little bit of faith to invest in any kind of personal growth, singing included. It takes no faith at all to buy a new kitchen table. But the table, while functional, isn't exactly enriching. Also, you will have to get rid of it at some point. Your personal growth will inform and enhance your experiences every day for the rest of your life.

after two weeks of babying your voice, you should see either an ear, nose, and throat (ENT) doctor or a laryngologist, ideally one who specializes in helping singers. Whatever you do, don't ignore the signs of vocal strain or injury.

Typical signs of vocal problems include:

- Hoarseness, or laryngitis, that doesn't go away after a few days.
- Persistent morning hoarseness that clears up as the day goes on.
- Loss of range.
- Feeling like you have to clear your throat all the time.
- A husky tone that either developed over time or seemed to come on rather suddenly.
- Your voice "dropping out" when you sing.
- Getting vocally tired sooner than usual.
- Feeling like you have a lump in your throat all the time.
- Getting laryngitis often.

There are many things that can lead to these symptoms. Some need only a simple fix, like being able to hear yourself at rehearsal or not eating late at night, and will heal up in short order. Some may require more serious attention and you'll have to be sensitive to them for your entire singing career. And there's everything else in between.

Solution: pay attention, and give yourself permission to care about taking care of your voice.

## VOCAL TRAUMA

Vocal trauma can be either a one-time thing—screaming at basketball game or a particularly hellish gig, for instance—or it can result from an ongoing behavior like constant talking on an unnaturally low pitch, as we often do on the office phone, or speaking loudly and often to large, unruly groups such as school classrooms or sports teams. The former is usually easy to identify. If you know you've had a vocally stressful situation and you took vocal rest for a day or two—speaking as little as possible (silence would be ideal) and drinking lots of liquids—you'd probably be fine. The latter is an ongoing situation or habit that you have to be aware of and change. Simple as that. It might be an easy fix; sitting up straight in your office chair or using a lavalier microphone when you're speaking to a group, for instance. It might be more complicated than that or have a deeper root cause.

Solution: a good speech therapist or voice teacher (or both) can help you. Ask your ENT doctor for a referral.

## OVERUSE

Overuse is really, really common with singers. No surprise: we tend to be pretty gregarious people. But the fact is, if you compromise or damage your voice because you talk too much, too loudly, or both, then you'll have to deal with it. The trouble will probably show up in the form of one or more of the symptoms listed above, and if it doesn't go away after two weeks you should go see an ENT. If that doc doesn't help you, go see another.

## IT DOESN'T MEAN YOU WERE NAUGHTY

Having healthy singing technique can help a singer avoid these problems, but it's not a cure-all. People get vocal problems. People who use their voices a lot get vocal problems more often than people who don't. Baseball pitchers get shoulder problems. Office workers get carpal tunnel syndrome. Carpenters get back problems. It just stands to reason. It doesn't have to mean you're a bad singer or that your voice teacher has led you astray. Go to a voice doctor, speech therapist, or voice teacher and work with him or her to figure out what it does mean. Because voice problems are almost always a result of behavior, you can change your behavior to keep your voice healthy in the future.

## STICK UP FOR YOUR VOICE

This section is for everyone, but especially for singers in bands.

You don't want to be a whiner. You want to be a team player. You might not have any formal music training, and you might feel embarrassed or inadequate about that. So when something isn't working, you suck it up. You just sing louder, even though you can't really hear yourself. Or maybe you sing songs that are too high or too low and leave your voice feeling sore and strained. Or maybe you know you're vocally spent, but the rest of the band wants to keep rehearsing so you keep on singing.

It's time to reframe the "whiner" or "diva" ideas in a way that lets you stick up for yourself and your voice. The rest of the band doesn't have to understand why the song should be in a higher key, why it needs to invest in in-ear monitors for you or why you need a ten-minute vocal rest every hour. They just need to do it. You need to tell them, because nobody else will.

Look, they can go out and buy new instruments if they trash theirs. You can't. You're stuck with yours. And if you trash it, everyone loses. So find a way to advocate for yourself as a singer in a way that works for you, give everyone a little time to get used to the new you, and enjoy your singing!



# Part 2





## CHAPTER 5

# The Banana Split of Singing

If you want to remember something, the most effective way is to connect it to either sensory information (sight, sound, taste, smell or touch) or a story. Those are the things we remember. If information is linked to your senses or a memorable story, you're more likely to retain that information. That's why stories are often used to illustrate a point, diagrams to clarify a concept, or jingles to make you remember a product. Those are ways to make information sticky. That's why I've made a visual model for the elements of singing.

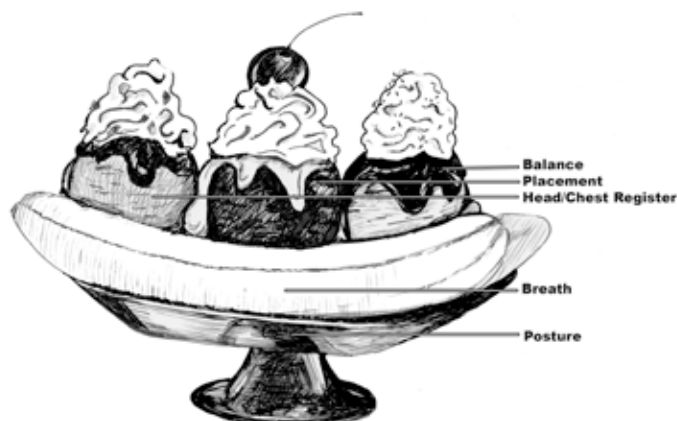
This model was inspired by the Ogre Model. Remember the movie *Shrek*? There's a dialog between Shrek, the ogre, and Donkey, the donkey, in which Shrek is explaining his personality. (One of my favorite movie moments.) He tells Donkey that ogres are like onions because they have layers. Donkey suggests that Shrek not use an onion as an example of his layers because not everyone likes onions. An ogre, he contends, should be like a parfait. Parfaits have layers, and everybody likes parfait.

As I thought about a model for solid, efficient, healthy singing I considered how different elements of singing sort of stack up on top of each other. Like a parfait. But a parfait stacks up systematically, one layer upon the next, and singing isn't really like that. So, although I adored the frozen confection idea, a parfait wasn't exactly the model I needed. I decided to use a banana split instead. A banana split, I hope, will be an illustration you'll remember. Similar to the ogre model in that it falls into the delightful and enticing ice cream dessert category and requires stacking of layers of ingredients. Everybody likes it. It's little more relatable than an architectural model or a flow chart. I also really like the way the three ice cream scoops are contained in, or held up by, the banana. You'll see what I mean.

## PUTTING THE SPLIT TOGETHER

Behold the banana split. A dish, a banana, three scoops of ice cream, and toppings.

For our singing model, the bowl represents your posture and the banana your breath. The ice cream scoops are registers, balance, and placement. The toppings are your personal style. You need it all.



In this chapter I'm going to describe these banana split elements from the top down and in some detail. Knowing and understanding these terms and what they really mean will put you in charge of your singing and keep you there. I'm devoting the most attention to the banana and the dish - breath and posture - and leaving them for last so they're fresh in your mind when you get to the next section, Prepping for the Exercises.

In the Prepping for the Exercises section, you'll be using what you just read about breath and posture. It's important to get the breath and posture stuff under your belt because you'll use it in every single exercise. It doesn't have to be perfect, but you should feel that you understand it enough that you can apply it the best you can.

Finally, there are the Neuro-Vocal Method exercises. If anything gets confusing as you learn the exercises you can always come back to this section for explanations.

## THE ICE CREAM—REGISTERS, PLACEMENT, AND BALANCE

The three ice cream scoops—registers, placement, and balance—represent the components or elements of a healthy sound. They work together with efficient posture and good breath support to give you strength, endurance, range and volume.

You'll probably find that one or more of the scoops is something that you've either already mastered or just found easy to do. You may find that one or more of the scoops is really hard and drives you crazy. Neither of these possibilities means you should neglect that scoop. **Use the ease or the difficulty you find to get familiar with what's really going on** for you with that element. You're cultivating new skills, right? So the more aware you are of the physical sensations you find in the exercises, the easier they'll be to master. Once you master them, you can use them as the tools they are.

Neuro-Vocal Method is designed to put the singer in control. A singer who's in control can troubleshoot when things are less than ideal, infuse their performance with their own unique artistry, and bring a richer variety of expression to their singing.

## Can Anybody Sing #4b

When “*Can anybody sing?*” really means “*Am I silly to imagine I could (or deserve to) improve my singing?*”

Answer: No

A couple more things you might be thinking:

**I can’t because somebody said I wasn’t good enough.** Whoever said, “Sticks and stones may break your bones but words will never hurt you,” was delusional or stupid. Words can hurt, and worse, words can steal joy and confidence from their target. If you had a relative who told you that you couldn’t sing or teased you when you sang, or a teacher who moved you to the back row in the concert so that nobody would hear you—and *told you* that’s why they were doing it—or if your singing was unfavorably compared to that of your sister or cousin or father, then you may still be hurting from those words and the thoughts they inspired.

You will have to be the one to decide to take action despite all that. Don’t wait for the sensitivity or the hurt to go away before you begin, because it won’t. You’ll have to begin so that you can prove to yourself that those people and their hurtful words were wrong. If you want to sing, you can sing. It’s up to you to create the evidence that this is so.

**I’ll never be good enough to be famous.** You might think it’s only worth pursuing your singing if you’re going to chase it all the way to a TV contest show, or a major-label recording contract, or Broadway. You might think anything short of that would mean you’re a failure, and you don’t want to risk being a failure, so it’s much safer not to try at all.

You’re welcome to think that way, of course. Nobody is going to try to stop you. But you might want to consider changing your mind if a) you want to sing, and b) you’re not singing because you’re afraid to fail.

To succeed at anything, you have to set your bar at a height that will inspire you; not so high that you’re defeated before you begin. You can start with whatever seems small to you. Use your commute time to memorize one song a week for a month, spend twenty minutes a week with YouTube and a mirror copying some great singer’s performance, or buy a beginning piano book and spend ten minutes, three days a week, at the piano. Do something you know you can succeed at. Then, when it’s the right time, do the next thing. Pretty soon you’ll have racked up a whole lot of successes. You’ll also have the confidence and skills to achieve things you might never have imagined before.

## SCOOP #1: REGISTERS

Hearken back for a moment to my comparison of the function of the voice to the gears of a car engine. Your voice has five distinct “gears,” or registers<sup>1</sup>—the vocal fry, the chest or lower register, the head or high register, the falsetto or flute register, and

<sup>1</sup> Although this physiological fact is agreed upon in the speech pathology community, there is frequent discussion on and disagreement about it in the vocal pedagogy (voice teaching) community. Because singers experience their voices in a much more specialized way than most people, they’re sensitive to the subtle changes that occur in singing but tend not to occur in speech. For instance, though the vocal “breaks” predictably land between B♭ and B, and between F and F#, singers also deal with smaller but significant changes at D♭ and E♭. Also, because it’s generally easier to achieve vocal blend through the pitches between B3 and F4 for men and F#4 and B♭5 for women, many voice teachers call this a “middle voice” and treat it differently than they do the chest or head registers.

## Semantics

You may find that Neuro-Vocal Method uses a slightly different meaning for a term than the one you've come to understand. If that happens, look for the similarities and try to identify the differences. I want you to be empowered and informed, not confused and annoyed! If you have to reinterpret an oft-repeated concept or word every time you see it, that's not empowering—that's a pain in the neck. So if my description isn't the same as your understanding, try to bear with me. Once you have all the skills involved in each element of the banana split, you can rename anything you want.

the whistle tone. Each register denotes a certain vibratory pattern of the vocal folds. These patterns occur through a specific range of pitches and produce characteristic tone qualities.

Though Neuro-Vocal Method recognizes and occasionally makes use of the extreme vocal registers, it focuses on building and coordinating the chest and head registers for healthy life-long singing. The sound we're used to hearing in all popular genres relies mostly on the chest register, and there are unhealthy and healthy ways to get that sound.

The unhealthy way involves hauling your chest register up as far as it can go in its purest form. That's the big hammer method, and with it the ceiling for your high notes is much lower than it would be using a healthy chest blend. It's also not an efficient way to produce tone, and depending on how much and what you sing, it can result in vocal damage.

Healthy and aesthetically correct pop singing blends the chest register with the head register such that, though the sound produced makes increasing use of head register blend as the pitches get higher, the character of the chest register continues to be present in the sound.

## CHEST REGISTER

This is the singing voice of the Western popular-music singer, for both sexes and across all styles. Exceptions to this are exactly that—exceptions. With Neuro-Vocal Method you'll access a pure and natural chest tone. When you're first phonating on that pure and natural chest tone, you probably won't think that you're making a sound that's usable for singing. The sound is very buzzy and plain and has a sort of metallic "edge" around it. But your physical experience of this sound is one of absolute freedom of the laryngeal area, some vibration in the upper chest, and a buzzy feeling in the front of your hard palate or face. Take a breath and it will feel like this voice is coming out of your face with no effort from your throat. It sort of sounds and feels like you have a kazoo in your face. Singers usually hate this sound when they first hear it. Even though it *feels* really good, it can be hard to get past the sound of it.

Once you try it, you may find that this sound coming out of your mouth is just

appalling. If you think it sounds bad, and you wonder whether you could possibly have done it right, please take a moment to notice that when you made the sound:

1. You were surprisingly loud, and
2. You felt nothing in your throat.

So although you may hate the *sound* of the tone, you'll have to admit that the feeling of ease and the volume you're getting are both things you want in your singing.

Normally the pure chest register is most easily accessed at the very bottom of the singer's range—not always, but usually. In the exercises there will be opportunities to access pure chest tones with methods that I've found very effective. **The bugaboo for people who have a hard time with it is usually this: they have difficulty letting go of singing in favor of making a sound on a pitch.** Said another way, they have difficulty letting go of their focus on the *sound* in favor of a focus on the *intention* and the *feeling*. Or, yet another way, being willing to sound unfamiliar and unattractive on purpose.

You'll have two goals with your chest register:

1. Producing a healthy, natural chest tone (which requires finding it, identifying it, and being able to create it on purpose), and
2. Working with the other elements to move your blended chest tones to the top of your range.

That second goal is easy to say, but sometimes not so easy to do. You may find yourself up against challenges that are both aesthetic and emotional. I'm going to give you a little homework, though, that should help you. I'd like you to start listening to singers with a slightly different ear. If you start observing your favorite singers differently now, it will help you get past challenges you may have when you begin the exercises.

## HEAD REGISTER

Sometimes called the falsetto, this is the lighter-sounding part of the voice that typically begins on a B for women and low-voiced men and an F# for high-voiced men. Healthy control and use of this register are absolutely essential if you're to get past your B $\flat$  or F breaks. Even if you choose to never, ever sing in pure head reg-

## The Exceptions

Singers who sing in their head register or falsetto become “branded” by this sound, thanks to how infrequently it's heard in any pop idiom. Head register used in the form of vocal breaks (yodels) will also be part of a recognized sound for that particular singer. This isn't bad. It's just not the norm. Popular music is all about exceptions to the norm.

If you were taking lessons with me and you had a cool, not-the-norm thing you did that you liked, I'd be totally in favor of working with that. Assuming it was nothing that could hurt you vocally, I'd encourage you to play it up and own it as an element of your uniquely fabulous style. However, since this is a book, I have to stay focused on the larger picture, which currently is top-to-bottom chest tones, with various stylistic textures sprinkled in, for most popular styles. For the sake of the broader brushstroke, this book will assume that's what we want: healthy chest blend throughout the singer's range.

## Listen differently

Listening consciously to good singers can shorten the time it takes you to acquire and make use of your money notes. Put on your singer ears and listen to what experienced and professional singers do with their high notes. Pay attention to any singer in any genre (no, really, *any* genre) who sings high and well. If you listen closely to their lower pitches you'll notice a wider, richer sound with a broader color spectrum, as well as an ease in producing that sound. But what I *really* want you to listen to is their high notes. Try not to be charmed by their singing skill, but rather focus on the actual timbre of those high notes. You'll notice that in high ranges their voices are kind of whiney sounding. Other words that might describe that high chest mix are thin, nasal, or "shouty." What I want you to listen for is this: although that high, loud singing is really impressive and the singer's skill is making you think they sound great, *the actual sound* coming out of their mouths isn't pretty. It's powerful, impressive, awesome, passionate, or fabulous, but it ain't pretty.

You may not be able to hear these things the first few times you listen for them, but please don't give up. Keep listening because this can be a very powerful tool in accessing your own money notes. No kidding. The way *they* sing will give you permission to reach for the less-than-pretty sound you'll need to achieve the high, blended, awesome sound you're going for.

ister tones, you still have to keep that part of your voice strong and healthy. It's your head register that does the heavy lifting when you get up into your money notes.

Most people can access their head tones without much difficulty. That said, I sometimes see low-voiced male students who have trouble accessing it. Smokers, too, can have difficulty or be unable to access pure head register. If you have a reasonably healthy voice, the exercises will help you find and access your head register. If you smoke, you may just have to accept some limitations of your voice until you quit smoking.

I've had students, both male and female, who are reluctant to access their pure head register. The reasons tend to be different for men and women. Ladies first.

## WOMEN

For a woman who's a dedicated chest register singer, the head register can feel fake, airy, childlike, or insincere. But because most songs have a range of more than an octave, and most women's voices bottom out at around G, most songs will require female singers to cross their B $\flat$  to B break. This fact drives chest register singers crazy. Usually, though, these singers have worked out some way to deal with their head register. They might do any of the following:

- Pitch their songs as low as they possibly can.
- Change keys mid-song.
- Use compensatory pharyngeal tension (think Kermit the Frog's voice) to "fatten up" the sound.
- Use frequent register breaks as part of their overall style.
- Sing any pitches higher than B out of tune.

For these singers, a little education goes a long way. Most of them don't like their

head register because they think there's something wrong with them or that it's some kind of failing on their part. I've found that they can be reassured and emboldened to begin using their head register simply by letting them know that this is the way humans are built. If you're ever going to get your high notes sounding the way you want them to, you'll have to build strength in your head register. Everyone has to deal with it: those who seem able to naturally skate over their break are a tiny minority of singers, and you should feel free to resent them.

If you're one of these female chest voice singers, you need to be aware of this tendency. You're probably going to avoid your head register *even after you know* that a healthy and strong head register holds the key to those high, strong notes you really want. You should do an extra head register exercise or two when you do your exercises. If you're taking lessons, let your voice teacher know that you're this kind of singer and ask to spend a little extra time in lessons on head register work.

## MEN

For some men the head register can feel unfamiliar, feminine, out-of-control, and fake. Men tend not to run into the logistics problems that women do because they have enough notes south of their breaks to sing most songs. (Not all men, not all songs.) Still, the problems that come with avoiding the head register turn up for men as well as women.

Men can certainly feel the frustration of a low ceiling on their ranges. They might be aware that the low keys they pick don't really flatter their voices. Or they may sing right up to the top of their chest register for song after song and find themselves vocally exhausted. They might use head register notes when they can't avoid it, using some of the same techniques the women use.

It all comes down to the same thing, though. If a guy wants to sing high and loud—if he wants to get into his money notes, or be able to sing a three-hour gig two nights in a row—a strong head register makes it possible.

Of course, with guys there's also the chick-magnet factor, which I never hesitate to point out. It's true, right? Women think it's really cool when men can sing high notes. Don't know why, that's just how it is. For a lot of guys, that alone is reason enough to start working the head register. Otherwise, the reasons are the same that I listed for the women: this is the way we're put together. If you're ever going to get your high notes sounding the way you want them to, you'll have to build strength in your head register. Everyone has to deal with it: hardly anyone can hit money notes without working on it, and you should feel free to resent those who can.

## USING THE HEAD REGISTER

Doing exercises to strengthen your head register doesn't mean you have to sing in your head register. However, you might find you want to start using pure head register, at least from time to time, once you feel more confident about your ability to access and control it. You want your singing voice to reflect your inner voice—to be an open and real expression of the music coming through you. That can't happen when you're worried about whether or not you can hit certain notes, or about what a note will sound like coming out of your mouth.

You'll have three goals with the head register scoop of ice cream:

1. Producing a healthy, natural head tone that is easily accessed.
2. Utilizing the head register to practice breath support.
3. Teaching the larynx to descend seamlessly into a “head mix” in the natural chest register range.

Once you've decided that it's okay to do exercises for your head register, most of them are pretty easy to do.

## SCOOP #2: PLACEMENT

Placement refers to the singer's physical experience of their voice when their sound is vibrating freely. When you've maximized your resonant capacity and all that air is bouncing around in your sinus and nasal cavities, you can feel it. It shows up as a buzzy feeling in your face or mouth. Some people feel it in a more general way, and some people feel it in a very localized way. But everyone can feel it. **The important thing is that you'll feel either a buzz in your face or strain in your voice. You won't feel both at the same time.**

Neuro-Vocal Method uses placement in two big ways.

1. To make you sensitive to, and give you a way to measure, whether you're providing adequate breath support to operate your voice in the most efficient way possible.
2. To teach the voice how to coordinate the registers. This is done by exaggerating certain sounds to achieve a particular feeling. Blending of the registers doesn't happen automatically, but the larynx can be taught how to coordinate between the registers to achieve a unified vocal sound with no break.

## SO HOW DOES THAT WORK?

When you phonate, air passes your vocal folds, causing them to vibrate. That vibrating air is something you, the singer, can physically feel. *Where* you experience those vibrations is referred to as “placement.” When a singer makes really *efficient*

use of their vibrational capacity –air bouncing around freely in the head and throat cavities– it feels really good. When you’re phonating efficiently you won’t feel much of anything in your throat. You’ll experience your voice as a vibration in your face, or as though it’s coming out of your whole face instead of just your mouth, or as a spinny or buzzy feeling in a particular spot (or spots) in your face or mouth. That’s what singers of all genres (classical included) call “forward placement.”

Because placement is a physical sensation and physical sensation is the language of the Lizard Brain, we use placement a lot in Neuro-Vocal Method. The method asks you to identify a natural placement and utilize it to measure how efficient you’re being. It also asks you to create and identify an *exaggerated* forward placement to use as a tool for conquering your break. It’s this tool that teaches your larynx to shift smoothly between gears, blending the chest and head registers seamlessly. You’ll also use this tool to get the feel for your money notes.

Exaggerated forward placement can be the hardest thing about this method. It’s not that hard physically, but it can be hard emotionally. Because when I say exaggerated, I mean really, really exaggerated. Like, horrible sounding. Whiney and nasal and yucky. Really exaggerated.

For some people it’s a breeze. I tell them what I’m looking for, I demonstrate a little, I give them the “why,” I promise them this is just a tool and their singing won’t sound like this, and they just do it. For *most* people, though, it takes some getting used to. It can be difficult to hear something that dreadful coming out of your own mouth. It can feel really unfamiliar and be emotionally uncomfortable.

The Exercises section gives you several ways to access this exaggerated forward placement. You’ll get a description of how it’s going to feel and I hope you’ll just throw caution to the wind and try it. Once you get the feel for it and start using it as the powerful tool that it is, then you’re on your way to nailing those money notes. You’ll have four goals in understanding and using the placement scoop:

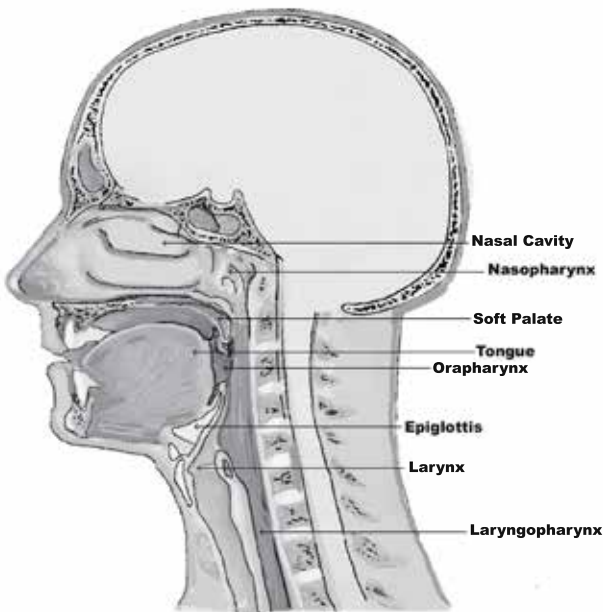
1. Identifying the feeling of forward placement.
2. Mastering the ability to create that feeling whenever you phonate.
3. Learning to anticipate changes in the way your placement feels as you ascend into your mixed chest range.
4. Using placement as your primary tool in mastering vowel modification.

Don’t memorize that or anything. Just know it’s here and you can come back to it when you’ve tried things out and are a little more familiar and comfortable with placement.

### SCOOP #3: BALANCE

Balance is the element that turns the other elements into the sound of singing. With balance we teach the soft palate that we want it to automatically lift up when we sing. Lifting the soft palate calls up the need for more breath support and ultimately makes the supported high chest tones possible. It also balances out the increasingly forward placement of the high chest tones to create a more aesthetically desirable and less nasal sound. Balance turns that exaggerated forward placement from the description of Scoop #2 into something that sounds like singing.

Your soft palate has a job. It responds reflexively whenever you swallow by lifting up and sealing off your nasopharynx (the part of your throat that goes up behind your nose) so that all the stuff in your mouth heads the direction it's meant to go. When you expel air quickly, like when you sneeze, cough, or laugh, it responds reflexively by elevating, creating greater area through which the air can pass. You can feel this most easily when you yawn. If you pay attention to the back of your mouth when you yawn, you'll perceive a big, open-feeling space. You may even be able to feel your soft palate in its lifted position.



### Where is Your Soft Palate, Anyway?

Take your tongue and touch it to the roof of your mouth at the back of your upper teeth. Now run your tongue along the roof of your mouth straight back towards your throat. You'll feel the roof of your mouth go from hard to soft. All of what you just felt is called the palate, and it separates the nose from the mouth. The hard part is called the hard palate and forms the roof of your mouth. The soft part is called the soft palate, and is what we're talking about in this section.

An important part of Neuro-Vocal Method is incorporating a lifted soft palate into the *Sing* file in your motor cortex. The soft palate is easy to manipulate because it responds reflexively to certain stimuli. (A reflex is any involuntary reaction to a given stimulus. Blinking when you sneeze, or pulling away when you touch something hot, for instance.) Because your soft palate has to respond reflexively, it's easy to boss around.

Your elevated soft palate widens the throat and also creates an opening to the nasal cavities and sinuses, which in turn calls up the need for more breath energy. Larger space,

more air required. So, if your intention is to phonate on a particular pitch, and at the same time your soft palate is elevated to create a lot of space, then you *have* to move more air to fill that space.

Moving a lot of air into that larger space will do some great things for you. First, it will make you louder for *no extra work*. (Told you I was ambitiously lazy!) Most people are really surprised to hear how loud they can be once they train their soft palates to lift when they sing. Second, you're more likely to sing in tune. Of course there are singers who sing out of tune because they don't have a well-honed sense of pitch, but there are far more singers who sing out of tune simply because they're not moving enough air. If you've had inconsistent pitch in the past, you may find that incorporating balance as a normal part of your singing voice solves that problem for you. Third, it will improve your tone. A greater resonant capacity adds richness to the sound of any musical instrument, singers included. So you'll have a fatter sound, as well as a sound that's less nasal or whiney. And last, it will give you the fuel you need to own your money notes. Hitting high notes in a chest register mix requires a copious supply of air and you won't be able to pull that up with just an intention. You have to have some tricks up your sleeve. Balance is one of those tricks. You'll have three goals in learning and using the Balance scoop.

1. Identifying the feeling of the lifted soft palate, and then familiarizing yourself with it.
2. Learning how to best exploit the reflexive responses of the soft palate.
3. Becoming accustomed to the feeling of taking in and moving enough air to achieve the balanced tone.

## THE BANANA: BREATH

Breath is the banana in our banana split because it supports the three ice cream scoops and gives a particular character to the whole. You can't have a banana split without a banana, and you can't have results adequate to hit your money notes without breath. Lots of breath.

Now, nobody needs to be told how to breathe. But singers and voice teachers always seem to be talking about breathing. That's because there's breathing and then there's *breathing*. If breathing is part of your discipline, like in martial arts or French horn or singing, then how you breathe matters a lot.

Our goal is to be able to express ourselves authentically, right? If you're trying to express musical ideas but keep running out of air it gets pretty frustrating. Also, without the support of a strong and healthy wind from your lungs your ability to sing high, loud, or long is going to be limited. So, as a singer, you're looking for an energized stream of air that you can sustain for a reasonable length of time.

When you get the feel for how to sing really efficiently and then practice it for a while, you'll be less and less aware of your breath support. It will just be there for you, effortlessly. The effort will have transformed into energy. But while you're learning, that breath support thing is HUGE. You won't be able to access those healthy, high, money notes without deliberately moving tons of air to get them.

### **SINGER BREATHING: THE HARDEST THING ABOUT IT IS THAT IT'S TOO EASY.**

As you now know, the physical stuff that comes together to create your voice is all part of the respiratory system. Singers who get the feel for efficient breathing and then take the time to allow it to integrate into their singing have the most success with Neuro-Vocal Method. They also get where they want to go much faster than those who don't take the time to get the hang of it.

Most important, though, is this: using your breath efficiently gets you what you want and keeps you healthy. Hitting money notes takes bucketloads of air. Trust me on that. If you haven't hit a money note, you have no idea how much air it takes. And if you're going to sing more than one or two songs in a row—like an entire gig or show, for instance—then your healthy breathing habits will keep you from trashing your voice.

### **LET'S GET PHYSICAL**

Your lungs are passive tissue. Unlike your heart, which does its own job, your lungs rely on the muscles surrounding them to make them work. When certain muscles contract, the spongy lung tissue is squeezed and you've exhaled. When other muscles contract, the lung tissue is stretched out and you've inhaled. Any discipline that uses breath actively—swimming, yoga, playing a wind instrument—places emphasis on the *manner* in which the breath is taken. You know this already, but singing is no exception. What you may not know is that you're already doing it. All night, every night.

### **WAKING BREATHING AND SLEEPING BREATHING**

We're addressing the *way* that you breathe, so I want to make you aware that you're already breathing in two distinctly different ways. I call them waking breathing and sleeping breathing. To demonstrate “waking breathing,” imagine there's a birthday cake in front of you that's ablaze with candles. Now blow out your pretend candles. Like you mean it. Make sure you get every one. (Seriously. Do it. Someone has to demonstrate this.)

Now take that same big breath again and **stop** just before you blow out the candles. Notice how you raised your chest and shoulders, filled your upper part



of your torso, and probably made a sound as you inhaled. You just demonstrated a very exaggerated version of how you breathe all day: waking breathing.

We don't tend to breathe that way when we're involved in concentrated or relaxed activities, like practicing guitar or watching a movie, but when we're out and about and inter-

acting with people we tend to take shallow, relatively quick breaths into the upper part of our lungs. That is also the way you breathe when you're stressed, scared, or excited.

There's nothing intrinsically wrong with this kind of breathing, of course. You're still alive, after all, so it must be working. Also, if you're trying to catch your breath after walking up the Statue of Liberty's staircase, for instance, it's the only way to go. For singing, though, not so much.

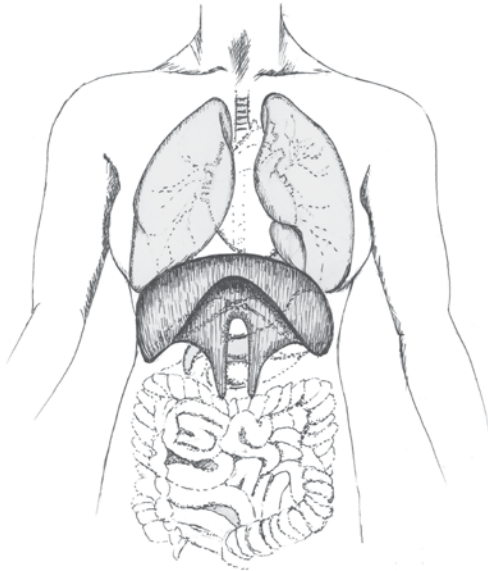
I need you to demonstrate again. Look at yourself in the mirror as you take that big, birthday-candle breath, and you'll notice that you've lifted your whole thoracic cavity (chest) to an unnaturally high position. You've pulled up your collarbone, shoulders, arms, and ribs, and you're holding all those heavy bones up there while you wait to exhale. Now watch yourself exhale. You'll see your body settle back down into a more natural posture.

So here's the question: if you're holding all that weight up in that unnaturally high position, how much control will you have as you exhale? Gravity is working against you, pulling your torso back down to where it belongs, and as you exhale you'll be blowing out most of your air in the first second or two. Good way to blow out birthday candles, but not the best way to support your singing voice.

Inhaling like this *feels* like the way to get a bigger breath. Ask anyone to take a deep breath, and that's what they'll do. But the reality is that the old birthday-candle breath doesn't use the full potential of your lungs. If we want to use the larynx, a part of the respiratory system, as efficiently as possible, it makes sense to give it more air to work with, right? To breathe that much more efficiently, we're going to turn to your "sleeping breathing" and enlist the strength of (you knew it was coming) the diaphragm.

The diaphragm is a large muscle, shaped like an open parachute, which literally

separates your torso into two halves. It is the muscle to which the bottom of the lungs are attached. It's attached to your front and sides, and all the way around to your spinal column. There are little holes in it so that your circulatory, digestive, and nervous systems can all get where they need to go, but mostly it's a big, flexible sheet of muscle. Above it, in the thoracic cavity, are your heart and lungs. Below it, in the abdominal cavity, are all your other internal organs.



The diaphragm is your primary breathing muscle when you're asleep. You can see this when you're in a semi-reclined position with your feet up, the way you might be when you read or watch TV, or when you're lying on your back. In these positions you're almost forced to breathe as you do all night, every night—the diaphragm contracts down toward your hip bones, and your abdominal muscles relax to allow for the additional space needed by the lungs as they fill with air.

There are two really important things about this manner of breathing as far as you, the singer, are concerned:

1. You already know how to do it.
2. You practice it every time you sleep.

So, really, how hard is this? **The hardest thing about being conscious and in control of our breathing as singers** (intentional breathing, or Singer Breathing, as it will be called in this book) **is that it's too easy.** So if it gets challenging as you're getting the hang of this, just remember, "I do this while I sleep. Relax."

There's one more thing that will help you get the hang of this. Your abdominal wall is made up of those vertical muscles between your hip bones and your rib cage. The diaphragm and the abdominal wall have what medical people call an "antagonistic relationship," meaning that they can't operate independently of one another. The diaphragm has to do what the abdominal wall tells it to, and vice versa. Now, you don't really have conscious control over your diaphragm's behavior, but that doesn't matter because you *can* control your abdominal wall, and your diaphragm has to do what your abdominal wall tells it to. As you breathe in and relax your abdominal wall, your diaphragm contracts and allows your lungs to fill with air

This tummy-in, tummy-out breathing experience will not happen simultaneously with chest-up, chest-down breathing. It's one or the other. If you're trying this breathing as you're reading this and it's not working, don't worry. We'll get to the "how" later.

*without* lifting the rib cage and shoulders. (Again, just as you do when you're asleep or reclining.) As you breathe out and tighten your abdominal wall, your diaphragm relaxes, allowing the abs to push the air out.

Net effect for you is this: when you inhale, your tummy sticks out. Not a lot, just some. When you exhale, your abdominal muscles engage and pull in. Voice teachers often tell students to “breathe from the diaphragm” or “breathe deeply into the body.” Obviously, your breath collects in your lungs, but thinking about the sensation of your breath being in the belly is very helpful when you're learning how to breathe with intention. It can also be helpful to people who are old hands at Singer Breathing. Everybody needs reminders from time to time.

I hope I've made a good case for getting the hang of Singer Breathing. You already know that I'm motivated by laziness and hope you are too. You're going to get a lot more air for a lot less work with Singer Breathing than with birthday cake breathing. You'll also sing louder and more in tune, and have greater endurance. Most importantly, though, you'll need it to hit your money notes. Simple as that. Your goals, in order, for the Banana, are:

1. Learn to deliberately take a Singer Breath.
2. Get the hang of taking a Singer Breath so it feels comfortable and familiar.
3. Apply that singer breath to phonating on pitch patterns.

## THE BOWL: POSTURE

If you're making a banana split and you don't have a dish, you don't have a banana split: you have a pile of ingredients in a sticky puddle on your counter. *Posture* is the same to the Neuro-Vocal Method. If you get the hang of Singer Posture and use it consciously until it becomes a habit, it will make learning and applying all the other skills easier and more effective.

I originally called this section “Ambitiously Lazy” because I was afraid that if I called it “Posture” you wouldn't read it. Posture is one of those words that just seem to carry baggage. It just *sounds* restrictive and punishing. And if you have a history of being nagged about your posture then it probably has especially unpleasant connotations for you.

I hope you can let that go for the duration of this chapter. I opened Chapter 1 of this book by telling you I really am ambitiously lazy, and I believe you should be too. I believe in getting a little uncomfortable and working a little more consciously if it means that down the road I'll be spared what would otherwise be hard work. Or extra work. It's like learning to ride a bike or operate a new computer application. It takes a willingness to learn and get the hang of something, but in the end it makes that thing - getting where you want to go or editing video - faster and easier.

Remember, Neuro-Vocal Method is about efficiency. It's not about right or wrong, good or bad, passing or failing. Neuro-Vocal Method is about "does it work, or doesn't it?" So we're going to start with the thing that gives you the most result for the least work. Good posture does a lot of your work for you and, as you'll see, makes efficient use of your energy. I hope I can convince you to be ambitious in making a habit of good posture so that you can afford to be a little lazy in the long run.

## WHAT IT'S NOT

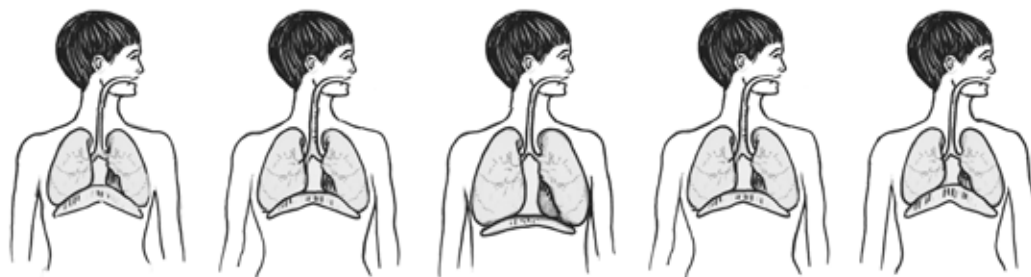
If you've ever been told, or told yourself, to "stand up straight," you probably did what nearly everybody does: arched your upper back and threw your shoulders back like wings to achieve a "straight" posture. How long did you hold it? Maybe three seconds? That's because the posture you put on in response to that very helpful suggestion was completely unnatural. You couldn't sustain it because your body's not put together that way. That method of correcting your posture doesn't work, so we're not going to use it.

The method we'll be using is described in Chapter 6. That chapter will go through the *how* of achieving easy, natural posture. Before that, though, I want you to understand the *why*.

## STOKING UP

This is a cutaway picture of your torso, showing your lungs and the movement of your diaphragm.

You can see that as the lungs expand, the diaphragm flattens out. So the easier you can make the diaphragm's job, the more air you take in and the less energy you expend to get that air.



If the diaphragm is restricted, then the lungs can't expand as far. You then, as you're singing, have both less air to move and less power to move it. If the diaphragm can move freely up and down in a nice, straight torso, then it can more easily do its part in generating breath energy. A nice, straight torso is a result of natural, healthy posture.

## YOUR VOICE NEEDS ROOM

The larynx, where your vocal chords live, is part of the respiratory system. If the whole respiratory system is working easily and efficiently, then the larynx can be, too. If you're standing with a slouchy posture while you sing, then your chin is probably jutting out a little. Or a lot. Or you're lifting your chin. Especially on high notes.

When you're lifting or jutting your chin you're compressing your larynx and your trachea (windpipe). You're squishing them. The more you reach, the more they get squished. A larynx that's being compressed is not operating efficiently: it's working harder to get a less effective result. But don't worry. I'm not suggesting that you stand up straight like you're in a military parade. That's weird and stiff, and nobody sings like that. In Chapter 6 we'll look at how to get the most efficient, sustainable, and not-weird posture for singing.

For a singer, the two main reasons to stand with efficient posture are to facilitate an easy and natural movement of the diaphragm, and to discourage reaching out or up with the chin. There are lots of very good reasons for anybody to make good posture a habit, though. Here are six.

1. **It's how you look, dahling.** Studies have shown that people perceive others with good posture as being more successful and attractive. Subjects with poor posture were rated as “unkempt,” “slovenly,” and “unfriendly.” Good posture makes you look slimmer, taller, and more confident. Also, your clothes fit better.
2. **Or is it how you *feel*, dahling?** This has been documented in several studies, but it's more powerful if you try it yourself. Walk around in a slouched position for a minute or two and note how you feel emotionally. Now do the same with your chest lifted but your shoulders and the rest of your body relaxed, and note how you feel emotionally. Interesting, isn't it? Studies by researchers Paul Ekman and Wallace V. Friesen show that, though we assume that our emotions govern our facial expressions, it's equally true that our facial expressions result in predictable emotions. In other words, our bodies and faces have an unavoidable connection with our emotions, and vice versa. So if you want to alter your feelings, you can do so by altering your facial and physical expression. If you want to *feel* fabulous, dahling, you must make a point to *look* fabulous!
3. **It's easier to breathe.** But we've been through that already, right?
4. **Circulation and digestion are more efficient.** You probably don't think about your internal organs as being active, moving things, but they are. All day and night they're expanding, contracting, beating, and transporting. If the organs of the abdominal cavity are squished by droopy posture, they have to work much harder to do their jobs, and those jobs are done less efficiently.
5. **Less stress on muscles and joints.** Osteopaths and chiropractors often refer to

“abnormal wear and tear” of joints. They mean that, beyond the ordinary wear and tear of daily use, you can stress your joints additionally by using them abnormally, and that includes the stresses of bad posture. This, of course, can become a snake eating its own tail, with bad posture creating joint stress, and joint stress then inducing bad posture. This also applies to muscle stress.

6. **Age happens.** Lord willing, you’ll be alive (or are alive) past age seventy or seventy-five. Physical therapists find that to be the golden age for reaping the benefits of good physical habits (or suffering the fallout of bad ones). Of course, things crop up in life that have nothing to do with whether or not you had good posture, good nutrition, or regular exercise when you were younger. But it has been shown that these habits, good or bad, affect your well-being as you grow older. And, getting back to where we started, you *do* want to look fabulous, don’t you?

Your goals for the Bowl, are:

1. Familiarize yourself with the difference in feeling between efficient and inefficient posture.
2. Practice until you’ve conquered any resistance to efficient posture (experiencing discomfort or fatigue in certain back muscles, or emotional resistance based on your self-perception, for instance).
3. Start the process of associating efficient posture, what I call Singer Posture, with phonating by consciously incorporating it into all the exercises.
4. Since you’ll look fabulous when you’re exercising good posture, take every opportunity to admire yourself in mirrors.

## THE SPRINKLES, SYRUPS, AND WHIPPED CREAM—STYLE

When you listen to recordings of singers, two things allow you to identify who you’re hearing: the timbre of the voice and the singing style.

Singing style is the result of many elements coming together, some easy to identify and some more elusive. Vowel pronunciation, type and placement of embellishments, phrasing, expressions of pitch and rhythm, and vibrato all contribute to a singer’s style. Style may grow out of musical influences, regional dialects, particular vocal strengths or limitations, or affinities for certain kinds of sounds.

Some well-known singers have a particularly unique vocal timbre. Most singers in the pop genres, though, are more easily recognized by a distinctive style. Sometimes bands have a signature sound that, if you’re familiar with the band, allows you to peg the singer. When you’re able to identify a singer based on auditory information only, it’s because you’re familiar with their timbre and style.

When singers have both control and stamina, whether as a gift or as an achievement, most are satisfied. For them style isn't an issue. Either they already have a style they're comfortable with or they're experiencing an organic expansion of their style as a result of their vocal control and confidence. Some singers, though, want to continue their journey toward a unique expression by working on their style.

## SINGING, PLAIN AND SIMPLE

Never underestimate the power of the human voice. It is possibly the most compelling sound in the world to us *Homo sapiens*. Studies with newborns indicate that the first distinction baby humans make in their auditory experience is between “a voice” and “not a voice.” Very simply, people find the sound of a voice intrinsically interesting. It seems that we're wired for it. And even more compelling than a voice that's speaking is a voice that's singing.

Singers sometimes feel that they should “do more” with their singing. They think they should add more embellishments or be able to fluently create melodic alterations. If you're that singer I certainly don't want to discourage you from your musical goals, but I *would* like to share some thoughts for you to chew on.

Some singers just sing the melody. Some of the very best singers just sing the melody. Singing a lot of notes doesn't mean you're a *better* singer. It just means you're a *type* of singer.

The genre itself is going to influence your style. If you're singing musical theater or cabaret music there isn't much room for changing or enhancing the melody. In those genres the focus of the song is the lyric, and a busy melody can steal attention from the lyric, so though interpretation is important, embellishment is not. In genres rooted in folk or rock there isn't much need to alter or embellish a melody. Of course you can if you like, but folk and rock based genres don't necessarily ask you to. Some genres are wide open. Blues, for instance. Some blues singers sing the melody straight up, and some interpret so much that they never sing the original melody of the song. The point is that melodic alteration and embellishment isn't always a given. It isn't always an indication of better singing.

Also, even though you may not give yourself credit for it, you already have a style. Even if you're afraid to color outside the lines, melodically speaking, you still have a style. You pronounce vowels a certain way. You break up or finish phrases a certain way. You're interpreting melodies every time you sing. You can't help it. All the singers you've loved and listened to live inside your head, influencing how you express songs. The rules you learned in choir at your school or church, the ways you impressed the rap group you formed in high school, or the techniques you applied during your six months of college voice lessons also contribute to your style.

As they gain control of their voices, many singers experience more confidence in asserting a musical style. Once you're sure that the musical ideas you hear in your head are actually going to come out of your mouth, you'll give yourself permission to make new musical choices.

## ADDING TO YOUR VOCABULARY

We all have an active vocabulary of more than five thousand words. That sounds like a lot of words. You'd probably admit, though, that you tend to use words you're familiar and comfortable with in daily conversation. We seldom add anything new to our collection of frequently used words.

People who are active about adding to their vocabulary are often people who speak or write for a living. When you make your living expressing ideas verbally, you need to have a large vocabulary at your disposal. For writers and public speakers, adding to their vocabulary on a regular basis is how they continue to both improve their craft and expand their thinking. When a novelist runs across a word she needs to look up in the dictionary, she doesn't think, "Well, that's a great word, but somebody else already used it. If I use that word I'll be copying another writer, and that would cost me my artistic integrity. I'm a good writer! I'm sure I can make up my own words."

That may sound silly, but a lot of singers seem to believe a musical equivalent of that idea; that every musical expression should be original and organic, and that deliberately incorporating others' stylistic ideas will call their own integrity into question.

The truth is that you should steal shamelessly. Okay, maybe not steal. It's not as though you're taking something that diminishes someone else. You're just allowing them to share their ideas with you. Have you ever considered how incredible and tremendous it is that you have at your disposal the work of thousands of great singers from the last hundred years? If you want to enhance both your singing style and your musical awareness, you should copy your favorite singers as accurately as possible, and down to the smallest detail you can. The difference between good and great, after all, is attention to detail.

You may feel resistance to that idea. You might be afraid that if you steal from other singers you're surely a hair's breadth away from surrendering your musicianship, your artistic expression, indeed your very personality. But I'd like to convince you that maybe, just maybe, the exact opposite is true.

Although they're expressed in the same language, different disciplines have different vocabularies. Physicists use words that historians don't. Choreographers use words accountants don't. And in the same way, different genres of music employ

different melodic vocabularies. If you want to kick ass in a particular genre of music, you have to be fluent in the vocabulary of that style. If you're not already, you have to learn to be. And if you have a limited vocabulary, if you use the same licks over and over, then you should probably expand it. Assuming that the way you sing is natural to you, how are you going to achieve that? How will you get better and add more style to your singing?

The answer is that you should do what all musicians have done since the dawn of musical time. Copy. Listen carefully and emulate what you hear. That's how people learn music. That's how people have always learned music. And it's the best way to add to your musical vocabulary. Just as journalists learn new words and work them into their own unique writing style, you can learn new licks and approaches and work them into your unique singing style.

Your goals for the Whipped Cream and Sprinkles are:

- Raise your awareness about what singers do to stylize their singing. Listen for the little things.
- When a singer does something you like, stop and listen again. Then try to copy it. Do this as many times as necessary until you can do what they did.
- Apply some of your new stylistic vocabulary to a song.





## CHAPTER 6

# Prepping for the Exercises

While everything you've read so far is a collection of precious pearls—don't get me wrong—the following are probably *the most important words in this book*:

***It's an exercise in futility to try to be all things to all people. You can't, so don't even try.***

I know it's true in singing; you'll find the most fulfillment and recognition by identifying what you're good at and getting better at that one thing.

It's true for this book as well. This isn't the perfect method for every singer everywhere: it might not be right for you, and I might not be your gal. That's okay. If I'm not the right teacher for you, please find the person who is! If this method doesn't click for you, then find one that does. There are a lot of terrific teachers, teaching products, and methods out there. Find what feels right, at least for now, and work with that.

With that said, I know that Neuro-Vocal Method works for most people. As long as you're willing to let yourself sound bad—or at least unfamiliar—in the exercises and pay attention to how things *feel* rather than how they *sound*, you'll get a lot of benefit from this method. If you simply cannot bear to hear yuckiness issuing forth from your own self, then this won't work for you and you shouldn't waste one more of your allotted minutes of life on Earth doing it.

## MAKING IT WORK

If something in this book doesn't make sense to you, it could be because the *way* I'm expressing the concept or describing the exercise doesn't work for you. There are other ways to express each of these concepts or fill in the missing pieces. If something doesn't seem to make sense, keep listening; it might make sense later, when I touch on a related piece. So don't bail. Just carry on and come back later to whatever stumped you.

The most common reason I've found for people "not getting" something is that they haven't given themselves a chance to get the hang of it. Really. Not master it, not be brilliant or perfect or even competent, but just plain get the hang of it. Don't give up just because something feels awkward and unfamiliar. Give yourself a chance to get the hang of it.

As you begin Neuro-Vocal Method, the exercises are things you've probably never done before. The behaviors within the exercises feel awkward and unfamiliar. But remember the Lizard Brain! When you're learning the exercises and they feel strange and unfamiliar, that means that you're bypassing the "sing" file in your brain. You're retraining your Lizard Brain by introducing new feelings associated with singing. That's how Neuro-Vocal Method works quickly. If something feels familiar it means you're opening the same old files in your motor cortex. It's crucial to your success with this method that you execute the exercises *without singing*. If that feels uncomfortable that's a good thing!

**Unfamiliar is good. Unattractive or disconcerting is good.  
Because those are not emotions you experience when  
*you're doing something you already know how to do.***

Use that short and precious period of unfamiliarity to focus on the point of each exercise and reach for the physical feelings associated with each one. That's the best way to speed up the magic.

These exercises, when executed properly, really can work magic on your singing—but that doesn't mean you get to phone it in when you practice. You'll get results in direct proportion to what you put in. Practice regularly and with integrity, and you'll get great results quickly.

Kind of like how it is with everything in life.

Before we get into the exercises, though, I'd like you to practice the two foundation skills—Singer Breathing and Singer Posture - the Bowl and the Banana. We talked about them in the last chapter: this will help you put words into action.

## SINGER BREATHING

Take a few minutes to try Singer Breathing. Don't overdo it: just get a feel for it. Relax! Don't work too hard. Remember, this is how you breathe when you sleep. If you already know how to do this you can skip this section. If not, read on.

The four exercises that follow are designed to help you get the feel for taking a Singer Breath. One of them should work for you. Try them in order. When one works for you, you're done. Move on. Once you get the feel for taking a Singer Breath

you can practice it in everyday life. Then, once you're conscious and in control of Singer Breathing, you'll learn to energize it for singing!

### Singer Breathing Exercise 1

1. Look at yourself in a mirror that reflects at least from your waist up.
2. Stand up straight. (Not stiff, weird straight. Just straight like you'd be if you just got dressed up in fancy clothes and you were checking the results in the mirror.)
3. Put one hand on your solar plexus (the top part of your tummy, just beneath your ribs).
4. Remember that this is easy, the way you breathe when you're asleep.
5. Imagine you're breathing through a skinny little cocktail straw.
6. Take a small, slow, audible breath through your imaginary straw and feel for your solar plexus to push or relax **out** just a little. *Don't look for big results yet. You're trying to get the **feel** of it. Focus on the feeling.*
7. Once you feel that gentle and small expansion of the solar plexus or overall abdominal area, exhale. Don't hold your breath.
8. Check to see if you're still standing up straight, and try again. Do it a few times, each time checking to make sure you're standing up straight.

If you get dizzy or feel like you need to take a big breath, stop. Come back to it in a minute or an hour or a day.

### Singer Breathing Exercise 2

1. Follow the first four steps of exercise 1 above.
2. Push your hand **firmly** against your solar plexus.
3. Focusing on your abdominal wall, push your tummy out against your hand. **You won't feel yourself inhaling, but you will have inhaled.**
4. Relax, exhale, and take a normal breath.
5. Repeat steps 3 and 4 several times.
6. After you've inhaled in this forced way a few times, try doing the same thing without the pushing. Relax the abdominal wall out instead of pushing it out. If

## You Are a Water Balloon

When you're very relaxed or reclined - when you're kicked back watching TV or reading, for instance - it's easy to notice that your tummy sticks out a little bit when you inhale. When that happens you're demonstrating a gentle version of Singer Breathing.

People often get turned around when they're learning to consciously take a Singer Breath. They'll inhale and, as they do, suck in or flatten the tummy.

A water balloon is an image that often helps people get the hang of Singer Breathing if what they're exhibiting is the opposite of what they're going for.

Imagine you have the neck of your balloon snugly over the faucet and you turn the water on. The balloon fills up. Now imagine your tummy as the balloon. A balloon filled with water expands; a tummy filling with air (so to speak) expands. Air in, tummy big. Air out, tummy relaxes and deflates.

you're successful, do it enough times so that you have a sense of controlling it.

7. Do not work too hard! Take easy, small breaths and get the feel for what you're doing.

If you get dizzy or feel like you need to take a big breath, stop for a minute or two.

### Singer Breathing Exercise 3

1. Look at yourself in a mirror that reflects at least from your waist up.
2. Stand up straight.
3. Lace your fingers together and put them on top of your head.
4. Remember this is easy, the way you breathe when you're asleep.
5. Pretend that you're breathing through a skinny little cocktail straw.
6. Take a small, slow breath through your imaginary straw and feel for your solar plexus to relax **out** just a little. Don't look for big results yet. Take small breaths. *You're trying to get the **feel** of it. Focus on the feeling.*
7. Once you feel that, exhale.
8. Check your posture and try again. Do it a few times, each time making sure you're standing up straight before you inhale.

If you get dizzy or feel like you need to take a big breath, stop for a minute or two.

### Singer Breathing Exercise 4

Note: This is my least favorite exercise, and I recommend using it only as a last resort. It seldom translates to a standing position, and I don't know of any singers who perform lying down. However, it can be a step toward being conscious and aware of how Singer Breathing feels. After you feel like you have an awareness of it, go back to one of the previous three methods and try it standing up.

1. Lie flat on your back on the floor.
2. Put your hands on your tummy.
3. Breathe with your eyes closed and get a sense of how that feels. Feel your tummy going up and down, but more importantly, feel what's *causing* the tummy to go up and down.

Once you have the feeling for how this Singer Breathing works, we'll take a step sideways and look at how to make it easier. There's a secret weapon that will do most of the work for you, but you have to know what you're shooting for before we can apply it. Now that you do, let's move on to making it easier.

Remember: the goal of Singer Breathing is to forget about it as soon as possible, trusting and knowing that it's working for you without you having to think about it.

Let's start forgetting.

## SINGER POSTURE

What follows is a simple method for “putting on” a posture that’s going to make your singing and breathing easier, as well as making you feel more confident and energized. It’s also a posture that will let you move freely when you’re performing on stage.

You’ll want to get used to Singer Posture so that it feels normal, so practice it in normal situations. Practicing Singer Posture isn’t something you’ll need to make time for, but you’ll need to have an awareness that your goal is to make it familiar and comfortable. If you keep it in mind you can practice for a few seconds or minutes at a time while you’re doing everyday things.

### Singer Posture Exercise: Magnet Lift

Stand in front of a mirror that reflects you from at least your waist up. Take a Singer Breath. Look at yourself *without “fixing” anything* and note how you’re standing. Now you’re ready.

Imagine that the ceiling has an electronic magnet on it. When the switch is flipped on, it will become an active magnet. Now imagine you have a little magnet stuck to the middle of your sternum, right here.

When the switch is flipped, that magnet will be drawn to the ceiling. But because it’s attached to you, it can’t get far. It can only pull you up a little bit, maybe a half an inch. Half an inch straight up toward the ceiling. Not forward. Straight up. Nothing else changes. The *only* thing that happens is the sternum is drawn straight up toward the ceiling a little bit.

Okay. Go. Flip the switch.

If you lifted your sternum straight up without *trying* to change anything else, then you may have noticed your shoulders gently rolling back a little. They now look more squared to your torso.

You may also have noticed that your body didn’t feel “stiff.” You may have experienced a more lifted and open feeling across your chest.

If neither of these things happened or you didn’t notice, try again. Now repeat all that with your attention on your neck and head.

## Good Posture

Not everybody needs to improve their posture. Some people have great posture. You might have a background in dance or gymnastics, yoga or fencing. You may have been in choirs or marching bands. You might just have naturally good posture. If you already have good posture, getting the feel for Singer Breathing was probably pretty easy for you. If you already have good posture, skip the Singer Posture section. If Singer Breathing becomes challenging as you’re doing the vocal exercises, though, come back to this section on posture and give it a read.



Relax your sternum down into its previous (dropped) position. You can even exaggerate it a little. Bring your attention to your neck between the middle of your shoulder blades and your head. Now do the Magnet Lift again.

You'll probably feel your neck align, with your head feeling as though it's sitting more easily on top of the your spine. For most people, simply feeling this position consciously will speak for itself. Know, too, that this position will do two very powerful things for you. It will keep your larynx free from unnecessary muscle tension in your neck, and it will make any habitual (and constraining) reaching or craning with your chin extremely difficult. Craning and reaching with your chin makes efficient phonation impossible and will keep you from hitting your money notes.

## THE EASIEST ROUTE TO SINGER BREATHING

Here's an exercise proving that this posture is for lazy people.

1. **Stand in a slouchy way.** Maybe even exaggerate the slouch a little. Take a birthday-candle breath. Easy, right? Now take your Singer Breath. Not so easy.
2. **Stand in your new Singer Posture.** Now take a Singer Breath. Easy, right? Now take a birthday-candle breath. Not so easy.

By getting into the habit of standing with that lifted sternum and open chest, and your shoulders like a coat-hanger you'll be virtually free from having to think about how you're breathing. You almost *have* to engage your Singer Breathing. You'll still know how to breathe consciously so you can amp it up when you need to, but if you can get used to this posture, the habit of Singer Breathing will naturally follow.

## MAKING IT A HABIT

The key to making Singer Posture your normal posture is to practice. Doing it, consciously, until you don't have to think about it anymore. Sound familiar? Practice for five seconds, ten times a day. If you're worried about how you'll remember to do that, here's a trick.

Find a touchstone, something you do a number of times every single day. It could be:

- Standing up.
- Walking into a room.
- Texting.
- Washing your hands.
- Waiting (in line, on hold, for your computer to boot up, to to receive a response to a text, at a red light, after the test has been distributed, while your friend grabs her purse, after you've ordered your food, for your turn, etc.).
- Doing something routine at work.

Each time you're aware of that touchstone, stop, put on your Singer Posture, and take two Singer Breaths. Then move on.

Seriously. If you do that ten or more times a day for a couple of weeks, you'll begin to notice that you don't have to think much about it anymore. Or at all. You're just standing like that automatically. You'll catch yourself taking Singer Breaths without thinking about it. As I keep saying, your body *wants* to do the more efficient thing, and it will quickly and easily cooperate with your intentions if you give it a little help.

If you feel like you've got this, then move on to the next chapter. If you're frustrated or not getting the hang of it, read on.

HELP! THIS POSTURE THING ISN'T WORKING FOR ME!



Endomorph



Mesomorph



Ectomorph



Endomorph



Mesomorph



Ectomorph

Let's talk body types.

Human beings have three basic body types: the endomorph, the mesomorph, and the ectomorph. Everyone's body is a combination of elements of each. A lot of people are *mostly* one of the three types, and if your physique looks like one of the illustrations above, you're probably one of them.

If you're one of the first two, it's likely that you were able to do the posture thing without a lot of difficulty. If you're of the ectomorphic persuasion, though, you may have understood it intellectually but felt challenged in the application. For you beautiful, gazelle-like creatures, I have some additional tips.

### **ANYONE EVER CALL YOU AN ECTOMORPH BEFORE?**

If you're not sure whether or not you're an ectomorph, take a look at this list of things that describe ectomorphs *beyond* their appearance. If two or more apply, *and* if you had trouble with the whole magnet-in-the-ceiling thing, then you're probably an ectomorph.

- You were a skinny kid.
- You like to eat but often find that, rather than feeling hungry, you just get kind of spacey and unable to concentrate.
- Sometimes you eat not because you feel hungry, but because it's time to eat and other people are eating.
- You'd prefer the chocolate dessert to the baked fruit and ice cream dessert.
- Authority figures or loved ones have reminded you to "stand up straight."
- Sleeves are sometimes too short for you. Women, you might avoid wearing three-quarter-length sleeves. Men, you frequently roll your sleeves up or choose short sleeves.
- Sleeve length notwithstanding, almost all clothes (as long as they're the right size) fit you well. There are almost no styles you can't wear.

If this sounds like you, you're in good company. Almost everyone who's built like you finds this whole posture thing challenging. But please don't give up on this piece of the Neuro-Vocal Method. It's very powerful and very worth it. Besides, over the years all my lovely, lanky students who have adopted this posture as their default tell me that they feel much more confident overall. It stands to reason (and there are studies to support) that standing like a confident person will make you feel more confident.

When you try the Magnet Lift:

- You may not feel confident about how far is far enough.
- You may feel like you're standing too straight, like a wooden soldier.

- You may be concerned that you look weird.
- You may feel tension or fatigue in the muscles next to your spine and between your shoulder blades.
- You may find you're locking your knees.
- You may find it challenging to express that physical focus in the middle of your sternum. Rather, it feels more generalized across your chest.
- You may find you're still pulling your shoulders back.

If any of these things are true, don't worry. You'll be able to do this. It will just take a little more focus for you than for other people. That's the price you pay for being so beautiful and getting to eat so much. But really, you'll love how this feels when you get it.

### GET THE FEEL FOR THE FOCAL POINT.

1. DON'T USE THE MIRROR.
2. Put your index finger on that spot in the middle of your sternum and close your eyes.
3. With your eyes closed, push down on your sternum and let your posture follow. Ribs, shoulders, neck, everything.
4. Stop pushing with your finger. Now let your sternum push your finger up and out. **Try not to think "in and out,"** but rather, **think "up and down"** as you keep your eyes closed and feel your rib cage, shoulders, and neck respond to this exercise. You may also be aware of your abdominal wall working for you in an unfamiliar way.
5. As you do this you'll begin to feel the center or the focal point of this posture – right where your finger is.
6. *If you can feel the focal point, move on. If not, keep looking for it for a while. Take a break if you need to.*
7. Once you're feeling that focal point, bring yourself to the lifted posture using your index finger as a guide.
8. Let your hand drop to your side. As your hand drops you'll probably notice that you're feeling a little like a wooden soldier, or that you're thrusting your chest out.
9. **NOW LOOK IN THE MIRROR.** Notice that you don't look at all the way you feel. In fact, although the physical feeling you're experiencing is rather dramatic, the visible expression is hardly noticeable.
10. Now, with or without your finger on your sternum, drop and raise your posture a few times. Watch yourself as you feel what's happening. Head straightening

on the spine, shoulders rolling gently back, muscles between the shoulder blades working a little harder.

You may find that you have it right now, but the next time you try you've lost it again. Trust and believe that, like everything else you've gotten the hang of in your entire life, you'll get the hang of this. Also, please note that on the scale of awful versus easy tasks, this is really far over on the easy side of the scale.

I promise you'll get the hang of this posture thing if you give yourself a few chances. And when you do, besides making you look even more gorgeous than you already are, it will make your singing a lot easier. And that's what all this is for, no?

## NOW WE MAY PROCEED

There won't be a million exercises here. In the interest of not overwhelming or confusing you, I'm going to stick to basic and effective exercises. I'll explain the focus or goal of each exercise, too.

## HOW OFTEN AND HOW LONG?

Imagine you've decided to learn to play tennis. You go to your first lesson, and you suck. You feel uncoordinated and stupid and embarrassed. But for some reason (you'll have to fill in that blank yourself) you're highly motivated to learn to play tennis well enough that it will be fun for you.

If you want to become proficient enough to make this darn game *fun*, are you going to spend three hours a month on the court, or three hours a week? Or would you even devote three hours a day if you're determined to learn before your transfer next month to your new job in Tunisia?

You get my point. If you make time to do these exercises once a week, you'll quit before you start. You'll be frustrated and feel stupid. You'll try it a couple of times, forget everything you read about how important it is that things feel unfamiliar at first, and go back to trying to make sense of randomly selected YouTube videos.

If you want Neuro-Vocal Method to take hold quickly, you'll find twenty to thirty minutes a day to practice for two to three weeks. At that point you'll know what's going on, you'll have started to experience your new skills in your singing, and then you can dial it back if you want to. How often you practice will probably depend on your goals and on how excited you are.

The bottom line for acquiring the skills Neuro-Vocal Method promises is the same as for any new skill: you'll get out what you put in.

## THREE-PART SESSIONS

The exercises are explained with the assumption that you'll be engaged in twenty-to-thirty-minute exercise sessions. Each session is divided into three parts:

- Part 1:** Warm-ups
- Part 2:** Skill Development
- Part 3:** Working the Blend

Each exercise has an explanation of which elements you're working with. Pick between two and four exercises in each section for each practice session.

If you keep your attention on the indicated focus during the exercises, you'll keep your Lizard Brain from perceiving "singing." Then the physical feelings you've accessed through your non-singing, pitched phonating can make their way into your singing, both unconsciously and consciously. It's a pretty cool experience when it starts happening.

## FORMAT

Each exercise begins with its name. Then you'll see guidance for the exercise listed as follows:

- Part:**
- Elements:**
- Range:**
- Time Spent:**
- Purpose:**

**Part** indicates where we are in an exercise session. If an exercise can be applied to an additional part of the session, it is indicated in the Alterations and Modifications section at the end of the description.

**Elements** indicates which of the Banana Split elements this exercise focuses on.

**Range** indicates the range you should be using. Range is sometimes indicated by feel, so you'll *have to be sensitive* to how you're feeling. **More is not better.** So, if I say an exercise is to be done in your "comfort zone," it means the most comfortable notes you have. These are the notes you access when you talk. If you're doing one of those "comfort zone" exercises in an ascending pattern and you feel the top note of the pattern change *in feeling or tone*, then turn around and continue the pattern descending. No heroics.

There will be a suggested range, but it's just a suggestion. You should always de-

fer to the feeling. Or, if you're a voice teacher, listen for the change in the student's timbre and decide from there.

**Time Spent** indicates the approximate time this exercise will take **once you know how to do it**.

**Purpose** indicates the “why” of the exercise. I may include a little background or anatomical explanation in this part so that you get the “why.”

## AFTER ALL THAT, THE EXERCISE WILL BE DESCRIBED.

Because it's a written description of a specific physical activity, it's pretty unlikely that you'll always interpret the instructions exactly as I mean them.

If you're a voice teacher, a lot of this will make sense to you the first time through. Your only challenge might be to keep in mind the neurology theory upon which Neuro-Vocal Method is based. If you're not a voice teacher, it might not make sense until you get the hang of how the exercises feel. You can refer to the Money Notes support videos for clarification at [MeredithColby.com](http://MeredithColby.com).

After the description of the exercise itself there will be three more sections.

## CHECKING FOR FORM AND TROUBLESHOOTING

Every exercise relies on the form with which it's executed. And every exercise has some physical skills that require an increased awareness by the singer, or need to be mastered by the singer. No surprise there. So once you've given the exercise a couple of initial tries, check your form. Remember, the primary strength of the Neuro-Vocal Method lies in **shaking up your motor action plans**—getting you out of your comfort zone in order to trick your Lizard Brain into accepting new behaviors. Form is important.

After you've tried the exercise, checked your form, and tried it again a time or two, you'll likely find a challenge or two in its execution. When that happens, scan the list of troubleshooting categories. There you'll find some help to get you past whatever is hanging you up.

## ALTERATIONS AND MODIFICATIONS

This section gives you an opportunity to modify the exercise to your skill level. If it's giving you trouble at the outset, or if you're having a hard time getting the hang of it, you'll probably find a suggestion or modification either in this section or in the Troubleshooting section. If you're comfortable with the exercise, then there's probably a way to make it harder so you can push your skill level a little.

Also, if you're a voice teacher you'll want to refer to this section for ideas to accommodate individual students. If you come up with a modification or alteration

that works really well and that's not listed, please let me know!

### **SUGGESTED PRACTICE SESSION**

Once you have the hang of the exercises, you should execute two to four from each of the three parts. That should take between ten and twenty minutes.

### **SAY IT AGAIN, YA'LL.**

I know from experience that I can't say this enough. The more you're willing to let go of the idea that you're singing as you do these exercises, the faster the changes will show up in your actual singing. **If your intention is to *sing* when you do these exercises, you'll be keeping yourself exactly where you are.** In order to invoke change in the physical aspects of your singing, you have to stop singing.

Don't sing the exercises.

Phonate on pitches.

Look for the feeling.

Keep the goal or focus of the exercise in mind.

Check your form.

Be willing to sound bad—to make noises on pitches instead of singing.

Imagine you're talking, or whining, or whatever.

Just don't imagine that you're singing.

When you do, you'll be amazed at how fast you'll get results!



# Part 3





## EXERCISE SECTION 1:

# Warm-Ups

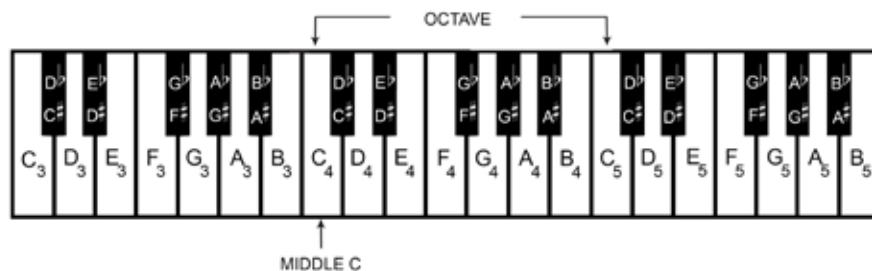
Most singers who've sung for a while are used to vocal warm-ups. In fact, we're so used to them that we tend to blow them off. We don't bother with them at all, or we do them with half a brain while doing something else, or we take less time but sing higher and louder right out of the gate.

With Neuro-Vocal Method the warm-ups can't be skipped. Each warm-up involves a skill that you'll be applying to a greater degree in either the Skill Development section or the Working the Blend section. So you need to pay attention to what you're doing. You need to do these warm-ups with integrity.

Once you're familiar with how the Neuro-Vocal Method exercises roll out, the warm-ups will make a lot of sense to you. Until then, take it on faith and do your best.

*The examples of the note patterns in this section are just that: examples. They're meant to show how the patterns are executed and how they're meant to progress (ascending or descending). They are not meant to suggest starting pitches or exercise duration. Find your comfortable starting pitch and appropriate duration according to the directions for each exercise. You could also go to my site, [MeredithColby.com](http://MeredithColby.com), to find the piano guide track to each exercise by name.*

*The pitches indicated are per the illustration below, with middle C being C4.*



## WARM-UP EXERCISE #1: BREATHE &amp; BUZZ

Part	Warm-up
Elements	Breath, chest register
Range	Super-duper comfort zone
Time Spent	2–3 minutes

**Purpose**

This exercise gets you centered and focused on the physical feelings you'll use most in your exercise session, specifically a low breath, a breath that is not grabbed, forward placement, and a supported tone. It also brings you into the present and helps you concentrate on what you're doing. This exercise asks you to do two things (really, just two things): breathe and buzz.

**Objectives**

- To hold Singer Posture throughout.
- To allow for a low, easy breath without grabbing.
- To experience your phonation as a buzzy, kazoo-like feeling somewhere in the front of your face.

**THE EXERCISE:  
BREATHE & BUZZ**

**Breathe:** Use the note pattern below. Put on your Singer Posture, take your Singer Breath. Your sternum is lifted and your ribs are up off your diaphragm, allowing it to move freely. Take a couple of these breaths to remind yourself that you're breathing the way you do when you're asleep.

*This is the easiest exercise you're going to see here.* Take this opportunity to really, really pay attention to your posture as you breathe. Try to keep your sternum lifted. Keep it from sinking and having to be lifted up again. You may have to think, *Lift, lift, lift* as you phonate on your buzzy “n” sound. Give yourself a chance to feel

High female

Low female

High male

Low male

your abs helping you take in breath by *relaxing*. They can only do that when your rib cage is *already lifted* before you begin to inhale.

**Buzz:** Normally when you hum, you hum on an “m” as in “Mary.” Here you’ll be humming on an “n” as in “Nancy.” Your jaw is loose, your lips are relaxed and not touching, and as you phonate into that “n” position you’ll notice that you’re experiencing a buzzy feeling in the bridge of your nose, and/or your cheekbones, and/or your front teeth.

Once you’ve got those two things, start phonating on the pattern that follows. Go up a few semi-tones until you perceive a slight change in your voice, then turn around and descend as far as you’re comfortable (no pushing!).

NOTE: These pitches are to demonstrate the pattern only. The suggested range is a guideline. Please use the pitch range that works for you.



### CHECK FOR FORM

- Are you standing with your Singer Posture **as you phonate**, with feet shoulder-width apart?
- Is your sternum staying high and lifted, not dropping as you phonate?
- Are you feeling your abs gently engage?
- Are you feeling a gentle buzz in the bridge of your nose OR under your eyes OR near your front teeth?
- Is your jaw hanging loosely, with your top and bottom front teeth about half an inch away from each other?
- Are you taking an easy, low breath during the beats of rest?
- Is the buzz completely connected? (By that I mean it stays the same all the way through each tone pattern. It doesn’t go away and come back or get quieter and then get louder.)

### TROUBLESHOOTING

#### My chest is moving up and down.

- Use a mirror to watch yourself. Focus your eyes on your sternum and try to keep it lifted and open as you phonate. Or try to keep it still and relaxed—not moving. Your body doesn’t necessarily tell you when your posture is sinking,

but your eyes will.

- As you phonate, think, *Lift, lift, lift, lift*. You won't really be lifting any further, but in defeating the habit of dropping your sternum as you phonate it will *feel* as though you're lifting.
- You may be waiting until the split second before you phonate to grab your breath. In that case it's almost impossible *not* to breathe high in the body. Take the whole three beats to take an easy, low breath. But don't work too hard. You're going for focus, not work.

### **I don't feel my abs engaging.**

- You may be looking for a big feeling. Your abs aren't working very hard at all. Feel for engagement rather than effort.
- Your chest may be habitually moving up and down without your awareness. Use a mirror.

### **I'm not feeling the buzz.**

- You may be making an "l" or an "m" sound, not an "n" sound. Try saying "hunn" as in "honey" to begin the tone and find the tongue placement. Another good word for this is "tin." Be sure to land on the "n" sound, though. Don't stay on the vowel. It's the "n" that's giving you the buzz.
- You may be going for too much volume. You're looking for a normal speaking volume. Don't work too hard.
- You may be making a "pretty" sound. Make a very plain, speech-like sound instead.
- You may have the buzz but you're looking for something big. This is a small feeling in the front of your face.
- You may be phonating on pitches that are too high. This exercise should be done on the pitches of your natural speaking range.
- You may be clenching your teeth. Remember to keep the jaw loose and the teeth from touching.

### **I feel the buzz, but not all the time.**

- This one is a big deal, and there's only one reason for it: inconsistent breath support. You want to "keep the bumblebee in the air," as I tell my students. This is the very first exercise where you focus on your placement in order to get your abs to engage in the needed breath support. So,
  - Focus your attention on your buzz. Really hold the intention to keep the buzz *consistent throughout the pattern*, not just on the individual pitches.

- Be willing to let it feel sloppy. For hit-the-note kind of people, connecting a line can *feel* sloppy. Let that be okay for now.
- Pay special attention to not grabbing your inhalation, but instead taking a slow, relaxed breath during the three beats given.
- It may help to think of the buzzing as being a tad louder. Just a tad, though.

### **I just can't make that darn "n" sound! I keep opening to the vowel right away.**

- If you really, really can't make the "n" sound, then just hum on an "m" as a person normally would. If you do hum on an "m" you need to:
  - Be aware that your tongue is staying forward, gently touching the back of your lower teeth,
  - Be aware that you're not grabbing your breath and lifting your rib cage (otherwise known as "gasping") when you open your mouth to take a breath, and
  - Keep it easy and plain so you can experience the buzzy sound, which may be less pronounced using the "m" sound.
- Once you get the hang of humming through pitches on the "m" sound, try the "n" again.

### **MODIFICATION**

This exercise can also be used to warm up the head register. In fact, if the singer is the type who defaults to the head register it's better to start this exercise higher and lighter than what is indicated here. If using this exercise in head register, start with a gentle tone about a major third or fourth higher than is indicated in the instructions. Don't go too high. Stay comfortable.

## **Are You a Grabber?**

Some people have the darndest time taking that low, easy Singer Breath. And it's very understandable.

All day, every day you're talking. Talking is improvisational. As you form your thoughts into words you take high, quick breaths so you don't lose continuity as you complete each thought. It stands to reason that you'd probably breathe this way when you sing or do exercises because you're practicing this kind of breathing all day.

But singing is different. Singing gives you the luxury of knowing how much time you have to breathe between phrases. So, beyond learning to breathe low in the body, Singer Breathing also requires developing another habit: inhaling without grabbing.

That means you'll have to be super conscious for a while. You're not working harder, but you're paying closer attention. Because if you want to hit those money notes, you're going to *have to have this breath thing down*. Seriously. But don't stress about it. Just pay attention for a while until it gets easier and more natural. You'll be surprised how quickly it will happen if you commit to good form for a little while.

High female

Low female

High male

Low male

## WARM-UP EXERCISE #2: CHARLIE BROWN'S TEACHER

<b>Part</b>	Warm-up
<b>Elements</b>	Breath, chest register, balance, placement
<b>Range</b>	Comfort zone or a smidge past
<b>Time Spent</b>	2–3 minutes

### Purpose

This continues the warm-up process and so is an easy, non-taxing exercise. It lets you feel your balanced tone as your soft palate practices lifting and your tone is naturally forward, tricks you into keeping a supported chest tone, and keeps you from “singing” as you warm up.

### Objectives

- To maintain Singer Posture throughout the exercise.
- To breathe easily and low in the body without grabbing.
- To feel the soft palate lift at the same time that you feel the buzzy forward placement through the use of a comical and exaggerated “wow” sound.

## THE EXERCISE: CHARLIE BROWN'S TEACHER

**Do your best impersonation of Charlie Brown's teacher:** You know, from your favorite holiday *Peanuts* cartoon? If you've never heard it or don't know what I'm talking about go to YouTube and search “Charlie Brown's teacher.”

The reason it's called that—rather than “muted trumpet,” which is what actually makes that “wah-wah-wah” or “wow-wow-wow” sound that's used for the voice of grown-ups in the *Peanuts* cartoons—is that I want you to be goofy with this. I'd like you (as always) to get away from any idea that you're singing and instead make a silly, talky sound, the best imitation of Charlie Brown's teacher that you can manage.

**Check, double check:** Assume Singer Posture and take a Singer Breath.

**Walk it down the first time:** Start on a comfortable pitch and walk down a five-note scale (see the pattern below) using the voice of Charlie Brown's teacher. Really plain. Really silly. Not pretty AT ALL.

You're looking for a feeling of balanced placement. You should feel that lifted soft palate, you-could-fit-a-ping-pong-ball-back-there kind of feeling in the back **at the same time** that you feel the buzz-in-your-face feeling in the front. For most people,

making the muted-trumpet sound on “wah-wah-wah” works, but for some people, thinking “wow-wow-wow” works better and makes more space in the back. Try them both out.

Next, walk down the scale with a goofy attitude two or three times. Then do the same thing, but **connect** the tones as you descend the scale. Connect them, but keep the idea of the silly sound.

**Walk it down every time after that:** After you know how to do this, always use the connected wah-wah-wah rather than the speech-like staccato sound. Go back to the staccato sound only if you lose the feeling of balanced placement: your soft palate lifted like a yawn and the front-of-your-face buzz.

**Phonate on the pattern that follows:** Start at the bottom of your range and walk up in half-steps. Go up a few semi-tones until you perceive a slight change in your voice, then turn around and descend as far as you’re comfortable (no pushing!), then ascend again. (These pitches are to demonstrate the pattern only. Please use the pitch range that works for you.)



### CHECK FOR FORM

- Are you standing with your Singer Posture **as you phonate**, with feet shoulder-width apart?
- Is your sternum staying high and lifted, not dropping as you phonate?
- Are you feeling your abs gently engage?
- Are you keeping your tongue forward in your mouth?
- Are you feeling a gentle buzz in the bridge of your nose OR under your eyes?
- Are you feeling a wide-open sort of feeling in the back of the mouth?
- Are you keeping a very plain, goofy kind of sound? Not trying to make it pretty?
- Are you taking an easy, low breath during the beats of rest?

### TROUBLESHOOTING

**My chest is moving up and down, or my sternum keeps sinking.**

- Make sure you’re taking an easy Singer Breath, not a quick “speech breath.”
- Use a mirror to watch yourself. Focus your eyes on your sternum and try to keep it lifted and open as you phonate. Or try to keep it still and relaxed—not

moving. If you normally stand with a sunken chest, your body won't necessarily tell you when your posture is sinking, but your eyes will.

- As you phonate, think, *Lift, lift, lift, lift*. You won't really be lifting any further, but in defeating the habit of dropping your sternum as you phonate it will feel as though you're lifting.
- Try an exaggerated, "toy soldier" kind of posture. For some people this makes it harder to breathe low in the body, but for some people it works like a charm to get the feel of the lifted rib cage and engaged abdominal muscles. It's a tool. You won't stand like this after you're confident you have the feel for it.

#### **I don't feel my abs engaging.**

- Keeping the sternum lifted and with very little movement will force the abs to engage. Remember, this isn't forever. You're just teaching your body a new way to make sound.

#### **I don't feel the buzz or the space.**

- You're most likely still singing. Stop being pretty, be silly, and do the exercise like Charlie Brown's teacher. Or like a muted trumpet. It should sound cartoonish and goofy.
- Your vowel may be too flat. Try "wow-wow-wow" instead. See if that feels different.
- You may be looking for a big feeling. It's a small feeling. And though it's often focused in a particular spot, it isn't always. Sometimes singers just feel a general sense of vibration in their face or forehead.
- More volume may help. Try thinking of talking loudly or even yelling as you do this. You shouldn't feel this in your throat or voice, though, so if you experience any tension in your throat or voice (and assuming you're standing straight and not craning) turn your volume down a smidge.

#### **I can't help switching to head register.**

- You're probably taking this exercise too high. Stay in a comfortable, low, speech-like range. Not too loud, not pushy, just easy and plain-sounding. Switching to head register means you've gone too high.

## ALTERATIONS AND MODIFICATIONS

Here's an alternative pattern. Do this one very slowly.



If the “wah” or “wow” sounds aren’t working for you (or if you’re a voice teacher), here are some other options that do basically the same thing. Please apply the guidelines for good form cited above to these alternative sounds.

- Using the same note pattern, say “ho-ho-ho.”
  - Do this slowly. Connect the line.
  - Make sure your jaw is dropped and your tongue is gently touching the back of your lower teeth.
  - Make sure your sternum is lifted and that **you’re initiating each “h” with a gentle flex of the abs.** Don’t use your pectorals to push down. Make sure you’re taking a Singer Breath low in your body.
  - Be talky. Don’t sing.
  - Use the list above for Form and Troubleshooting.
- Using the same note pattern, say “blah-blah-blah.”
  - I use this version when the singer can’t seem to separate themselves from the idea that they’re singing. For some reason it’s easier to be loud-talky and not pretty when you’re saying “blah-blah-blah.”
  - Use the list above for Form and Troubleshooting.

This exercise can also be used to get a balanced tone higher in the range. This modification should go in the Working the Blend section, but it can be a little tricky to do without a teacher. To use Charlie Brown’s Teacher to blend high:

- Be super conscientious about your posture. This just plain won’t work if you’re craning your neck or jutting your chin. Also, like all high blending, it takes a lot of air.
- Open your mouth wide enough to feel your soft palate lifting. Once you’re there, look in the mirror. You’ll need to keep it that far open.
- Do the same exercise, but this time you’ll be saying “Hwah-wah-wah.” Start with the “h” sound, which you should feel in your abs, to force that soft palate up. Then don’t move your jaw much at all. Your mouth should just stay wide open.
- As you’re doing this your operative words will be “ugly” and “loud.”

- Go as high as you can without cracking or straining. I strongly recommend that you use Power Breathing for this exercise modification.
- Really, this is better done with a teacher, but you'll be surprised how high you can go with this open, free sound if you keep thinking *ugly* and *loud*. And this is a real singing sound. Don't think of it that way when you're doing it, though.

## WARM-UP EXERCISE #3: PUFF YOUR PUNIM

<b>Part</b>	Warm-up
<b>Elements</b>	Breath, placement
<b>Range</b>	Comfort zone in either chest or head register
<b>Time Spent</b>	1–3 minutes

### Purpose

This continues the warm-up process and so is an easy, non-taxing exercise. It allows the larynx to begin phonating on deliberate pitches without working hard or singing, thus encouraging the vocal folds to “warm up” as blood actively fills the tissues. It keeps you from initiating pitch with a glottal plosive, but instead encourages an easy vocal onset and a natural, coordinated phonation. It also improves pitch accuracy.

(*Punim* is the Yiddish word for “face,” and “puff your punim” just sounds more fun to me than “puff your face” or “puff out your cheeks.”)

### Objectives

- To maintain Singer Posture throughout.
- To breathe easily and low in the body without grabbing the breath.
- To loosely puff out the cheeks with each pitch, blending each “m” sound into the next “p” sound to allow for a continuous stream of air.

## THE EXERCISE: PUFF YOUR PUNIM

Using the note pattern below and using a comfortable pitch range, say “pum-pum-pum.”

**Puff:** Keeping your lips together, puff out your cheeks. Release to a “pah” sound. Your lips should be soft and your jaw in a naturally relaxed position. Get the feel for that.

**Pum:** Keeping your tongue gently touching the back of your lower teeth, and using the cheek-puffing initiation of the tone, say “pum.” You’ll notice that the “m”



High female

Low female

High male

Low male

of the “pum” lands your lips in the same place they started to make the “p” sound of “pum.” That being the case, one “pum” can lead right into the next “pum” without rearticulating your tone.

Follow the pattern below, and use the feeling to determine the range you use. You should not push at all; rather, think of this as a talky exercise. This can be used in head register or chest register or both, but in neither register should you extend the range beyond what is natural and easy. You may find that the higher you go, the more deliberate you have to be in puffing out your cheeks on the first note of the pattern. However, if you start feeling tightness in your larynx, or if your voice starts acting squirrely of its own accord, that’s your cue that you’ve gone a bit too far. No worries. Just continue the pattern in descending half-steps.

This is the go-to pattern for this exercise:

Pum-pum-pum - pum-pum-pum - pum Etc.

Please use this pattern if this is not an easy exercise for you. Do it slowly and use a plain sound:

Pum - pum - pum Etc.

### CHECK FOR FORM

- Are you standing with Singer Posture **as you phonate**, with feet shoulder-width apart?
- Is your sternum staying high and lifted, not dropping as you phonate?
- Are you feeling your abs gently engage as you initiate the pattern?
- Are your cheeks puffing out with each pitch, especially the first one of the pattern?
- Is one pitch leading right into the next?
- Are you staying in your comfort zone with pitch?
- Is your tongue gently touching the back of your lower teeth?

## TROUBLESHOOTING

### **My chest keeps sinking or dropping.**

- Singers often find that their posture follows their pitches on descending lines. It's just a thing. But be aware of that tendency.
- As you're saying "pum-pum-pum," think *lift-lift-lift*.
- When you use an energized sound like the one in this exercise, you need to use enough air. Your choices are to either push down with your pectoral muscles or flex the abdominal muscles. It's really hard to do both, and doing one tends to preclude being able to do the other. If you keep your sternum lifted, you *have* to use your abs to get that pitch started.
- As a last-ditch effort, you can stand with your back against a wall, feeling the wall touching the back of your head (making sure your chin isn't dropped down too far) and your shoulder blades. Hold that position as you try the exercise.

### **It's hard to puff out my cheeks!**

- That's great! That means this is a good exercise for you! The best thing to do is slow down and start with Alternate Pattern #1. Slow the exercise down as much as you need to in order to get the feel for puffing your cheeks with a sound attached to the puff.
- Slow down the exercise and use the shorter alternative pattern shown above. Hang out on the "m" for a little before you puff into the next "p."

### **The pitches I intend aren't the ones I hear coming out of my mouth.**

- It's very likely that you're using your vocal folds in a way that's more efficient than they're used to. In getting more bang for your (breath) buck, you're probably hearing yourself go a little sharp (high). It's disconcerting to hear that happen, but hang in there. Keep doing the exercise with good form **with the intended pitch in your head**. You'll find that your voice will work it out for you in very short order.
- Don't try to control your voice to be super accurate with pitch. **If you're phoning on this exercise or any early warm-up exercise and you're not nailing the pitches, just let it be.** Let your larynx warm up before you start asking it to perform perfectly.

**ALTERATIONS AND MODIFICATIONS**

**Simplify**

- If the mouth coordination required for this exercise feels too complicated for you, slow it down or use the shorter pattern or both.

**Blah-blah-blah**

- Use the sound “blah” instead of the sound “pum.” The cheek thing won’t happen, but you can do it with really loose lips. Pretend you’re a dog.

**Blow it off**

- This is a simple warm-up. It’s not worth sweating. If it’s not working for you, just move on.

**Make it harder**

- The following pattern (at a quick tempo) forces you to take a quick and efficient breath. If you don’t, you’ll be gasping by the fourth or fifth time through the pattern.

Pum - pum - pum - pum    pum - pum - pum - pum    - pum - pum - pum - pum    - pum

## WARM-UP EXERCISE #4: BUZZY NEH

Part	Warm-up
Elements	Breath, chest register, placement
Range	A little past your comfort zone. See suggested ranges.
Time Spent	2–3 minutes

### Purpose

To familiarize yourself with the feel of a natural forward placement and the buzzy feel of an easy chest register sound. To capture that feeling in the instant you go from the “n” sound to the bright vowel and carry that feeling through the rest of the pattern.

### Objectives

- To maintain Singer Posture throughout.
- To breathe easily and low in the body without grabbing the breath.
- To connect the sounds rather than articulate individual pitches.
- To feel the buzz of the “n” sound translate to a buzzy feeling in the vowel sound.
- To carry that buzz through the descending line.
- To stay in the pitch range of speech, where natural chest register is most easily accessed.

## THE EXERCISE: BUZZY NEH

**Walk it up:** Use the pattern shown below. Start on a pitch that, while not your lowest possible pitch, is pretty close to the bottom of your range. With your tongue in the “n” position, as it was in the Breathe and Buzz exercise, hum up the first two pitches. As in the other exercise, the “n” should create a gently buzzy feeling like a kazoo in your face.

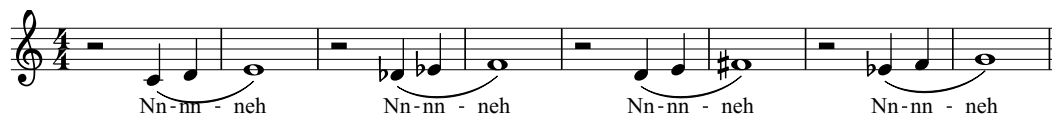
**Open:** Once you hit the third note—the pitch that’s the major third—open to an “eh” sound, like the first part of the word *nest* or *neck*. Make sure your tongue is gently forward in your mouth, your mouth is open, and your smiling muscles are relaxed. If you keep your sound speech-like and plain, you’ll feel that vowel pop into the front of your face (bridge of your nose, behind your teeth, under your eyes, etc.) the instant you open to it from the “n.” Be aware that your vowel is an “eh,” not some version of an “ah” or an “aw.” Keep your sound plain and not sing-y by focusing on

The image shows four musical staves, each representing a different voice type. Each staff contains a sequence of four notes: a half note on G4, a quarter note on A4, a quarter note on B4, and a half note on A4. The staves are labeled as follows:

- High female: Treble clef, notes on G4, A4, B4, A4.
- Low female: Treble clef, notes on G3, A3, B3, A3.
- High male: Bass clef, notes on G3, A3, B3, A3.
- Low male: Bass clef, notes on G2, A2, B2, A2.

the feelings of what you're doing rather than the sound. If you don't get the feeling, check the Troubleshooting list.

**Hold the pitch:** Once you open to the “eh” vowel on the third pitch, hold the tone and feel the buzz for a count of four.



### CHECK FOR FORM

- Are you standing with your Singer Posture **as you phonate**, with feet shoulder-width apart?
- Is your sternum staying high and lifted, not dropping as you phonate?
- Are you feeling your abs gently engage?
- Are you making an “n,” not an “l” or an “m”?
- Are you getting the buzzy feeling on the “n” on the ascending pitches?
- Is your tongue gently touching the back of your lower front teeth as you phonate on “eh”?
- Is your mouth open sufficiently on the “eh” vowel?
- Are your smiling muscles relaxed?
- Are you keeping your head and neck posture the same as you open to the vowel, not jutting forward or reaching up?
- Is your “eh” vowel sufficiently bright to allow for the buzzy, forward feeling? Don't look for a pretty sound, look for a buzzy feeling. It won't be pretty.
- Are you taking an easy, long, low breath during the beats of rest?
- Is your volume at speech level? Not too loud and not too soft?

### TROUBLESHOOTING

#### I can't feel the buzz on the “n” sound.

- You may be making an “l” or an “m” sound, not an “n” sound. Try saying “hunn” as in “honey” (going instantly from the “hu” to the “n”) to begin the tone and find the tongue placement. Another good word for this is “tin.” Be sure and land on the “n” sound, though. Don't stay on the vowel. It's the “n” that's giving you the buzz.
- You may be going for too much volume. You're looking for a normal speaking volume, or perhaps even a tad quieter. Don't work too hard.

- You may be making a pretty sound. Make a very plain, ugly, or speech-like sound.
- You may already have the buzz but you're looking for a big feeling. **This is a small feeling in the front of your face.** If that's challenging you, move your awareness to how your throat feels. You should feel nothing in your throat other than a gentle vibration.

### **I don't feel the forward buzz when I open to the "eh" vowel.**

- Check your vowel. For some people this kind of naturally forward vowel comes easily because it's part of their dialect. For others, though, this can feel unnaturally bright or nasal. If you're not buzzing, brighten up your vowel so it feels a little whiny or brassy.
- Instead of thinking "n-eh" think "n-eck." As long as you stay on the vowel until the moment you stop your tone – with the "k" sound – your intention to sing "neck" might help your vowel stay brighter.
- Try thinking "n-ay," as in "neighbor."
- You may be being too sing-y. Make a plain sound.
- Be aware of your vowel the instant you open from the "n." It probably popped into place and then your existing habit pulled it back to where you're used to feeling it. See if you can identify the different feeling in that moment and grab onto it to keep it there. Remember, you're looking for a feeling more than a sound.
- You may be, along with one of the previous two things, trying to move off the top pitch of the exercise too quickly. If you're getting the hang of trying to find the right vowel or find and keep the forward buzz, then don't change pitches. Just open up and hold the tone until you get it. Do that a few times to give yourself the chance to get the feel for it.
- Make sure your tongue is touching the back of your lower teeth throughout the open vowel part. Not pushing, just touching.
- Make sure your mouth is open enough to allow for an "eh" vowel and that your smiling muscles are in a relaxed position. Often people will not open their mouths enough or will pull back the sides of their mouths, both of which inhibit the buzziness of the "eh" vowel.
- Be aware that your "n" and your "eh" are connected as though you're saying the beginning of the word *nest* or *neck*. **Do not rearticulate** (that is, wait a millisecond and then start again) as you hit the vowel.
- If the "eh" vowel just isn't working, don't beat your head against the wall. Go for either an "a" vowel as in "sand" or "natural," or a bright "e" as in "knee" or

“bee” instead. It’s a little harder to keep your smiling muscles relaxed with these vowels, but one of them might work better for you.

### ALTERATIONS AND MODIFICATIONS

- **Walk it down:** Holding on to the front-of-the-face feeling, walk your “eh” vowel back down to your starting pitch. Connect each pitch one to the next *even if* it feels sloppy or slidey to you. Your goal is to keep the buzz and forward feeling consistent through each pitch. Ascend by half-steps until you feel the tiniest tightness in your throat or you feel you’re about to break into head register.



- **Slide it:** Slide through the ascending and/or descending notes instead of walking. Sliding takes more breath support and vocal coordination than hitting pitches in a scale. Slide up on an “n,” hit the vowel, and slide down on the vowel keeping it forward. Take your time and be aware of your placement.



- Use an “ah” rather than an “eh.” It’s typically more difficult to keep the “ah” vowel forward, so doing this ups the ante and makes this exercise more difficult but still a gentle warm-up.
- This exercise can also be used to a similar effect in the head register. In that case the exercise should start in a middle area of the voice and ascend to a high but still comfortable pitch before descending again.
- This can also be a blending exercise once you’re warmed up. In that case,
  - you can push the top of the exercise higher, and/or
  - you can also open to brighter vowels such as “ee” or “a,” and/or
  - you can expand the range from a third to a fifth.

## WARM-UP EXERCISE #5: HUNG-AH

<b>Part</b>	Warm-up
<b>Elements</b>	Chest register, placement, balance
<b>Range</b>	A little past your comfort zone
<b>Time Spent</b>	2–3 minutes

### Purpose

Here you're teaching your body to initiate a tone with the soft palate in the lifted position. The placement comes forward naturally as the tongue leaves the soft palate, and the soft palate flies into the elevated position. A natural chest tone is achieved as you hold the intention of a plain, speech-like, or ugly sound (use the word that works best for you) and open to the vowel sound in the natural chest register range.

### Objectives

- To maintain Singer Posture throughout.
- To breathe easily and low in the body without grabbing the breath.
- To keep the mouth open enough that the lifted soft palate is maintained.
- To feel the buzz as you touch the back of the tongue to the soft palate, and to feel the balanced placement as you open to the “ah.”
- To connect the tones rather than rearticulate individual pitches.



High female



Low female



High male



Low male

## How It Works

When the jaw drops into a very open position, your soft palate thinks you're yawning. It reflexively responds by going to the elevated position. When you make the “ng” sound, the back of the tongue is sticking itself to the soft palate. (Try it by saying “ring” and holding out the “ng” so you can feel that tongue position.) If the jaw is in that dropped position, the soft palate is trying to elevate while your tongue in the “ng” position is holding it down. When you open to the vowel, releasing your tongue from that “ng” position, the soft palate instantly lifts up to a slightly exaggerated version of the lifted position (for a moment) and your sound pops to the front of your face. Your part is to feel that open space—together with the forward placement—in that instant when your tongue leaves the roof of your mouth. Hold the intention to maintain that feeling as you move through the rest of the pattern.

## THE EXERCISE: HUNG-AH

**Hung:** Use the pattern shown below. Start on a low pitch that is not your lowest pitch. Drop your jaw a little farther than what feels comfortable to you. You want to have your mouth open enough so you can feel your soft palate lifting up in the back. Be sure you're maintaining your head and neck posture and that your smiling muscles are relaxed. Starting on the “ng” sound (or saying “hung” very quickly and then staying on the “ng” part) be aware of your little kazoo buzz as you move through the first two pitches of the exercise. Even though it feels awkward, keep your mouth open wide. Remember, you want your soft palate to think you're yawning. Also be sure to keep your tongue gently touching the back of your lower teeth.

**Ah:** Keeping your jaw dropped and your mouth open wide, go seamlessly from the “ng” sound to the “ah” sound as you reach the third pitch. *Do not rearticulate.* Keep your sound plain and speech-like. Keep your smiling muscles relaxed. In the instant you go from the “ng” to the “ah,” be aware of how your voice sounds and the feeling of being simultaneously open in the back *and* buzzy in the front. Try to maintain this open and buzzy feeling as you descend back to the first pitch, per the pattern below. There shouldn't be any feeling of tension or work in the throat during this exercise. The throat should feel relaxed and totally open, the sensation of the voice should occur in the mouth and face.

Ascend by half-steps until you feel any tightness in your throat, you feel you're about to break into head register, or you *do* break into head register. Then turn around and descend by half-steps until you're a whole step or two above your starting pitch. Repeat if you want to. (These pitches are to demonstrate the pattern only. Please use the pitch range that works for you.)



### CHECK FOR FORM

- Singer Posture? Singer Breath? Feet shoulder-width apart?
- Is your sternum staying high and lifted, not dropping as you phonate?
- Are you feeling your abs gently engage?
- Is the back of your tongue actually touching your soft palate as you ascend in the “ng” position?
- Are you getting the little kazoo on the “ng” as you ascend the pitches?

- Are you using a plain, speech-like sound?
- Is your tongue gently touching the back of your lower teeth?
- Is your mouth open wide enough for you to feel your soft palate in the elevated position? Does your soft palate think you're yawning?
- Are you keeping your head and neck posture the same as you open to the "ah" vowel, not jutting forward or reaching up?
- Are you keeping your mouth open wide as you open to the "ah" vowel?
- Is your "ah" vowel sufficiently bright to allow for the buzzy, forward feeling?
- Are you taking an easy, long, low breath during the beats of rest?

## TROUBLESHOOTING

### **The "hung" buzzes but "ah" doesn't.**

- Try a couple of different "ah" sounds. Try opening to the vowel on an "aw" sound, thinking "hung-aw" or an "uh" sound, thinking "hung-uh."
- Try opening to an "a" as in "hat" or "sand," or an "eh" as in "neck" or "get" instead. Take care not to tighten your smiling muscles.
- Do not listen to yourself. Do not make a pretty sound. Think plain, speech-like, talky, ugly, or whatever. Just don't sing the pitches.
- Make sure you're in chest register and giving it enough volume. This should be like loud speech.

### **My tongue feels like it's going down my throat as I open to the vowel.**

- This is for one or all of the following reasons:
  - You have more tension than usual in the muscles in the back of the tongue.
  - The "ah" vowel you're opening to is too dark.
  - You think you're singing.
- The remedy is the same for all three. Change your vowel.
  - Try a couple of different "ah" sounds. Try opening to the vowel on an "aw" sound, thinking "hung-aw" or an "uh" sound, thinking "hung-uh."
  - Open to an "a" as in "sand," an "eh" as in "neck," or an "ae" as in "tray" instead. Be aware that these vowels make you want to pull at your smiling muscles, which in turn causes your soft palate to drop, so you'll need to be more aware of keeping your smiling muscles relaxed. If that still doesn't work, then show your voice teacher and let her figure it out (which she will). If you don't have a teacher and you can't make it work, just don't do this exercise. There are others to choose from.

**None of it is working!**

- This exercise can feel *very* awkward. As far as Neuro-Vocal Method is concerned, that's a really good thing. If you're concentrating on something new, there's a good chance that your Lizard Brain has no idea what you're doing and won't get in your way. You'll be free to phonate on a pitch rather than sing, and you'll allow for new feelings to occur during phonation. Accepting that it's awkward and new is your strongest tool for being able to do this. Go through the Form checklist again, knowing it's going to feel weird.
- If it's just not working, skip it. Come back to it another time.

**I'm not getting the feeling of being open in the back on the descending part of the pattern.**

- Your mouth may not be open enough. Your mouth needs to be open enough for your soft palate to think you're yawning to create that open feeling in the back of your mouth near your throat. Open bigger. If you have a temporomandibular joint (TMJ) condition (a jaw problem), that prevents you from opening that wide, skip this exercise. (You can try it again after you've learned Power Breathing.) If you just have tension in the TMJ, use this exercise to begin stretching that joint out and getting it to relax.
- You may be tightening your smiling muscles. Tensing those muscles causes the soft palate to drop into a neutral position.

**My jaw feels tight. It's hard to open that big.**

- A lot of people carry tension in their jaw joint. This is especially true if you clench or grind your teeth in your sleep. If your jaw joint feels plain ol' tight, that's probably what's going on. This exercise is harder for you because of that tension, but it's also beneficial to you for the same reason.
- You may have a TMJ condition. If you've already been diagnosed with a TMJ condition, you may want to skip this exercise (at least until after you've learned Power Breathing). If you choose to do this exercise, please proceed with extra awareness and modify it so that it doesn't hurt. You may not be able to open your mouth wide, but you can open it more than usual and be aware of keeping your smiling muscles relaxed. If you haven't been diagnosed, the following things could indicate a TMJ condition:
  - Pain or tenderness in the jaw joint, especially when chewing.
  - Persistent aching pain in or around the ears, or in or around the temple or side of your face.
  - Occasional locking of the jaw, particularly in an open position.

- The jaw joint occasionally clicks or shifts out of position and then snaps back in.

### **I'm not feeling the buzz.**

- You're most likely singing. Stop singing. Thinking of one of these words—whatever works for you—may help you stop singing: *plain, talky, ugly, whiny, buzzy, metallic*, or whatever else works for you. One of my students once achieved the non-sing-y, talky sound by imagining she was mimicking one of her college professors. You have to trick yourself.
- You may not have your tongue connected to the soft palate and instead are phoning on the first two notes with a vowel. Get the feeling first just by speaking words (*ring, sing*) and holding out the “ng.” Feel it so that you can identify it and reproduce it in the exercise.

### **I get the balanced feeling when I first open to the vowel, but then I can't hold onto that feeling.**

- You may be sucking your tongue back. Make sure it's gently touching the back of your lower teeth.
- You may be using too dark a vowel. Try thinking of the kind of “ah” vowel a “typical American” would make. If a bright “ah” sound isn't a natural part of your dialect or language, the sound of this vowel will be brassy and ugly to you. If you really can't get it, use an “a” sound as in the word “sand” or an “eh” vowel as in “neck.” Be aware that these sounds will make you want to pull your smiling muscles back, and you'll have to pay extra attention to keeping them relaxed.
- You may not be supporting your tone. Do the support checklist:
  - Singer Posture?
  - Sternum high and not dropping during the exercise?
  - Abs gently engaged?
  - Using enough volume?
- You may be articulating each note rather than connecting one to the next. People are often a little too precise with their pitch articulation, so that they stop and start their breath in a tiny way with each note. For these people, a line that's connected on one breath can feel strange. It's more breath work than they're used to, for one thing, but it can also feel sloppy or lazy. If this sounds like it might be you, then really overdo the slop factor. Really try to mush (or *carry* or *blend* or *connect*, whatever word works) each pitch into the next pitch. Be sure to take a bigger breath than you think you'll need. This kind of supported tone takes some work!

**I can feel the open space in the back but I'm not feeling the buzz in the front.**

- You may be looking for too big a feeling. The buzz is a small feeling that may be localized in the bridge of your nose, under your eyes, or behind your front teeth. It may, however, be a broader and more generalized feeling across the center of your face or even up into the lower part of your forehead. In either event, it's a very gentle buzzy sensation. Focus your attention to how the front of your face feels and look for something small.
- You may be singing. Stop singing. Thinking of one of these words—whatever works for you—may help you stop singing: *plain, talky, ugly, whiny, buzzy, metallic*, or whatever else works for you.
- You may be using too dark a vowel. Try thinking of the kind of “ah” vowel a “typical American” would make. If a bright “ah” sound isn't a natural part of your dialect or language, the sound of this vowel will be brassy and ugly to you. If you really can't get it, use an “a” sound as in the word “sand” or an “eh” vowel as in “neck.” Be aware that these sounds will make you want to pull your smiling muscles back, and you'll have to pay extra attention to keeping them relaxed. You may be articulating each note rather than connecting one to the next. People are often a little too precise with their pitch articulation, so that they stop and start their breath in a tiny way with each note. For these people, a line that's connected on one breath can feel strange. It's more breath work than they're used to, for one thing, but it can also feel sloppy or lazy. If this sounds like it might be you, then really overdo the slop factor. Really try to mush (or *carry* or *blend* or *connect*, whatever word works) each pitch into the next pitch. Be sure and take a bigger breath than you think you'll need. This kind of supported tone takes some work!

**ALTERATIONS AND MODIFICATIONS**

- This exercise can also be used to strengthen balance once you're warmed up. Increase your volume somewhat—think *I'm yelling* rather than *I'm talking*—and you should expand the range somewhat. However, in neither the volume nor the range should there be any feeling of tension or work in the throat. The throat should feel relaxed and totally open. Take the pattern as close to your break as you can. This should get you past your break once you're familiar with it. Be very aware of your vowel, and don't hesitate to go to a brighter “a” as in “sand,” or “eh” as in “neck,” if you feel you're pushing in the higher notes of the exercise. Let the feeling be your guide. Skinnier and brassier in your face is good: keep going! Pushing from your throat is bad: stop.

- Sliding through the pitches takes more support than articulating them. Try sliding from the bottom to the top and back to the bottom while being aware of your placement. You could also try sliding up, opening to the vowel, and holding it.
- When using this exercise as a building exercise for balance, it's best to use Power Breathing.

## WARM-UP EXERCISE #6: LIP TRILLS

Part	Warm-up
Elements	Breath, head register
Range	From wherever you want, to as high as you can go.
Time Spent	1–5 minutes

### Purpose

This is the go-to head register warm-up for voice teachers throughout the galaxy because it does three things very well:

1. **It forces you to support from your abs.** You literally can't do anything but a really short version of this exercise unless you're supporting your tone.
2. **It keeps you from singing.** It's hard to want to sound pretty when you make this silly sound. It forces you to warm up on a natural tone that's not affected or prettified in any way.
3. **In order to make the lip trill, you must have a connected, energized sound that's supported by breath.** The level of breath support necessary for trills allows you to reach pitches you thought you couldn't and experience high notes as being pretty easy.

### Objectives

- To maintain Singer Posture throughout.
- To breathe easily and low in the body without grabbing the breath.
- To feel the abdominal muscles engage as you phonate.
- To experience the sound as shooting *out*, rather than up and down with the pitches.
- To get your lips to do this trill thing even if it's difficult.

## THE EXERCISE: LIP TRILLS

**Make a motorboat noise:** Or make a motorcycle noise, or a pitched horsey noise. You know the noise I mean. You'll have your lips together, your teeth a little apart, and your tongue forward, and you'll blow air out against your held-together lips

The image shows four musical staves, each with a treble clef and a 4/4 time signature. The first staff is labeled 'High female' and contains a single note on the G line (G5). The second staff is labeled 'Low female' and contains a single note on the C4 line. The third staff is labeled 'High male' and contains a single note on the G4 line, with an '8va' marking above it. The fourth staff is labeled 'Low male' and contains a single note on the C3 line.

so that you get that noise. (If you really don't know what I'm referring to, go to the exercise videos on my web site, or search "lip trill" on line.)

**Do the trill:** Do the pattern that follows if this exercise is easy for you. If this exercise is giving you trouble, know that you're in good company and go to the Troubleshooting section.

**Go over your break:** Unless you start rather high (which you are certainly free to do) you'll be going over your break into your head register. It might feel weird, and it may feel a little sloppy, and you may feel unable to control your pitch very well. That's fine. Don't try to control it. This is a warm-up, remember? Also, it will work itself out after you've done it a few times.

Take the pattern up by half-steps as high as you can. You may surprise yourself when you hear the pitches you can access this way!



### CHECK FOR FORM

- Singer Posture **and** Singer Breath, feet shoulder-width apart?
- Focus on how you're breathing. This is a *breath* exercise, not a *lip* exercise.
- Is your line connected almost to the point of seeming too sloppy? One note leading right into the next?

## Chick-Magnet Notes

If you're a singer who prefers your chest register, regardless of your sex or age, the act of phonating into your head register can feel very strange. If you're a man and you've never sung in—or even tried to access—your head register (falsetto), then it can seem impossible.

It is not impossible (unless you have a particular kind of permanent vocal damage). It's also necessary. It will be harder for you at the beginning than it is for most people. Sorry, dude. That's just the way it is. Know that and take the extra time. It's worth it. (See the title of this section. Just sayin'...)

Please be extra patient and forgiving. The muscles in charge of creating your head register are lazy and likely to be unresponsive at first. Give them a chance to get a little stronger and learn to give you what you're asking for.

If your voice just doesn't want to go into head register on the Lip Trills exercise, then try the Register Separation exercise (Exercise #3 in the Skill Development section). It may help you to get the feel for the head register. In any event, until your muscles are a little stronger and more responsive, you should allow for a very small head register range (like, two to eight half-steps). Expect it to feel funny, to tire quickly, and to sound airy and light. That's all good. It'll change over time. How fast or slow depends on your overall vocal health and how determined you are.

This part of the process is important and worth your time. *If you want to hit your money notes, you'll have to have a working head register.* This will work for you; you'll just have to take the extra time to do it.

- Are you imagining shooting your sound *out* rather than up and down?

## TROUBLESHOOTING

### **It's hard to take a Singer Breath. I'm breathing into my chest.**

- This exercise seems to beg you to do the thing that it's trying to negate: grabbing short breaths high in the body (previously described as the Birthday Candle breath). Until this is easy for you, you'll have to be super conscious about not grabbing high, but instead breathing low.
  - Use the beats you have to breathe. Don't hold the last pitch out so long that you have to grab your next breath. Make the line short at the end, relax, breathe low.
  - Use your friend the mirror. Watch yourself with the conscious intention to keep your chest lifted and stable and watch your tummy pook out.

### **I just can't do it.**

This is a very challenging exercise for a lot of people. If your habit (which isn't your fault and you didn't know you were doing it) is to clamp off airflow from the lungs and use only the air in the trachea (your windpipe) when you speak or sing, then this exercise will be a challenge. Frankly, it's hard to learn and incredibly empowering to master. **You simply can't do this exercise without defeating a habit that's been holding you back in your singing.** (Please read that last sentence again.) You'll hate learning it, but you'll like it once you can do it. And really, it's not difficult once you get the hang of it. Give yourself a chance to feel awkward, work harder than you're used to, and get this puppy under your belt.

Some singers and voice teachers use a rolled "r" sound instead of the lip trill. While rolling the "r" does the same thing in a lot of ways, it requires a lot less breath power than the lip trill does. Your ability to hit the high, awesome money notes that Neuro-Vocal Method promises relies on strong breath support. So: beloved songbird, I'm afraid I have to insist that you use the trill instead of the "r."

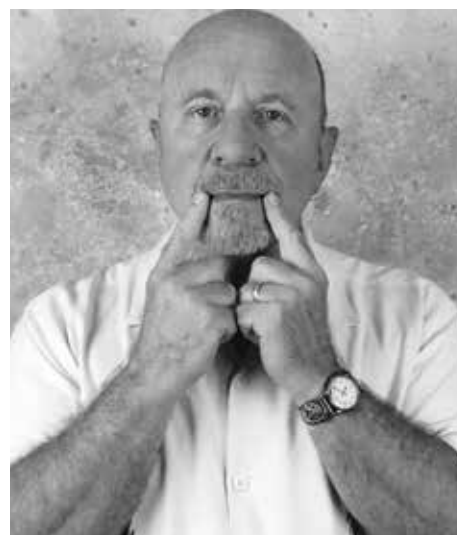
For some people this exercise is pretty easy, but for some it isn't, so I'm going to walk you through the steps of getting the hang of this exercise. By way of troubleshooting, go through the steps to find where you, personally, get held up. Then go over those steps, looking for hints that you're getting it right.

**Please** don't be a perfectionist. Give yourself a chance to get the hang of it. Please don't judge yourself. Yes, this is silly and seems like it should be easy. But if you can be a little detached and walk through the steps sensibly, as though you were teaching someone else, then you'll get this powerful skill integrated into your technique.

Go to my website, [MeredithColby.com](http://MeredithColby.com), for more help.

### Step 1: Make the non-pitched horse noise.

- Keep in mind that this is a breath exercise, not a lip exercise. You're your focus on your breath.
- Take a breath from your tummy and make your lips flap.
- Did I say take a breath from your tummy? BE REALLY AWARE that you're standing in Singer Posture taking Singer Breaths, and that you're NOT doing the Birthday Candle breath. (See the Breath section if you don't know what I'm talking about.)
- Don't make any sound or pitch. This should just be the sound of air passing your horsey lips.
  - It helps a lot of people to fix their gaze on something across the room. Imagine you're shooting your air across the room and hitting that spot.
  - Many people find that they get the feel for this best when they're doing something else. Most of my students who felt challenged by this controlled exhalation concept have gotten the hang of it while showering, driving, doing chores around the house, or something else that can be accomplished on autopilot.
- Don't clench your teeth. They should be a little apart.
- Start short. When you feel like you can, hold it out longer.
- Add a level of control by being aware of how you're breathing and then doing the horsey noise to a set number of counts. Start with "1-2," then go to "1-2-3," and so on.
- TRY THIS: Sometimes people have a very relaxed labial area (the lips and the muscles that work the lips). *This is not in any way a bad thing.* For those people this exercise can be really hard. If that's you,
  - With the index finger from each hand, touch the corners of your lips.
  - Don't squish, don't stretch, don't push. Just touch.
  - Keep your elbows up so that your hands don't drag your posture down.
  - NOW TRY.
- You can always use the finger thing. There's nothing "better" about *not* using the finger thing. You have to work your breath support just as hard whether you're touching the corners of your lips or not.



**Step 2: Make the motorboat noise (lip trill) on a single pitch.**

- Breathe from your tummy. Remember this is a breath exercise.
- Make sure your teeth are not touching.
- Fix your gaze on something at least five feet away and at shoulder level or higher.
- Imagine you're shooting your sound to whatever you're staring at. Start with a count of 2, then move up by counts as you feel more controlled. DO NOT try to empty your lungs! Keep your sternum lifted, feel your abs working, and stay controlled.
- Be conscious of doing this step-by-step. As soon as you think you have the feel for this, try doing the same thing on different pitches.
- Feel free to use the technique cited in the last bullet of Step 1.

**Step 3: Make the motorboat noise (lip trill) on single pitches moving up and down the scale.**

- As you phonate higher you have to be aware of **how you're breathing**. If you start breathing high in the body (Birthday Candle breath), then you've gone too high and should walk back down the scale in half-steps. (You'll be able to go higher later.)
- As in step 2, fix your gaze on something at least five feet away and imagine you're shooting your sound to whatever you're staring at. (This can also be your reflection in a mirror, by the way. It can help you control your breathing.)
- If your lips fail to cooperate for a given pitch, **pay no attention**. Seriously. DO NOT take even a millisecond to reprimand or judge yourself. You really, really want to pay attention only when you're getting what you want, NOT when you're NOT getting what you want. If one pitch "doesn't work," then just move on to the next one.
- Feel free to use the technique cited in the last bullet of step 1.

**Step 4: Use lip trills in increasingly longer patterns.**

- Once you've mastered step 3, you're rolling downhill. Use the patterns below to increase your breath energy and control.
- Remember that control is the name of the game, here. Be sure you're using Singer Breathing and that your posture is lifted and easy.

- If you start breathing high in your body or gasping, then back it up and do the shorter exercise pattern.
- Feel free to use the technique cited in the last bullet of step 1.



## ALTERATIONS AND MODIFICATIONS

### Alternate patterns

There's nothing sacred about using scales for this exercise. I suggest scales because it gives the singer the least to think about other than the technique of the exercise. If this is easy for you and you want to push yourself a little, feel free to make longer, harder patterns. Make patterns that include a sustained tone. Use little melodies. Whatever works!

### Invisible ink

This exercise can be used in the melody of a song. It's the invisible ink of breath support. (Ever use invisible ink? When it's dry you can't see it, but when you wet it with something special, such as lemon juice, or hold it to red tissue, black light, or some other particular light source, it shows what's been written.) If you do lip trills over your melody it will show you where you need more breath or where you're not supporting. Once you know, you can make conscious adjustments until you've made a new habit.

**Breath support:** This is a great exercise to use with Power Breathing. (See Skill Development section.)



## WARM-UP EXERCISE #7: HEAD REGISTER E'S

<b>Part</b>	Warm-up
<b>Elements</b>	Breath, head register, placement
<b>Range</b>	From wherever you want, to as high as you can go without straining.
<b>Time Spent</b>	1–3 minutes

### Purpose

This is the first exercise in which vowel modification is used consciously. There will be further explanation about vowel modification and its importance to achieving your money notes in the next section, Skill Development.

In this exercise vowel modification will be accomplished by paying attention to your placement. Your placement will be deliberately very forward. This forward head register will be essential in the high blend you'll accomplish soon. It's not like classical technique; neither is it something most people do naturally, as it takes significantly more air than people tend to want to give their high notes. Additionally, this exercise lets you practice forward tongue position, which allows for your most efficient resonant capacity.

High female

Low female

High male

Low male

### Objectives

- To maintain Singer Posture and Breathing.
- To connect the pitches fluidly without any rearticulation of individual pitches.
- To be aware of feeling the sound in the front of the face throughout each ascending and descending scale.
- To be aware of any tightness in the throat and use that as your cue to modify your vowel.
- To modify your vowel when appropriate by opening your mouth wider for higher notes.

## THE EXERCISE: HEAD REGISTER E'S

**Mouth position:** your tongue is touching the back of your lower teeth: not pushing, just touching. Your smiling muscles are relaxed. Your jaw is loose and relaxed.

**Say “e”:** Now, in that position, you’re going to make an “ee” vowel. Of course, this is not the position your mouth *wants* to be in to make an “ee” vowel, and it will force the *back* of your tongue to lift a little higher than it normally does for that vowel. You may feel your smiling muscles wanting to pull back, but that would force your soft palate into its relaxed, lower position, which we don’t want. So keep those muscles relaxed. For many people the tongue wants to pull back in the mouth on the “ee” vowel. We don’t want that either, because both a lowered soft palate and a pulled-back tongue inhibit your resonant capacity (see Chapter 3: Placement). Inhibited resonant capacity means more work for less result—*not* the sacred path of the lazy!

**Feel for it:** Before you begin, hold out an “ee” sound—mouth in the position described—on a comfy, high-ish pitch. Feel the resonance in your face. As always with placement touchstones, don’t look for something big. Look for the small buzz in the bridge of your nose, under your eyes, behind your front teeth, or anywhere else in the front of your face. Once you have the feeling, do any one of the patterns below with the intention to *keep your placement consistent throughout the pattern*. Keep reaching for that small, buzzy feeling in the front of your face, wherever it is you personally feel it. In this exercise **the integrity of the vowel takes a backseat to the feeling of the placement**. So, if you *hear* yourself making a sound that doesn’t sound like a nice, bright “ee” sound, but you’re doing all the other stuff, that’s okay. Just keep your form and **think** “ee.”

**Make the space:** As you go to higher pitches, you’ll have to open your mouth a little more, a little bit at a time, in order to keep your placement feeling the same. If your placement isn’t enough of a guide, you can also create more space (that is, open your mouth a little more) if your larynx starts to feel at all tight. Feel for what you need.

**Keep it simple:** As you do this exercise try not to be fancy in your singing. Think *innocent* or *childlike* or *simple* or *plain* or anything else that might help you focus on *making a sound on a pitch, rather than singing*.



## CHECK FOR FORM

- Are you standing with your sternum lifted, open, and quiet—not dropping as you phonate or heaving as you breathe?
- Is your tongue forward in your mouth, touching the back of your lower teeth? Just touching, not pushing.
- Are your smiling muscles relaxed?
- Are you making a plain, childlike sound?
- Are you taking the time indicated as a rest in the note pattern to breathe low and easy in the body?
- Are you feeling for the space you need as you go to higher pitches?
- Are you dropping your jaw (not changing your tongue position or tightening your smiling muscles) a little more with each higher pitch?
- Are you allowing the “ee” sound to slowly transform as you go to higher pitches?

## TROUBLESHOOTING

### **My tongue feels tight.**

- For many people it’s really hard to keep that tongue forward and touching the teeth. That’s an indication that you’re used to sucking your tongue back on your “ee” vowels, so this is a good exercise for you.
  - Until you have the feel for this, don’t take the exercise too high. Keep it in a relatively easy pitch range.
  - Watch yourself in the mirror.
  - Try using easier vowels, such as “ae” as in “hay” or “eh” as in “hen.”
  - If even those vowels feel tight, use an “ah” vowel. (Use the “ah” sound you make when you get into a hot tub or hot bath. Don’t use the “aw” sound like in “awful.”)

### **I’m not sure I’ve got the forward feeling.**

- Try holding out your practice pitch longer. I often see students find the feeling once they’re willing to hold out the tone for 30 seconds instead of 5 seconds.
- Try a lower or higher “practice pitch.” Nudge your pitch slightly higher or lower—holding it out for an adequate time—until you bump into your natural buzz.
- Be aware of the *type of sound* you’re making. You may be making too sing-y a sound. Think *plain*, think *innocent*, think *childlike*.
- Rather than going straight to the “ee,” start on a held “n” first, so your sound is “nee.” Take the time to feel your little kazoo on the “n” sound before opening to

the “ee” sound, and *hold your intention* to bring that buzz to your “ee” sound.

- If you really can’t find it, don’t do this exercise today. Try again tomorrow.

### My tongue keeps moving back on high notes.

- If your tongue is willing to stay in the forward position—saying “ee”—on the lower notes but pulls back on the higher notes, then change your vowel as you go higher. Start on an “ee.” As your tongue gets tighter, move to an “ae” as in “hay,” and if it continues to get tight, move to a bright “ah.”

### It’s hard to relax my smiling muscles.

- Please use the mirror for this exercise if you keep pulling back your smiling muscles to the more natural “ee” shape. Relaxing those facial muscles on the “ee” vowel really takes some getting used to. People sometimes fear that they’ll have to do this when they sing and they’ll look stupid. Don’t worry. We’re just training your soft palate. You’ll be able to smile when you sing. **This isn’t singing.** Until you get the hang of this you’ll have to really pay attention. Using the mirror lets your eyes tell you things your body might not notice are going on.

### I’m not sure how high to go.

- As with most of these exercises, you want feeling to be your guide. AND you want to give yourself a chance to get the hang of it. The pitch you reach today may not be the pitch you reach tomorrow. You should not strain, and if you feel yourself beginning to strain you’ve gone high enough (actually, a little too high).

## ALTERATIONS AND MODIFICATIONS

- **Breath support:** This is a great exercise to use with Power Breathing. (See Skill Development section.)
- **Altering the vowel:** Different vowels require differing levels of breath support. “Ee” takes the least, and “ah” takes the most. As you get the hang of this you can use it on different vowels to increase your ability to support high head register tones.
- **Different patterns:** the following are alternative patterns you can use.

Nee - Nee - Nee

Nee - Nee - Nee - Nee





## EXERCISE SECTION 2:

# Skill Development

In the **Skill Development** section of the exercises, the skills that make up the Banana Split are targeted, mastered, and integrated. As implied by the order of presentation, these exercises work best and are easiest once you're warmed up.

These skills are designed to speak the language of the Lizard Brain: feeling. As these are described and outlined, you'll keep reading "feel this, feel that." That's because in order for these exercises to work their magic you need to have them feel the right way. In this case, "right" means efficient. What that efficiency translates to, feeling-wise, is that you'll feel your breath working, your abs working, and a lot going on in your face. You shouldn't feel your larynx or throat much at all. Sometimes you'll look for a certain kind of sound, and your ears will give you confirmation that what you intend is indeed coming out of your mouth, but **what you sound like as you do these exercises is nearly irrelevant. To make them work for you, your focus *must* be on what you're feeling.**

Once you know how to do the Skill Development exercises with confidence, you're sliding into home plate. You'll start to experience surprising and wonderful things in your singing: this note won't seem as high as it used to, people will tell you you're too loud (love that!), you don't get vocally tired like you used to...stuff like that. It's really fun when those kinds of things start to happen.

## THE NEURO-VOCAL METHOD GUARANTEE

I promise you that if you:

- do these exercises regularly and with integrity,
- focus on the feelings you're asked to look for, and
- hold the intentions you're asked to keep in mind,

then you'll master these Skill Development exercises and get the results I've been describing. If, however, you interpret them in your own, different way, or if you're

unable to stop listening and trying to keep yourself sounding good, then there's no guarantee that the Neuro-Vocal Method will change your singing at all.

## Spinning Plates

Have you ever seen a magician or some other performer spin plates? They get one plate at a time spinning on top of a stick, adding more and more sticks with plates. They have to keep running from plate to plate, grabbing each stick to keep each plate spinning. Well, when you first learn these exercises that might be how you feel. It will probably seem like a lot of things to keep track of at once. (It's one good reason to find a teacher who teaches the Neuro-Vocal Method!) But I promise that after you become accustomed to these strange things—after the weird stuff you're doing starts to feel somewhat less weird—then you'll be able to concentrate on the feeling you're supposed to be feeling. As you get used to each exercise, you'll get down to having only one plate to spin. Or maybe two.

## THE OTHER TWO ICE CREAM SCOOPS

In the Warm-Ups section you got the feel for the registers: chest register and head register. You were warming them up, working the muscles, and for some people, getting used to and accepting the feelings they bring. We weren't going after any vocal gymnastics, but were primarily letting the larynx work the way it naturally works, operating in one "gear" at a time, either chest or head register.

In the Skill Development section we'll be focusing primarily on the other two elements of the Neuro-Vocal Banana Split: placement and balance. As with the warm-up exercises, the exercises in this

section will depend on your new, awesome breath support. You'll be happy to know that you won't have to give your breath support a lot of conscious thought. You'll be focusing on other things, and the ol' Lizard Brain is going to step up and provide the support you need to fulfill your intention. (Your posture might require additional attention, though, depending on how your posture was to begin with.)

## POWER BREATHING

In the final set of exercises, Working the Blend, you'll have to seriously crank up your breath support. So, in the Skill Development section you'll be introduced to a type of breath support that can give you the power you'll need: Power Breathing. It works unbelievably well for what it does, but if you're not used to working that hard for your singing, you'll hate it. Many people literally break a sweat when they start moving the amount of air it really takes to support their money notes.

With Power Breathing, we take what we naturally do, get conscious about it, and then attach it to our singing. You'll breathe the same way you do when you laugh, or cough, or sneeze. Your lower abdominal wall (the rectus abdominis) contracts in and up, your transverse and oblique abdominal muscles contract back and out, and the soft palate elevates. All that happens with a sneeze! But surprisingly, it's good for singing as well as sneezing.

I'm guessing you've had the experience of hanging out with your friends and laughing until your face hurts. If so, you'll recall that the next day, after all that uproarious laughter, your voice was completely fine. Conversely, you've probably had the experience of trying to talk for some time over a lot of ambient noise, like at a nightclub, or at a sports game or a party. Most people really feel that in their voice the next day, anything from being vocally fatigued to full-blown laryngitis. The difference between those two scenarios was the manner in which you were breathing. The larynx is part of the respiratory system, remember?

When you were laughing your head off, you were breathing the same way you did when you were a little kid. Like, before you were four. Ever hear of a baby losing its voice or getting hoarse? You probably haven't. That's because they don't, even after crying for hours on end. They can do it because of how they breathe, and how that breath supports their crying.<sup>1</sup>

Our aim with Power Breathing is to get ourselves breathing like we did when we were toddlers and then attach that breathing to our singing. Not only will that kind of support let you sing for hours and hours without getting tired, but **you're also absolutely going to need it to hit your money notes**. You won't always need to incorporate Power Breathing, but when you're first learning how to get your chest blend way up high, it feels like a *lot* of work. You want your breath to do most of that work for you. So you're going to learn Power Breathing.

## PLACEMENT

As discussed earlier in this book, placement refers to the singer's experience of the resonance the singing voice creates in the body. While it isn't the most medically accurate term for what's going on when we sing, it's a very useful concept for learning to use the voice efficiently. And, subsequently, for being able to judge for yourself whether you're using your voice in a healthy way.

**The Neuro-Vocal version of placement is the hardest part of the method. It's not hard physically, nor does it take a particular level of talent or accomplishment to achieve. It's hard *emotionally* and *psychologically*. To get your money notes, you'll have to be okay with sounding really bad on your way to sounding really good.**

---

1 When babies are brand-new and their vocal folds aren't yet fully formed, it's the presence of high amounts of hyaluronic acid in the vocal folds—part of the process that creates the layered structure of the vocal folds—that allows for this endurance. But that's only for a few months. Most babies and toddlers can still exhibit Olympic-level crying well after this developmental phase.

The Neuro-Vocal version of placement is psychologically difficult because **it sounds horrible**. Really. It's horrible sounding and loud. And when you do it you can't help but think, "Really? This is supposed to make me sound good?"

Placement in Neuro-Vocal style is probably very different than what you've done or been taught before. It uses an exaggerated forward placement—extremely exaggerated—to allow you to get over your break. That very forward placement allows your larynx to override its natural tendency to shift abruptly from the chest to the head registers. It helps teach your larynx to do an unnatural thing: to blend the chest register into the head register such that the larynx isn't working too hard. With each successive half-step higher, the tone produced is more head register and less chest register, while the *character* of the chest register—essential to the aesthetics of all popular styles—is maintained.

What I know to be true is this:

**The more you're willing to reach for the *feeling* while *allowing* that horrible sound to come out of your mouth, the more quickly you'll teach your larynx what it is you want from it. The greater your need to sound good, to hold onto the idea that you're singing, or to second-guess the instructions to fit in with your preexisting ideas, the longer this will take you.**

I've seen students able to vocally demonstrate this concept in one lesson, and I've worked with students for months without getting them to 100 percent. The difference is not talent or aptitude, and gosh knows I'm not saving my good teaching for some students and using my bad teaching on others. The difference is in the willingness to surrender to the process and trust that it will all come out in the end.

It does, by the way, all come out in the end. That exaggerated forward placement is simply a tool, a means to an end. It's not what we're ultimately shooting for. But it will get you there much sooner.

## BALANCE

Balance is the skill that turns that horrible-sounding placement into the sound of singing.

To achieve balance, we teach the soft palate to stay in its elevated position whenever we sing. When the soft palate is lifted, it forces the singer to use more breath to fill the space. (This is where Power Breathing comes in.) When that larger space is filled with more air and you're simultaneously allowing for the exaggerated forward placement, you'll be hitting your money notes with no strain to the larynx. Although it might sound a little strange in your head, it feels great. Your Lizard Brain will love the feeling and adopt it in very short order.

There's a little more to achieving balance consistently, and we'll get to it in the Working the Blend section. For now we just want to learn this skill and apply it consistently to phonating. In time your Lizard Brain will start to take over for you, and you'll feel this occurring spontaneously in your singing. It's a great feeling. Let's get to it!

## SKILL DEVELOPMENT EXERCISE #1: ACCESSING THE NASTY VOWEL

Part	Skill Development
Element	Placement, chest register
Range	Use suggested range
Time Spent	1–5 minutes

### Purpose

To identify and familiarize yourself with the exaggerated forward placement used in Neuro-Vocal Method to access high blended tones. ***This tool must be mastered in order to attain the high, mixed chest sound.***

This manner of phonating is most easily accessed initially in the natural speech range because it is mostly a pitched speaking

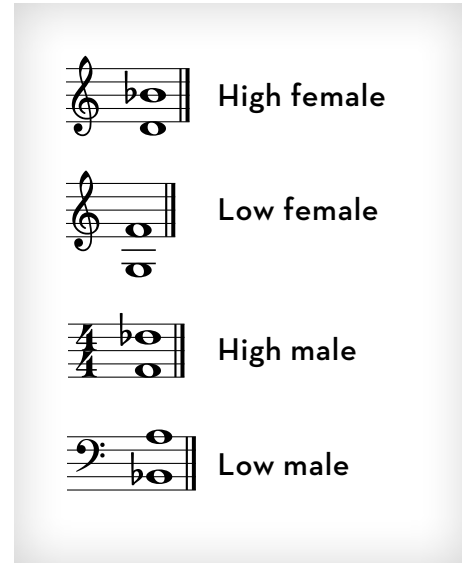
sound. Getting familiar with this usually happens in the following order:

1. Following instructions, you happen upon it and the description (or your voice teacher) confirms you've got it.
2. Following instructions, you happen upon it and know instantly that you did it.
3. You find it, either on purpose or by accident, and you can maintain it for a while.
4. You can find it yourself.

Some people have no trouble accessing this sound. Some people always have this placement and are so familiar with it already that they can have difficulty identifying it. But to manipulate it, which we'll be doing, you have to be in charge, which means getting conscious of what you may already be doing naturally.

### Objectives

- To maintain Singer Posture and Breathing.
- To feel nothing other than vibration in the throat and larynx—no pushing or straining.
- To become familiar with the feeling of the Nasty Vowel and what it takes to access that feeling.



## THE EXERCISE: ACCESSING THE NASTY VOWEL

- Identify the vowel.
  - The point of this exercise is simply to be able to identify this sound, which you will be using as a powerful tool, and be able to access it at will.
  - This is the flat “a” sound of the American Midwest. It’s a somewhat exaggerated version of the “a” sound in “flat” or “can.”
  - Alternately, if you can’t make that sound, make the “eh” sound as in “nest” or “neck.” Just be willing to make it a nasal and whiny version of “eh.”
  - If you find the feeling right away using Nasty Vowel Method 1 and are accessing it without any trouble you can move on. If you want to lock it in so you’re more familiar with it, try one or more of the other exercises in this section.
- Access and hold out the vowel on a single pitch.

### Nasty Vowel Method 1

- Using a pitch near, but not at, the bottom of your range, say “na” as in “nag” (or “neh” as in “nest”).
- Hang out on the “n” until you’re aware of the kazoo buzz you’ve been working with in the warm-up section.
- With your tongue forward and your teeth about a finger’s width apart, say “na” as in “natural” or “neh” as in “nest.” Hold out the vowel for ten seconds or more as you give yourself time to get the feel of the vowel. It should be buzzy in your face or mouth. This is the same feeling you accessed in the Buzzy Neh exercise
  - You’re looking for attitude and energy, not volume. Do not try to be too loud.
- Look for the forward buzz in the bridge or sides of your nose, under your eyes, behind your teeth, or in a more generalized way across the front of your face.
  - DO NOT look for a big feeling. It’s a small feeling. It’s typically pretty localized in the front of the face, but can also be felt as a more spread-out feeling across the nose and cheekbones.
- Hold out the sound while you focus on the buzzy feeling. Hold as long as you comfortably can. Your goal is to familiarize yourself with both the feeling and the sort of vowel you’re using. If you have a particular thought, such as what you’re reminded of when you do this, remember that thought. It will be a good tool to reach this feeling next time.
- If you mostly have it but you feel some tightness or strain in your larynx, try it on a higher pitch. Or try it with less volume. Or stop singing it and just say it.

### Nasty Vowel Method 2

- Do the exercise below. Do it with the attitude of “I’m a bratty little kid.”
- As you phonate think: Bratty, bratty, bratty. Imagine you’re trying to be as annoying as possible. Remember that you’re not singing. You’re making a nasty sound.
- For this method of accessing the Nasty Vowel, you’re probably going to have to be pretty loud. You’re being an annoying child, after all.
- Your goal is to familiarize yourself with both the feeling and the sort of vowel you’re using. If you have a particular thought other than what I’ve written here, use that and remember it. It will be a good tool for finding that feeling again.

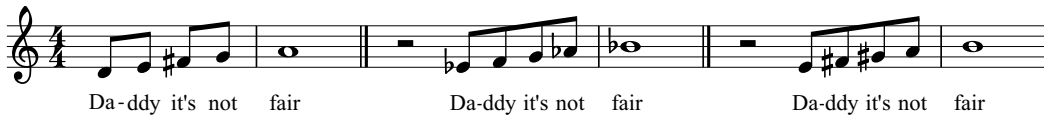
Na-ma-na-ma-na - Na-ma-na-ma - Na-ma-na-ma-na

Na-ma-na-ma-na - Na-ma-na-ma-na - Na-ma-na-ma-na

### Nasty Vowel Method 3

- This works if you just can’t stop yourself from singing or sounding pretty long enough to identify this brassy, buzzy, ghastly-sounding Nasty Vowel. You’ll have to call up your inner actor and **be** the role!
- Using the pattern below, do this with exactly the attitude you’d expect: bratty, annoying, loud. Use as flat and brassy a vowel as you can come up with.
- On the last word of the first exercise, way, be sure to hold out the first part of the vowel as the “nasty” part: **wa**-ee.
- On the last word of the second exercise, fair, be sure to hold out the first part of the vowel as the “nasty” part: **fai**-er.
- Use the instructions in the other access methods to find and identify the feeling and the vowel.
- Once you get yourself over the hump and are able to make this pitched sound without singing it, try one of the other access methods again.

Ne-ver get my way Ne-ver get my way Ne-ver get my way



### Nasty Vowel Method 4

- Using the Register Separation, exercise number 3 in this section, land on your ugly, forward chest tone with the Nasty Vowel.
- Do the exercise without the suggested beat pattern. Take your time and look for the feeling. Stay in a comfortable pitch range near the bottom of your vocal range. You can experiment with going lower as long as you don't push at the tone. If you take your time and raise your awareness, you'll probably land on one or two pitches that either nail that feeling or lean heavily toward the feeling.
- You're looking for attitude and energy, not volume. Do not try to be too loud.
- Using that range of pitches (or the single pitch, whichever it was for you), repeat the Register Separation exercise. When you hit the low note that gives you all or part of the buzz you want, hold out the tone with the intention of making your vowel brassy and buzzy in your face. Allow for this to sound really horrid.
- DO NOT look for a big feeling. It's a small feeling. It's typically localized in the front of the face but can also be felt as a more spread-out feeling across the nose and cheekbones.
- Hold out the sound while you focus on the buzzy feeling. Hold as long as you comfortably can. Your goal is to familiarize yourself with both the feeling and the sort of vowel you're using. If you have a particular thought, such as what you're reminded of when you do this, remember that thought. It will be a good tool to reach this feeling next time.

### CHECK FOR FORM

- Are you standing with your sternum lifted so that you get a natural, low breath?
- Are you remembering to inhale?
- Do you know what kind of a sound you're looking for? A clear intention is very important. (If you're not sure, check out my girl Fran Drescher on YouTube. She's got this placement!)
- Do you feel the buzz in your face?
- Do you feel nothing in your throat and larynx?
- Are you choosing to try to make a sound that will bring a feeling, or are you singing? Don't sing.
- Are you holding out your sound long enough to look for the feeling and get fa-

miliar with it? You want to hold it out as long as is comfortable. Don't let yourself run out of air completely.

- Once you've found the buzzy-face-completely-effortless-voice feeling, can you find it again right away?

## TROUBLESHOOTING

**This exercise is making my throat hurt.**

- You may be trying to make a loudly obnoxious sound rather than a just-plain-obnoxious sound. Bring your volume down and try again. It's all about the attitude. Try doing it with a sneer.
- You may be accustomed to making a similar sound by pushing from your throat. Close your eyes, make your volume speech-level (not too loud or too soft), and try to bring the whiny component of the sound you're used to into your nose or cheeks. Really feel for it.
- You may not be really aware of the type of sound you're looking for. If this brassy "a" sound is allowed to be too broad or too pretty it will slip right down into the throat. You may not really be wrapping your head around just exactly how horrible this vowel sounds. Remember that it's called the Nasty Vowel.
- You may be trying to sing this sound. Do not sing. Hold the intention to make a brassy, bratty "a" sound (or another of the many sounds I've described here) on a tone. Hold the intention that the tone you're looking for is a tool to find a feeling. You must let go of any idea that this is singing.

## The Outgoing Message Phenomenon

I mentioned this in the introduction, but it bears repeating. You'll get all this so much faster if you can remember that **you are the only one who hears your voice the way you do.**

When you hear your voice on your outgoing message or on a video, you probably sound kind of thin or high-pitched to yourself. And yet your friends and family all seem to sound pretty much like themselves when you hear them on their outgoing messages or on video. So why does your voice sound so bad?

I'm reiterating this illustration because it's the simplest evidence I can give you that your opinion of the way you sound doesn't count. Really. You're the only one who hears you in the way you hear yourself. Want to know what the rest of us are hearing?

We hear what you feel. If your throat feels tight, or scratchy, or pushed, then all of us out here on this side of your face hear you as tight, or scratchy, or pushed.

To sing in a healthy way—one that will keep you singing all your livelong days—you simply have to stop using what you hear to gauge what you sound like. It's time to teach yourself to use what you feel to guide you.

**I think I'm doing it but I can't feel it in my face.**

- You may be looking for a big, dramatic feeling. It's not. It's a little feeling. You have to bring your attention to the physical feeling you're calling up, and you may not have done that before. Try closing your eyes and concentrating on the front of your face. See if you notice a small feeling of buzziness, kazoo-ish-ness, brassiness, or even something sort of rattly. Once you find that little feeling, pay attention to it. As you become more familiar with what you're looking for, it will become much easier to find.
- If you feel nothing in your throat when you phonate on the Nasty Vowel and **also** can't feel what I'm describing in your face, then it's very likely that you already have this type of placement naturally. Congratulations! Your problem is that you're already accustomed to what I'm asking you to identify, so it's harder for you to find. It's like asking you to become aware of the manner in which you walk or hold a pen. It's odd to think about, but it can be done. For you this will be a matter of holding out a comfortable tone, closing your eyes, and bringing your attention to what you're feeling in the front of your face. You'll need to isolate and identify that feeling. It may not happen right away. You may have to try a few times. Be sure you're not looking for a big feeling: look for a very small buzz in your face that's either localized or spread out across your cheeks. (I've found that people who have this placement naturally tend to experience it in a more generalized, spread-out way than people who cultivate it consciously.)
- Your vowel may not be bright enough. Don't underestimate the ugliness of the sound you're looking for. You will not like this sound. If the sound you're making **isn't** likely to be offensive to anyone listening, then you probably need to exaggerate the brassy, flat "a" still further.

**I just can't get it.**

- You may be trying too hard. Singers are natural mimics and can typically reproduce many, many sounds. You can up your game in general by paying closer attention to how other people make their vowels when they speak.
- Stop working at it and try experimenting instead. It's all about your attitude. Play around with it. Do it with a sneer. Do it with a whine. Do it in the character of someone who is obnoxiously complaining. Do it with the idea that you're mimicking a character. In other words, lighten up and play with it.
- If you're too frustrated, then just stop and walk away. Come back to it later. Mess around with trying to find it when you're driving or walking or washing the dishes.
- Get a voice teacher who teaches Neuro-Vocal Method.
- Use the tutorials at [MeredithColby.com](http://MeredithColby.com).

## SKILL DEVELOPMENT EXERCISE #2: POWER BREATHING

Part	Skill Development
Elements	Breath, balance
Range	Use suggested range
Time Spent	1–5 minutes

*If you have not yet read the section called Intro to Skill Development, please do so before you begin this exercise.*

In any exercises involving Power Breathing you'll be sticking your thumb or thumbs into your transverse abdominal muscles. You'll use your thumbs in the position shown in the photo. This position allows you to maintain your Singer Posture and keep your shoulders relaxed. When your thumbs are firmly pushing into your transverse abdominals in this way, they act like free weights. When you use weights to work your muscles, the weight you're lifting (or pushing or pulling) gives your muscles something to work against; thereby allowing you to isolate, strengthen, and gain control over that particular muscle or muscle group. Same deal here: pushing your thumbs into your transverse abdominal muscles gives them something to push against, allowing you to isolate and work those babies.

### Purpose

- To understand and be able to implement Power Breathing. Power Breathing will be used for most balance exercises. In addition, Power Breathing can be used by the singer whenever tension is felt in the larynx, or when the high blend or high head register is being accessed.
- To get conscious about your innate ability to support your voice with breath.
- To begin to make the connection, at the Lizard Brain level, between singing and supported breath. (See paragraph on Power Breathing in the Intro to Skill Development section.)

### Objectives

- To maintain Singer Posture and Singer Breathing.
- To find the place to put your thumbs where you'll get the most feedback (or



High female



Low female



High male



Low male



pushback) from your transverse abdominal muscles.

- To feel how flexing (pushing) those muscles forces air out in an energized way.
- To attach phonation to that energized air. (Please note that the word here is phonation, not singing.)

## THE EXERCISE: POWER BREATHING

### Step 1

- Stand in Singer Posture with your sternum lifted and your chest open and relaxed.
- Put your thumb of each hand on the corresponding strap of your imaginary tank-style shirt (or your imaginary bra strap, spaghetti strap, or suspenders.) Right hand on right shoulder, left on left.
- With your thumbs, draw an imaginary line straight down your torso until you reach your lowest rib. Stop there and poke your last rib with your thumb.
- When you've got that, go another inch (really, just an inch) down your torso and press your thumb strongly (strongly!) into your abdominal wall.
- Now cough.
- When you can feel that muscle pushing out against your thumb, you've got it. If you have any notion at all that this is going to be easy, put it out of your head. This will not be easy. It will either be difficult for you to focus and isolate that muscle, or it will be difficult for you to push out against your thumb with that muscle. Or both. Get ready to work. Someday, moving enough air to hit your money notes will be easy. But probably not today.
- Now say "ha, ha, ha," slowly and with a great big "h" sound. The "h" sound will force a lot of breath to escape, so you can really feel yourself moving air. See if you can feel that muscle push against your thumb. Better yet, see if you can **make** your muscle push against your thumb.
- **This is the goal: to feel your transverse abdominals pushing out strongly against your thumbs as you phonate.** Or, put another way, to feel the connection between the muscles flexing and the energized sound you're making.

### Step 2

- Once you're good with step 1, try the exercises below. The exercises are written out in order of difficulty, easiest first. ***This is all about form. Please take the time to ensure that you're doing this effectively before moving on to more difficult exercises.*** Doing more difficult exercises with ineffective form will only set you back, so make sure you have this before moving on.

- Think sort of mechanically while you do this. You really don't have to move anything except your abs. You'll probably need to blink, but other than that you can just leave your mouth hanging open and your chest lifted. No need to open and close your mouth or readjust your posture.
- Note the Check for Form section as soon as you start doing one of the exercises.

Ha - ha - ha      Ha - ha - ha      Ha - ha - ha

Ha - ha - ha      Ha ha ha

Heh      Heh      Ha      Heh      Heh      Ha

Hee - eh - ah      Hee - eh - ah

### CHECK FOR FORM

- You're using the higher ranges suggested because they use more air. You're starting your note patterns with an "h" sound because it wastes air. **This is all about moving air**, so that should be your focus. *Your focus should **not** be how you sound.*
- Are you standing with Singer Posture, so your lower ribs are lifted up? Gotta let the abs do their job.
- Are your thumbs pushed in firmly, giving your abs something to push against? (Both sides are doing the same thing, so you can really use one thumb at a time if you want. When one gets tired you can switch and use the other one.)
- Are your shoulders relaxed?
- Is your jaw relaxed, with your mouth open, tongue forward, smiling muscles relaxed?
- Are you feeling your abs engage at the same instant that you're phonating?
- Take a moment to cough or laugh. Feel how strongly your muscles push against

your thumbs. That's how strongly you want to feel them pushing for this exercise.

## TROUBLESHOOTING

### **I can't find the muscles that are supposed to be pushing out.**

- Go through the instructions again. Thumb on the shoulders, draw an imaginary line straight down the torso until you find your last rib, go another inch down, push in, cough.
- Look in the mirror. Imagine the abdominal section of your torso divided into three by two horizontal lines. Poke your thumbs into your torso outside those two lines. Move them around and cough, looking for the most feedback from your abs. Poke, cough, poke, cough...like that. You'll find a spot where the muscle really pushes back against your thumb strongly.



### **I don't feel the muscles pushing out, or they're only pushing a little bit.**

- It could be that your thumbs are pushing into your abdominal wall. Look at the drawing above of the torso divided into three by two horizontal lines. The section in the middle, between those two imaginary lines, is the abdominal wall. When you expel air quickly (e.g., by laughing, sneezing, or coughing) that muscle group naturally contracts in and up. If your thumbs are in that section and you're trying to make them push out, then it's going to be very difficult or even impossible. Make sure your thumbs are pressing in far enough toward your sides that you can feel the natural outward contraction.
- If you have your thumbs in the right spot, but you're not sure if you're giving it enough strength, then laugh. Really. Try to make yourself chuckle or giggle. If you can't, then cough really loudly. Either of these two will give you the amount of push you should expect to feel in Power Breathing.

### **My ab muscles aren't pushing out in the same instant I phonate; it doesn't feel connected to the "h" sound. I seem to be flexing a second before I phonate.**

- This is something you have to catch right away. The problem with this is that it will never become natural to your singing. It's not natural. The goal is to support

your intentionally pitched tone (singing) the same way you support your laughing tone. Feel how you do that and then try to duplicate this in the exercises.

- Are you standing with Singer Posture? If your sternum is dropped it can be hard to flex and phonate in the same instant.
- You may have to really overdo the “h” sound in the first two exercises. Really make yourself work to connect the muscle action to the sonic result. You won’t have to do this for very long. Just give yourself the chance to get the feel of it. It may feel a bit out of control at first. That’s okay. Let it be. It’ll come together pretty quickly.

**This exercise is making me lightheaded.**

- That happens. Don’t worry. Just stop when you feel lightheaded and wait until you feel normal again before you begin. It won’t be that way for long. Your body will figure out how much it needs for what you’re asking it to do, but you have to give it a chance.

**The pitches coming out of my mouth are not the pitches I’m intending!**

- This is VERY common. Because you’re using much more air than you’re probably used to, and the larynx is thus not working nearly as hard for the same result, you’re probably singing sharp. I know, it’s very disconcerting to think one pitch and have a higher pitch come out of your mouth. But if you hold your intention—know the pitch you want to make—and carry on, your body will figure it out for you in short order.

**This is hard.**

- Yes, it is. But it won’t always be hard. Over time (how much time depends on the person) that effort will translate into energy and simply make your singing sound, and feel, the way you really want it to.

**ALTERNATIVES AND MODIFICATIONS**

---

Power Breathing can be used any time more breath support is needed. You’ll know more support is needed if:

- Your larynx feels tight.
- You’re singing high and loud.
- You feel like you’re pushing against a ceiling on your high notes, rather than going “up and over.”
- You need your placement to be more forward.

- You're experiencing jaw tension or clenching. I don't know why, but Power Breathing seems to relax the jaw joint.
- You're experiencing tongue tension or find you're drawing your tongue back when phonating. Power Breathing helps the tongue relax. It doesn't fix it for you, but if you have this habit, Power Breathing makes it easier to leave the tongue forward in the mouth.

## SKILL DEVELOPMENT EXERCISE #3: REGISTER SEPARATION

<b>Part</b>	Skill Development
<b>Elements</b>	Placement, chest register, head register
<b>Range</b>	Use suggested range
<b>Time Spent</b>	1–5 minutes

*Caveat: This is the only exercise in the Neuro-Vocal Method that it is possible to overdo.* You'd have to do it a lot—every day for many months—but it is possible. It's great for what it does, and none of my students have ever used it too much, but I have to say this for the More-Is-Better people out there: doing this exercise a few times a week is enough.

### Purpose

To access both the natural chest register and head register sounds. To increase ease and familiarity with accessing the head register. To improve pitch acuity. To warm up when you have very little time.

### Objectives

- To maintain Singer Posture and Breathing.
- To keep the jaw relaxed and responsive.
- To keep the tongue touching (not pushing, just touching) the back of the lower front teeth.
- To produce and control pure head register and chest register tones.
- To feel and hear the “yodel” of the register separation.
- To keep your placement forward and consistent throughout, allowing the weight and color of the tone to change.

## THE EXERCISE: REGISTER SEPARATION (OR YODEL OR DONKEY BRAY)

- In this exercise—per the staff below—you'll be making a bright “ah” sound for two beats, then an “ee” sound one octave up for two beats, then come back down to your original pitch with a bright “ah” sound for two beats.
- This is the “multiple personality” exercise. Your “ah” sound is going to be in the character of a big-city cab driver (I always think of Chicago or New York)



High female



Low female



High male



Low male

who's leaning out his window, chewing on his cigar stump, kind of annoyed, and yelling, "Hey lady! You waitin' for a better shade o' green, or what?" We're looking for a brassy, nasty attitude and sound, here. Your "ee" sound, an octave up, is going to be in the character of a sweet, chubby, little cherub—angelically cooing a sweet little sound. Then you'll come back to the cab-driver sound for another two beats.

- Once you get the hang of this you won't need to think of these sounds in this silly way, but if you use this tool (or something similar that lets you distance yourself psychologically from the sound you make) as you're getting the feel for it, you'll get it much faster.
- When you go from the top note to the bottom note (or for some people from both the bottom to the top and the top to the bottom) you should hear that sort of "click" in your voice that makes you sound like a donkey. Or a cowboy. Or someone yodeling. That's called a register separation.
- Be aware that your tongue is staying in the relaxed and forward position, touching the back of the lower front teeth throughout. Leave it there when you go to the head register "ee": don't suck it back.
- Move instantly from one pitch to the next. (No in-between pitches, no sliding, no rearticulating, no rearticulating with an "h" sound.) If you do that you'll get the donkey/cowboy/yodel sound. If you don't, you won't. We're looking for that sound in this exercise.
- Your placement for the first and last sounds should be as close to identical as you can get it.



### CHECK FOR FORM

- Is your sternum lifted in Singer Posture so you can take a natural, low breath?
- Are you making sounds rather than singing?
- Are you using pitches that are squarely in your chest register (bright "ah") and head register ("ee")?
- Are you thinking loud and ugly, then high and sweet, then loud and ugly? (Or something like that?)
- Are you feeling all the sounds you're making in the front of your face?
- Are you switching instantly from one pitch to the next—not sliding or adding

extra notes or rearticulating?

- Are feeling these sounds in your face rather than your throat?

## **TROUBLESHOOTING**

---

### **This makes my throat hurt.**

- You might be singing. Stop singing and think of making noises on pitches.
- You might be trying to be too loud. Like the other horrible-sounding exercises in Neuro-Vocal Method, this is about attitude, not volume. You want to think loud, but only with the intention to differentiate between the top and the bottom pitches. You want your bottom pitch to be nasty and brassy, so you'll probably have to think of it as being a little louder than the higher pitch.
- You might be trying to control too much. This takes a little getting used to because it demands that you release control. You think the pitch the instant you're making it. You may be rearticulating, stopping your sound for an instant and then starting again. That will happen naturally in the middle with the "donkey moment," but if you're hearing a tiny stop without hearing the donkey bray, then you're rearticulating. You'll have to get more playful with this and give yourself a chance to get the hang of it. (Or do this with a voice teacher.)

### **I'm not hitting the right pitch or pitches.**

- This happens to most people the first time or two (or three) that they try this exercise. Typically they go sharp, but not always. Sometimes it's just plain wild. Like other exercises that use your larynx in a more efficient way than you've been used to, the results can be surprising and disconcerting. Don't panic. If you keep doing the exercise and keep the pitches you want in mind, your brain will do the math and you'll be hitting the right pitches in short order.

**I'm not getting a forward placement on the lower pitch.**

- If you can't playfully get the "ah" sound to be forward and brassy, don't keep trying. Just change to an "a" as in "can" or to an "eh" as in "neck."
- If you've changed to the "a" or "eh" vowel and you're still not feeling the forward placement, then:
  - Try not singing.
  - Try thinking: Ugly.
  - Start with a "w" before the sound "a": "wa" or "weh" like the sound of a baby crying in a cartoon. But only one "w" at the very beginning. Don't do it again within the pattern.
  - Start with an "n" before the sound "a" or "eh": "na" as in "natter," or "neh" as in "neck." But only one "n" at the very beginning. Don't do it again within the pattern.

**I don't hear the click (or the donkey bray or yodel).**

- You may not be going far enough into the concept of the exaggeration in this exercise. You really have to think of the two sounds in the two octaves as being very different in every way. Loud and soft, brassy and pretty, nasty and sweet, heavy and light, however you describe it.
- You may not be going into true chest and head registers. Make sure you're starting on a pitch that lets you easily hit your two pitches in two different registers.
- You may be sliding down to the third note you hit—the chest register "ah." Think of going instantly from "ee" to the lower octave "ah." You may be aware of a very low level of anxiety when you do this. That's natural. It's the anxiety of not being in control of what you're going to hear. Give yourself permission to let it sound stupid, to not be in tune, to feel weird, to be surprised by what comes out of your mouth. Think of doing a *sound exercise*, not of singing.

**I think I'm doing it right but I'm not sure.**

- Do this exercise for someone you know. Or record it and play it back for yourself. Ask the question of your listener or yourself, "Does this sound like a yodel?" If the answer is yes, you're doing the register separation part right.
- Feel for your voice in your face, and be aware of feeling your voice in your throat. You should feel no pressure or pushing in your throat. If your throat feels really free, then you've got the right placement.

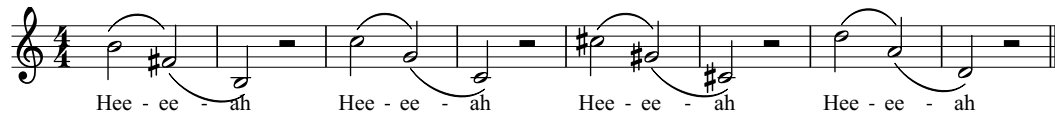
## ALTERATIONS AND MODIFICATIONS



Musical notation for the first exercise, featuring a treble clef and a 4/4 time signature. The melody consists of four measures, each containing a half note followed by a quarter note, with a slur over both. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), D5 (quarter), E5 (quarter), F5 (quarter), G5 (quarter). The lyrics are: Nee - ah Nee - ah Nee - ah Nee - ah.



Musical notation for the second exercise, featuring a treble clef and a 4/4 time signature. The melody consists of three measures, each containing a half note followed by a quarter note, with a slur over both. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), D5 (quarter), E5 (quarter), F5 (quarter), G5 (quarter). The lyrics are: Nah-ee - ah - Nah-ee - ah - Nah-ee ah.



Musical notation for the third exercise, featuring a treble clef and a 4/4 time signature. The melody consists of four measures, each containing a half note followed by a quarter note, with a slur over both. The notes are: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), D5 (quarter), E5 (quarter), F5 (quarter), G5 (quarter). The lyrics are: Hee - ee - ah Hee - ee - ah Hee - ee - ah Hee - ee - ah.

## SKILL DEVELOPMENT EXERCISE #4: DISNEY CHIPMUNK (DESCENDING BLEND)

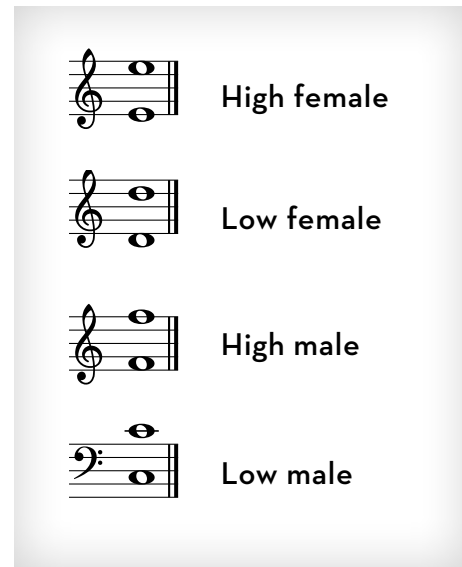
Part	Skill Development
Elements	Placement, head register
Range	Use suggested range
Time Spent	1–5 minutes

### Purpose

To teach the larynx to move smoothly from head register into chest register. To teach control over descending register breaks. To master a low head register blend for both vocal health and stylistic options.

### Objectives

- To control the descending head register, allowing for a smooth transition to a low head register blend.
- To use an exaggerated forward placement as your primary tool to achieve the controlled descending blend.



## THE EXERCISE: DISNEY CHIPMUNK

- You're going to be making the sound of a cartoon rodent. Really. Put on your best voice-over voice and make that little cartoon chipmunk come alive! This should feel really whiny and, well, rodent-y. Like one of Disney Cinderella's mice. It should NOT sound pretty or sing-y.
- Start on a pitch that is high for you. Not really high, but high. (Typically a D5 or E5 for women, a C4 or D4 for men.)
- With your tongue touching the back of your lower teeth and your smiling muscles relaxed, do your impersonation of a cartoon mouse singing a "nee" sound in the pattern below.
- Keep your placement as far forward as you can. (Most people have a sense of this vowel in this register coming out the bridge of their noses or thereabouts.)
- When you hit an F (women and men) or a B♭ (high-voice men) you may feel your voice want to get heavy and drop into chest register. This feeling will get more pronounced the lower you go. Your goal is to control your voice and not

let it “land” in a full chest register sound.

- Staying with your cartoon voice (which will get quieter and more airy as you descend), give yourself a sense of lifting up and forward to guide your voice smoothly down each scale. Allowing it to get quieter as you descend is also helpful. It may feel a little precarious the first few times you do it. Staying in character as a Disney chipmunk will help a lot.
- Go as far as you can without dropping into chest register. When you do drop into chest register, you’re done for now. Eventually you’ll be able to stay in that blend to the bottom of your range.



### CHECK FOR FORM

- Is your sternum lifted and open, allowing you to take a natural, low breath?
- Are you keeping your sternum lifted through the exercise, not letting your posture follow your pitch down the scale?
- Are you being cartoon-y? Goofy? Rodent-y?
- Is your tongue touching the back of your lower teeth? Not pushing, just touching.
- Did you start high enough? (Women should start C5 or higher, low men at C4 or higher, high men at F4 or higher.)
- Are you feeling your placement high and forward throughout?
- Are you feeling like you have to be a little more careful as you get into the lower notes? (Hopefully the answer is yes. It’s a good thing.)

### TROUBLESHOOTING

#### **I’m not sure if my starting pitch is high enough.**

- For women and low-voiced men, anything higher than C is fine. For high-voiced men, F is fine. You want your starting pitch to feel high enough to access head register, but not so high that you’re straining in any way.

#### **I’m not able to access my head register to start.**

- If your head register has been neglected and you’re still working on building some strength and responsiveness there, you may want to skip this exercise for

now.

- You may not be being goofy enough. You may be trying to figure out, *What is this exercise really asking me to do?* Here's the deal: I want you to sound like a cartoon chipmunk. Really.
- Go back to the Warm-Ups section and try Lip Trills and/or Head Register E's. Register Separation is also a good exercise to access head register. Do those and pay attention to how you're feeling when you go to that register. It shouldn't be hard to add the cartoon rodent piece to that.
- If starting with the "n" sound doesn't work, try starting with a "w" and saying "wee" or "whee." Or start with an "n" sound, but blow a little bit of air out of your nose before you phonate.
- You may have temporary vocal damage from coughing or screaming or allergies. You may also have vocal limitations if you smoke. (If you have the condition called Reinke's Edema due to smoking, you won't be able to get much of a head register at all. The condition will go away when you stop smoking.) You may have a naturally husky voice that has sustained some damage over the years. Any of these will keep you from accessing your head register. Any of these are worth a check-in with an ENT or laryngologist who specializes in treating singers.

### **I hate the sound of my head register!**

- This exercise should let you access your head register without the psychological baggage that typically comes with pure head register tones. It's playful and fun; it asks you to be a cartoon character instead of being yourself. Take advantage of that. You need to work the head register muscles in order to work the whole larynx.
- You may resist the whole idea of making sounds with your head register. Some people just do. Let yourself access that register for exercises even if it feels weird to you and you know you're not going to use those notes to sing. Think about football players learning dance moves. Those players will probably never use dance moves in a game, but the coordination and skills they learn in dance classes make them better football players.

### **I'm not sure if my placement is where it's supposed to be.**

- The short and easy check is this: if you feel it in your throat, then your placement isn't where it's supposed to be. This should not feel tight in your throat. If it does, check to see if you've:
  - Tackled too high a pitch to begin the exercise.

- Your placement isn't forward enough.
- You're craning or reaching with your neck.
- That's what the whole "cartoon rodent" thing is for. Your placement won't get much farther forward than that. Look for the feeling—a small feeling, not a big one—in the bridge of your nose, under your eyes, or around or behind your upper front teeth.

### I feel like my voice "dumps" into chest register at a certain pitch.

- That's okay. When it does that, you're done with the exercise for the day. You can try to get another half-step or two next time you try it.

### ALTERATIONS AND MODIFICATIONS

- This exercise can be done as a pure head register blend. In that case, don't be a chipmunk. Do a normal, pretty "ee" sound, but keep your placement very forward. This version will probably get quite airy and light at the bottom of your range.
- As this exercise is done on progressively more open vowels it becomes more and more difficult. Go for it.
  - Nee
  - Neh
  - Noo
  - Nah
- This exercise is more difficult and asks for more breath support if you descend and then ascend again, ending on the fifth scale tone.



- As a modified Register Separation focusing on placement, this exercise can immediately follow the Nasty Vowel in the following pattern.



## SKILL DEVELOPMENT EXERCISE #5: YA-YA ISOLATION

<b>Part</b>	Skill Development
<b>Elements</b>	Balance, chest register
<b>Range</b>	Comfortable low range into middle low range.
<b>Time Spent</b>	1–3 minutes



### Purpose

To create or reinforce the association of the elevation of the soft palate with phonation. To feel or reinforce the feeling of breath energy needed to create a balanced and healthy chest register blend. To bring an awareness of the feeling of a balanced tone, with lifted soft palate occurring simultaneously with forward resonance.

### Objectives

- To maintain Singer Posture and use Singer Breathing.
- To drop the jaw as much as possible (as when you yawn) without jutting or reaching with the chin.
- To keep the tongue touching the back of the lower teeth throughout the exercise.
- To isolate the tongue, allowing it to move without movement in the jaw.
- To move enough air to fill the space such that you have no feeling of tension or work in the neck (larynx).

## THE EXERCISE: YA-YA ISOLATION

(Please do this exercise in front of a mirror.)

- Stand with Singer Posture and start out by taking a nice, low Singer Breath.
- Open your mouth to the position it would be in if you were having a great big yawn. (This might make you yawn the first few times you do it.) Do this without altering your head or neck posture. You should feel an open feeling in the back





### CHECK FOR FORM

- Are you standing with perfect Singer Posture?
- Are you leaving your mouth in the extended open position when you breathe in? Try not to close and readjust every time you inhale. Just keep the same position.
- Is your tongue isolated, or is your jaw trying to help? In this exercise there should only be two things moving throughout: your tummy and your tongue.
- Is your jaw dropped as far as possible for you?
- Do you feel an openness in the back of your mouth or throat?
- Are you keeping your tone very plain and speech-like? There should be no vibrato in this exercise at all. You should be making a sound that is talky, plain, ugly, whiny...whatever word works to keep you from singing.
- Are you feeling your abdominal muscles engaging?

### TROUBLESHOOTING

#### I just don't get it!

- Go back and read the Purpose and Objectives of this exercise. Then be sure to use a mirror when you do the exercise. You don't need a full-length mirror—just one that will show you your posture from about the middle of your chest up.
- If you still don't understand, then you probably skipped the first section of the book and went right to the exercises.

#### My jaw and tongue want to move together.

- If you're unable to isolate your tongue and your jaw keeps moving, or if your TMJ is feeling tight or uncomfortable, try one or both of these techniques while doing the exercise:
  1. Place your hands gently on your face in what I call the *Home Alone* position. Do this while maintaining Singer Posture, without reaching or jutting your head forward.
  2. With your head very straight on top of your neck, drop your jaw a little past the point of being comfortable. Without moving your head



position, take two or three fingers from each hand and plant them on your chin. Your hands will have to exert some pressure to hold your jaw in place, but not as much as you'd think.

- **USE THE MIRROR for both of these.** It's really important to maintain posture that will support your breathing and allow for the release of tension we're seeking. If you do this exercise with slumpy posture, or if you're reaching or jutting your head, you could actually introduce tensions rather than release them. That is NOT what we're looking for here. The mirror will give you reliable information about your posture.



### **My jaw feels tight; it's hard to open my mouth that far.**

- You're most likely experiencing the tight feeling in the jaw joint. Let's talk TMJ for a moment.
  - Many people hold a lot of tension there, particularly if they clench or grind their teeth (sleeping or waking). The resting position of the TM joint is with the teeth 2 to 4 millimeters apart. To have your teeth together, clenching, or grinding causes pressure and tension on the joint.
  - Other people have tension because they've never used their TM joint in this way. The TM joint has two positions. The common and comfortable amount for the mouth to be open is about 20 millimeters. Beyond that distance, the ball joint of the jaw has to move, or translate, to a lower compartment of the mandible. (You can feel that from the outside if you put your hand gently over your TM joint and open wide. You'll feel the ball translate from the higher to the lower compartment. It feels like it's moving back to front.) If you're not accustomed to doing this, or if by not ever opening that wide your jaw and neck muscles have become stiff or tense, then this might be difficult for you. In this case you'll have to give yourself a chance to get the feel for it as well as allowing your muscles to stretch.
  - Some people have a condition commonly referred to as TMJ or a TMJ dysfunction. This can be rooted in any one of a number of causes, the most common being myofascial pain dysfunction syndrome, degeneration or displacement of the articular disc (which is the "padding" in the ball joint), or degenerative joint conditions such as osteoarthritis.
- If you suspect you have a TMJ dysfunction, see a dentist or orthodontist for a diagnosis. TMJ conditions are notoriously difficult to diagnose, so you might consider getting a second opinion before seeking any sort of treatment.
- If you're pretty sure you don't have a TMJ dysfunction but you're still tight in

that joint, then you'll have to approach this exercise in a more moderate way. Simply open your mouth as far as you can without creating actual pain. This will be farther than you are comfortable opening it. Plan on being a little uncomfortable. It will get easier over time.

- Be aware of the feeling of space in the back of the mouth or throat that's caused by the elevated soft palate. When you experience an open feeling back there, then you're wide enough for the exercise to be effective.
- If you can't get your jaw dropped far enough to feel that open-back-of-the-mouth feeling, just follow the instructions and do your best. Your jaw will loosen up over the next few weeks.

### **My throat is getting dry.**

- You're probably doing this exercise exactly as the instructions say. Woo-hoo! You'll get results very quickly! But in the meantime, feel free to close your mouth and swallow at any time. (Are you drinking enough water?)

### **I can't move like that.**

- Use the mirror. Let your mouth hang slack but not extended. Just let it be totally relaxed—like a dog. Looking at yourself in the mirror, say a single “ya” with your intention being to move your tongue only. Focus on moving your tongue, not holding your jaw still. Do that a few times. When you feel like you're in control, say “ya” two or three more times in a row, but slowly.
- If moving your tongue in isolation from your jaw is difficult for you, then it's very likely that association is showing up in your singing as well. This will keep you from hitting high notes for sure, and also probably keep you from singing in tune. Take a day or a few days to simply learn to isolate the tongue (as described previously). It may seem too easy, like you can't really be doing any work, but you are. This tiny thing could be the change that sets you free.

### **This sounds horrible.**

- Only if you're doing it right! Stop listening and start feeling. You're looking for a feeling here, not a sound.
- The feeling you're looking for is very open and free. It's going to make you spend more air than you may be used to, and if that's the case your Lizard Brain will be trying to make you sing and sound pretty so you can use less air. Don't do it. Keep your sound very plain and speech-like and your posture lifted and open; look for the feeling of openness in the back of the mouth/throat and nothing in the voice/larynx/neck.





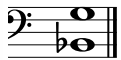
High female



Low female



High male



Low male

## SKILL DEVELOPMENT EXERCISE #6: SINGLE NOTE BALANCE

Part	Skill Development
Elements	Balance, placement, Chest register
Range	Use suggested range
Time Spent	1–5 minutes

### Purpose

To create or reinforce the association of the elevation of the soft palate with phonation. To feel or reinforce the feeling of the degree of breath energy needed to create a balanced and healthy chest register blend. To bring an awareness of the feeling of a balanced tone, with lifted soft palate occurring simultaneously with forward resonance. To get the feel for vowel modification.

### Objectives

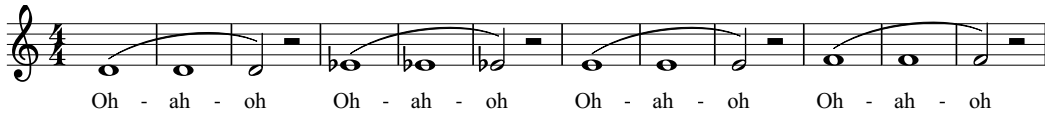
- To maintain Singer Posture and use Singer Breathing.
- To drop the jaw as wide as you can without jutting or reaching with the chin.
- To have the “oh” vowel and the “ah” vowel feel the same, allowing the integrity of the vowel sound to take a backseat to the feeling of the vowels being the same.
- To keep the tongue touching the back of the lower teeth throughout the exercise.
- To move enough air to fill the space such that you have no feeling of tension or work whatsoever in the neck (larynx).

## THE EXERCISE: SINGLE NOTE BALANCE

- Put on your Singer Posture and take a Singer Breath.
- Drop your jaw and create an “oh” (as in “open”) sound with as big a mouth as you can. Keep your tongue touching the back of your lower front teeth.
- On a single pitch, move smoothly from an “oh” sound to an “ah” sound and then back again to an “oh” sound. It’s important that the two vowels *feel as much the same as possible*. Don’t let your “ah” vowel collapse the space. Let go of any need for integrity of the vowel in the “ah” sound. It won’t sound much like an “ah.” Just



think “ah” and reach for the same feeling you’re experiencing with the “oh.”



### CHECK FOR FORM

- Is your jaw dropped as far as it can go while still making an “oh” sound?
- Are you standing straight, not jutting or reaching your chin? Is your sternum lifted to allow for Singer Breathing?
- Does it look and feel strange? (It should.)
- As you make the “oh” sound, are you feeling a combination of a lot of space in the back and buzz in the front?
- Are you using a very plain, non-sing-y sound?
- Is the tip of your tongue glued to the back of your lower front teeth (not pushing, just touching)?
- Does your “ah” feel the same as your “oh”?
- Are you moving smoothly between the vowels?
- Do the beginning “oh” sound and the ending “oh” sound feel the same?
- Are you leaving your mouth hanging open to breathe in—not closing and readjusting? (If you need to swallow, of course, then close and swallow.)

### TROUBLESHOOTING

#### I’m experiencing a closing-off feeling in my throat.

- A lot of people carry tension in their tongue muscles (specifically the hyoglossus muscle that attaches to the hyoid bone). This is very common, and if you are experiencing the closed-off feeling particularly when you make the “ah” sound, that’s probably your issue.
- If so, this is a really good exercise for you. It’s more difficult, but it will also help you more. Releasing tongue tension will make you louder for no extra work, and you gotta love that. Please do this exercise in this order:
  - Making sure you’re doing all the stuff in the Check for Form section (especially keeping your tongue touching the back of your lower front teeth throughout), change your “ah” vowel to an “ee.” If you’re doing this correctly, your “ee” won’t sound like an “ee.” It will sound kind of like an “ih.” So now you’re phonating on “oh-ee-oh” with the intention that all the vowels *feel* the same, and with very little concern with how they sound.

- Once you can do that and feel like your throat stays open for both vowels (in one session or over weeks, whatever works for you) then change to the “oh-ah-oh” modification. It may take a lot of concentration to keep the “ah” feeling the same as the “oh,” but that *is* the feeling you should be reaching for. Remember to keep your sound very plain and not at all sing-y.

### **I feel the back space but not the front buzz.**

- You may not be providing enough breath support. This exercise takes a lot of air, and the higher you go the more it takes. Make sure you’re standing with Singer Posture and breathing low in your body *without closing your mouth*. (I often see people close, re-adjust, and gasp between patterns. This will keep you from finding and maintaining the feeling you need for this exercise.) If you have enough space in your brain to pay attention to another thing, you can use Power Breathing with this exercise. Or you can increase your volume. That will call up the need for more breath, too.
- You may be making too pretty or too sing-y of a sound. Keep it plain, ugly, whiny, talky...whatever word works for you to keep you from singing as you phonate. (One of my students told me this sound reminds her of Squidward from *SpongeBob SquarePants*, so this is her Squidward exercise. Whatever works!)
- You may be activating your forward placement—your buzz in the face—but you’re not aware of it. This could be because:
  - The awkward and new feeling of making an “oh” vowel with an extremely dropped jaw is taking all your attention.
  - You have naturally good forward placement so you’re used to it.
  - You’re looking for a bigger feeling than you’re actually getting. The buzz is a small feeling and can be very localized or very spread out.

### **It’s not working...I don’t get it.**

- You may have skipped ahead to the instructions for the exercise without reading the objectives for the exercise. Like all these exercises, the “why” is as important as the “how.” If you don’t know what you’re looking for, you won’t know it when you find it.
- You may be making this about form rather than feeling. The form is what leads you to the feelings we’re after in this exercise; it’s the *feelings* you want to be paying attention to.
- Go over the instructions again. I find that the most common problem with people’s form is that they won’t or don’t open their mouths enough. You want to trick your soft palate into lifting the way it does when you yawn, so you have to

open your mouth enough for your soft palate to think you're yawing.

### ALTERATIONS AND MODIFICATIONS

- Once you have the hang of this and know what you're looking for, it's a great exercise for working your blend. Make sure you're using Power Breathing and take this exercise as high as you can. You'll find that it's nearly impossible to strain (if you *are* able to strain it means you're phonating on a sing-y sound and need to make it plainer and more speech-like). Keep allowing for the narrowing feeling in your forward placement and you'll find you can blend comfortably right up until you pop into head register.
  - NOTE: *Do not underestimate how much air you're going to need.* As this exercise goes higher and higher, you need more and more air. Really. Prepare to break a sweat. I've never had a student who wasn't surprised by how hard they were working. But the work will be coming from your abdominal muscles, *not* your throat or voice.
- This exercise can be used to modify other vowels once you're accustomed to the feeling you're looking for. You can pick any two vowels and move back and forth between them. It's a really effective vowel modification exercise.





## EXERCISE SECTION 3:

# Working the Blend

## HOW YOU LEARN AND PROGRESS

In this section you'll be applying all the Neuro-Vocal Method exercises in a way that will allow you to iron out your break. This work will be really gratifying in the end, but like most things worth working for, it might be challenging in its process. It definitely falls into the “ambitious” part of “ambitiously lazy.”

As I've said, some people have no problem with this. They get the concepts, they understand that they're creating tools, they apply the tools with the intention to phonate rather than sing, and they start sailing back and forth over their break—first in exercises and then in song. Some people simply cannot find it within themselves to separate these exercises in phonation from their singing, so their singing skills don't change much. Those two categories of Neuro-Vocal Method students are the extreme minority. Everyone else falls in the middle.

The middle, which we can consider typical progression through this process, is much like any other acquisition of a physical skill. If you're already good at some other physical skill—a sport, dancing, magic, sculpting, playing an instrument, or anything else requiring acquired skill—then you'll probably know what I'm talking about. Learning styles differ, of course, but most people share some common learning experiences. You may take two steps forward and one step back. You may inch forward slowly. You may make huge strides and then stay in the same place for a time. The important thing is not how your particular learning style plays out, but rather that you accept and work with your own process.

It can be very difficult to give yourself credit for what *you* consider nominal progress, but it's really important that you do. **You'll progress much faster if you pay attention to, and give yourself credit for, each moment when your expression matches your intention.** Say yes. Don't spend time judging yourself negatively or recriminating your efforts. If your expression doesn't meet your intention, just don't

pay any attention. Move on. Do the next thing. Train yourself to give attention only to the things you want. **Remember, your Lizard Brain doesn't really know yes from no. It only knows "what I pay attention to."** So if you pay attention to *no*, you may get more of whatever you said *no* to. If you pay attention to *yes*, then you'll definitely get more of that. If the expression of your intention doesn't match your intention *in the same way* time after time, take a little time to dissect and analyze. But if it's just once or twice, then pay it no mind. Just move on.

## BLENDING OVER YOUR BREAK

You thought your Nasty Vowel was nasty before? Wait until you hear it as you take it really high! It will sound beyond horrible. But if you've dealt with it so far, you'll probably be fine with it here. The yuck factor only increases by a matter of degrees. By now you pretty much know the feelings you're looking for, so you'll have an easier time focusing on the feelings rather than the sounds.

These exercises will get you over your vocal breaks, show you how much air it takes to get a high chest blend, and get you balancing your tone. The exercises for a balanced tone familiarize you with feelings associated with a normal singing sound (as opposed to the less-than-delightful sounds you experience in most of the exercises). They also demand a lot of air. This is one of the ways that you teach yourself to adequately support that high chest blend sound: your money notes.

## VOWEL MODIFICATION

This is a new idea to most singers, even though they're already doing it. Think about it: your voice is carried on vowels. Singing is a matter of moving from one vowel to the next, and whenever your vowel changes, so does the manner in which you're creating and amplifying sound. And never mind those pesky consonant sounds singers have to negotiate!

Vowel modification is the act of altering the sonic expression of the vowels that carry the sound of the voice. Modifications are made based on pitch, volume, timbre, and specific vowel *in order to keep placement consistent*. That's your goal. That's what allows you to use your larynx efficiently. Like most of what you've done so far, you'll use physical feeling as your measuring stick.

Why modify your vowels? It's necessary to maintain forward placement, which is necessary for efficient phonation. Modifying your vowels allows you to use your throat efficiently, keeping the feeling of your voice in your face rather than in your throat. When you feel your voice in your throat, you're not phonating efficiently and so are causing yourself vocal stress.

The simplest and most natural way to modify your vowels involves getting used to doing the following three things simultaneously:

- Open your mouth.
- Keep your tongue touching the back of your lower front teeth.
- Think the vowel.

Another way of understanding this is singing with your tongue forward on all vowels, allowing for enough space—having your mouth open wide enough—to feel your voice in your face.

Take a look at any video of a really good singer hitting their money notes. You'll notice that your singer has his or her mouth open very wide and the tongue forward in the mouth (there are some exceptions to this, but very few). Even if that vowel is an “ee” sound. If so many great singers are doing it, they must be on to something, right?

## **SUPER SUPPORT, POWER BREATHING, OR DO I HAVE TO BE THIS LOUD?**

### **Support**

I've been teaching popular music singing technique since the earth was cooling off, and I've never seen a singer start hitting their money notes without applying some hard, physical work. We're talking about breaking sweats, here.

People are used to having their singing be a pretty easy thing, and the singers they love make it look easy too. But those singers have earned it. The breath support they use looks easy because they're accustomed to it; for them it's more about energy than effort. You'll get there too, but until you get the hang of all this you're going to be working your breath in a way you're probably not used to.

Think about some physical skill that's easy for you. It can be anything, but it has to be something that you *learned* how to do: tennis, kneading dough, square dancing, skateboarding, keeping time on a rhythm instrument, or anything that burns some extra calories. When you first did this thing it took effort and attention. Depending on what it was, it may have taken a *lot* of effort. But after you repeated this thing, oh, a couple of thousand times, it wasn't so hard anymore. Your effort had translated—via familiarity—to energy.

That's what's going to happen here as well. You'll work hard at supporting your tone. You'll sweat. You'll quit and come back. You'll hate me or whoever is teaching you. You'll question whether this can be right. But whatever you do, you'll *have* to get next to the reality that notes in your high chest blend take a boatload of air to support them. **If you don't spend the air, you don't get the sound. Period.**

### Power Breathing

This is where Power Breathing comes in. You'll need to have mastered Power Breathing such that you have a sense of your abdominal muscles *connecting* with the sound you're making. If the sounds coming out of your mouth and the flexing of your abs feel like two separate actions that you happen to be doing simultaneously, then you need to go back a few pages.

Power Breathing does what the name promises: it provides you with that boat-load of air. But it does something else as well.

When you flex your abdominal muscles in the specific way that Power Breathing asks you to do, and you do so with enough strength, it's virtually impossible to grip or try to control your larynx. When you're flexing your abs that hard and your mouth is open to make noise, you have to take what comes out because there's no way to try to control it. At least from the larynx. You'll have freed your larynx to act as naturally and efficiently as it can. Remember, an efficient voice is a loud voice that can sing for a long time without fatigue. Effective Power Breathing will help force you to release any tension you carry in the larynx.

This might freak you out at first. It's going to feel and sound weird. But again, if you don't have it in your head that you're singing, you won't be singing. You'll be making a noise. And it's much easier to accept *noisemaking* issuing forth from your mouth than *singing* that sounds and feels just *wrong*. It doesn't take long. It can take as little time as a few minutes a day over a few days. Then you'll be more used to it and you'll have that sense of your breath connecting to your voice. And that feels really good. Seriously, how can it not?

### Pump Up the Volume

When you first start hitting your money notes you're going to feel like you *have* to be really loud. Like, if you're not as loud as you can be you'll be in your head register.

That's true. But it's not forever.

When you're getting the feel for your money notes, you have to completely have the hammer down or you're not going to be able to hit them at all. You'll feel like you're walking on a wire, and unless you're really loud, you're going to fall off. You may also feel as though you're shouting. Sorry. That's just how it is.

But, as you become accustomed to how it feels to hit those notes—as you begin to anticipate *at a physical level* what that high chest blend feels like—you'll have more control over it. Let me be clear: your money notes will always demand a certain amount of volume. No matter how familiar you become with the feel of the high

chest blend, the point at which your volume diminishes too much is the point at which you pop into head register. However, the high wire you walk as you're first leaning how to do it will become as wide as a balance beam, and then a diving board. As you get used to the feeling of singing in your high chest blend you'll have more choices about how to use it. You'll begin to take your ability for granted, to assume that your high notes will feel a certain way, and then you'll start to feel like you can control your singing on those pitches.

Now you know what to expect. Let's do this!

## WORKING THE BLEND EXERCISE #1: NASTY TRIANGLE

***Please read this:*** The Nasty Triangle is probably the most important exercise in Neuro-Vocal Method. This is the foundation exercise for getting the feeling of how a high chest register blend works. **With this exercise you are creating the tool that teaches your larynx to override its natural inclination to break into head register at a certain pitch.**

For this reason I take quite a bit of time with this, and you should too. Please don't push or hurry this exercise.

<b>Part</b>	Working the Blend
<b>Elements</b>	Breath, placement, chest register
<b>Range</b>	Start comfortably low and take it as high as you can without straining or popping into head register.
<b>Time Spent</b>	1–5 minutes

### Purpose

To develop and implement one of the primary tools used in Neuro-Vocal Method. To teach the larynx how to do something it does not do naturally, which is to blend smoothly from the chest register to the head register. Ultimately you want to have no discernable break and to maintain the character of the chest register to an F5 (women), an A4 (low men), or a C5 (high men). In other words, you want to be able to hit your money notes!

### Objectives

- To maintain Singer Posture and Breathing.
- To find an easy, exaggerated forward placement, one that
  - feels buzzy in your face,
  - sounds bad in your head, and
  - feels like nothing in your throat.
- To allow yourself to make a pitched sound that is NOT singing; rather, to phonate on a sound while looking for a feeling or feelings. It WILL sound horrible to you in your head.
- To move that exaggerated forward placement through a three-note scale as you allow for and support the change in feeling with each ascending half-step.

## Walking the High Wire

The Nasty Triangle is probably the most important tool you can develop on the way to hitting your money notes. For many people it's no big deal. They find it easily, and even though it *sounds* bad, it *feels* right, and so it makes sense to them.

But for most people this exercise is a challenge. It's not a physically difficult exercise, but being able to do it, and then use it, takes faith in the method. It takes a willingness to *not* sing, a willingness to sound bad, an ability to focus so that the sounds you're making take a far backseat to the feelings you're experiencing.

I'm gonna say it again, ya'll: **If you can't intentionally stop yourself from singing, you won't be able to change your singing.** You will have to be willing to sound bad and look for new feelings in order to get past your break and into your money notes.

Even if you're willing, you will probably experience some uncomfortable feelings. Your ego will scream at you for sounding so bad. You'll have an emotional reaction to the newness of it all. As you move higher into the Nasty Triangle, you may feel increasing anxiety as your need for more breath and a more extreme forward sound increases. You may feel uncomfortable with how loud you're being. You will probably feel unsure about whether this could possibly be right.

These are all reasons to do this with a voice teacher who uses the Neuro-Vocal Method, someone who knows what you're going for and can help guide you into it, reassuring you when you're doing it right. Yucky sounding, but right. Alternately, you can use the support materials at MeredithColby.com and commit to really paying attention to how you're feeling. You'll also have to be a very conscientious student of Neuro-Vocal Method. Don't reinvent the wheel. Or the Nasty Triangle.

## THE EXERCISE: NASTY TRIANGLE

- The name of the game with this exercise is *exaggeration*. Do not for a minute imagine that you are a) singing or b) sounding good. You should not sing, and you will sound bad. **You are creating a tool by which to find and access your high chest blend.** You need a tool because the high chest blend is not something your voice does naturally.
- It's very important to remember to breathe in this exercise. The breath has to do the heavy lifting for you.
- Start with your Nasty Vowel. Make that sound on a comfortable pitch. You want to find it and then hold it out long enough to really feel the feeling in your face. **If you're experiencing this sound as any amount of straining, tightness, or pushing in your throat, do not proceed with these instructions. Go back to the Nasty Vowel exercise and master it. These instructions are going to assume that you found that sound, and that you found it on a pitch that's comfortable for you.**

## STEP 1, DAYS 1 TO 3\*

- This is for the first day or few days, when you're getting the hang of it.
- Using a comfortable, speech-range pitch, phonate on the Nasty Vowel. (Remember, if the flat "a" doesn't work for you, try a short "eh" like in "neck.") Hold it out as long as is comfortable, making sure that you're experiencing the ugly-sounding-but-comfortable-feeling buzz in your face. You should feel nothing, or nearly nothing, in your throat or voice.
- If you're feeling it in your throat from time to time, lower your volume. Keep the attitude, keep a sneer in your sound, but quiet it down.
- Hold a tone using the Nasty Vowel for a set number of counts that doesn't wind you. ("I'm going to hold this for the count of four.") Then repeat it a half-step (or a little bit) higher. Keep going up. When it feels like you're working too hard, or you're feeling it in your throat, or you think you may switch to head register, then turn around and do the same thing on descending pitches.
- Once you're sure you've got the placement and it's feeling really easy, proceed to the next part.

## STEP 2, DAYS 1 TO 5

- Take a moment to find the Nasty Vowel on a held pitch, per step 1.
- Using the Nasty Vowel, and starting on a pitch that works for you, move through this pitch pattern:



- Your goal is to be able to move the pattern up three to five half-steps while maintaining the Nasty Vowel buzz in your face consistently. Very consistently. Don't let it come and go, or get stronger and weaker. It should be like a bumblebee all the way through. Connecting the sounds is the key to keeping that bumblebee in the air. Even if it feels kind of sloppy or slidey to you, make a point to connect one pitch smoothly into the next. Use your vowel and your attitude, not volume. This should be at a speech-level volume.
- Remember, if the flat "a" of the Nasty Vowel doesn't work for you, try a short "eh" like in "neck."
- Keep your focus on the physical sensations. Try not to listen to yourself. If your pitch isn't spot-on, *you don't care*. It will fix itself later. Just feel what you're doing as you make this sound on pitches. And *don't sing*.
- Do this exercise to the limits of your comfort zone. As soon as you've hit a pitch (either ascending or descending) on which you can't find the buzz, or you feel

that you're pushing from your throat at all, then stop. Either turn the pattern around to head the other direction (ascending or descending), or be done for the day.

### STEP 3, AFTER YOU'RE ABLE TO DO STEP 2

- Take a moment to find the Nasty Vowel on a held pitch, per step 1.
- Using the Nasty Vowel, and starting on a low or low-ish pitch, move through this pitch pattern:



- Your goal is to be able to move the pattern up three to five half-steps while maintaining the Nasty Vowel buzz in your face consistently. Very consistently. Don't let it come and go, or get stronger and weaker. It should be a bumblebee all the way through. Connecting the sounds is the key to keeping that bumblebee in the air. Even if it feels kind of sloppy or slidey to you, make a point to connect one pitch smoothly into the next.
- Once you're sure you're doing that, go back and start again. This time bring your awareness to what you're feeling in your face as you phonate. If you pay close attention, you'll notice that the highest note of the pattern feels as though it's moving into a skinnier and/or higher and/or more forward space than the lower notes of the pattern. *This is a very subtle difference in the lowest part of your range, and it will get more pronounced as you go higher.* This is called the Nasty Triangle in Neuro-Vocal Method. DO NOT look for this to be a big feeling. It's a very small feeling and will probably be quite localized somewhere in your face or mouth.
- Don't move on until you're sure you can feel the triangle. Most people begin learning this exercise in their comfort zone (for women it's lower than F#4, for low men it's lower than A3, and for high men lower than D♭4) and take time to get familiar with the feeling of the Nasty Triangle.
- Once you can identify the Nasty Triangle **and** you're able to make the sound with no pushing from the throat, you're ready to move on.

### STEP 4

- Starting in on a comfortable, low pitch (as you've been doing), phonate on the Nasty Vowel in the pitch pattern shown before.
- If the flat "a" of the Nasty Vowel doesn't work for you, try a short "eh" as in "neck."

- This time you're going to move higher. You want to take your Nasty Triangle up in half-steps and in a set beat pattern. Make sure you take a Singer Breath in between each pattern. *Singer Posture is really important in this exercise. A sunken chest or reaching up or out with the chin will get in your way, inhibiting your capacity to support the tone.*
- As you go higher, the "point" of the triangle (the highest note of the pattern) will become more and more exaggerated: increasingly skinny, high, forward, and/or whiny. The point is that it gets *more* like a triangle as it goes higher.
- **Keeping your focus on how you're feeling rather than how you sound will naturally create increased breath support.** Make sure you breathe your nice, low Singer Breath in between each pattern.
- As long as you're feeling your triangle in your face (that is, as long as you're maintaining your exaggerated forward placement) you can keep ascending in half-steps.
- You'll be getting louder and louder as you go higher. You'll also be getting brattier, whinier, uglier...just more horrible sounding. You have to allow that to happen. Don't *make* it happen: *allow* it to happen by maintaining your intention to **feel** the Nasty Vowel and taking low, big breaths.
- There will be a point at which you feel like you can't go any higher. You'll pop into head register, or you'll feel pushing in your throat, or you'll just feel like you've hit the ceiling. Fine. You're done for today.

**Please note:** Some people have no trouble with this exercise. They quickly understand the concept of making an exaggerated sound on a pitch, they can easily feel the triangle, and they cruise right through it. Most people, though, master this a little at a time. They get the feeling of one thing—the placement, the vowel, the movement, a certain group or pair of notes—and then they let that settle in for a while. (A while can be a day or a couple of weeks.) When they're comfortable they move on and get the next note or two. It's all good. It's about getting the feeling of it. You have to operate from a place of feeling rather than listening. Your reward will be that your Lizard Brain will learn what to expect and just give it to you instinctively; you won't have to think much about it at all. You may not like how this sounds, but your Lizard Brain loves how it feels. **Please read the Troubleshooting section if you feel any resistance at all to this exercise.**

## CHECK FOR FORM

- Is your sternum lifted in Singer Posture so you can take a natural, low breath? You're going to need it!
- Are your smiling muscles relaxed?
- When you open to the vowel, is your tongue forward in your mouth? Tip of tongue touching (not pushing, just touching) the back of the lower front teeth?
- Do you have a word that will keep you from singing, such as *plain* or *talky* or *ugly* or *whiny*? You should attach an effective word to your intention to keep this sound from being a singing sound.
- Are you feeling a sort of triangle in your face? There should be a sense of each ascending note going higher and/or more forward in the face, at the same time as the sound is feeling and sounding thinner and more whiny.
- Are you making the last note of the pattern short enough to allow you to take the breath you need?

### I Love My Low Notes...I Need My Low Notes!

For people who have been chest register singers their whole lives, the whole idea of the Nasty Triangle can be a challenge. The voice you're used to hearing and feeling is one that is rich and warm with a broad color spectrum. The Nasty Triangle exercise insists that you let go of your attachment to that richness and warmth. It makes you get brassy and thin. That can be a difficult pill to swallow, and not because you're unwilling or you don't understand. It's just hard to grasp at a physical, emotional, or sonic level.

Also, you're probably really used to getting out your power tools when you get to the top of your range. It's typical of chest register singers to be in the habit of putting more force and muscle into their sound when they're higher in their range. This is mostly because you're nervous up there. You don't trust it, you would rather avoid popping into head register, and you don't have the confidence in your higher notes that you do in your lower notes. But also, you want to hear your voice maintaining the rich quality it has in its lower notes. So for you, dear Chest Register Singer, this exercise involves not just learning a new skill but also breaking old habits. You'll still be putting plenty of muscle into those high notes, but the work will be coming from your abs, not from your throat.

You're reading this book, so I assume you really want to get your money notes. So here's my advice to you: raise your awareness. Be super aware of if and when you're working from your throat. Be super aware of *not* singing, and instead phonating on a pitch. If you feel yourself pushing from your throat in this exercise, then stop. Bring your awareness to your placement such that you're very sensitive to when you're bringing it forward and up, as opposed to holding it in one place or allowing it to fall down the back of your throat. Have your non-singing word (*plain*, *talky*, *whiny*, *ugly*, etc.) in your back pocket and ready to pull out any time you need to remind yourself to stop singing. In these scale exercises the pitch you're phonating on should always feel different than the one right before it. Higher pitches are thinner, whinier, more forward. Lower pitches get fuller and richer, and they take up more space. Most people aren't used to thinking of their voices in that way, or to feeling for these little differences. But you will, if you want to conquer that break and get your money notes.

- Are you connecting the pitches, not rearticulating? Even if it feels sloppy or slidey, it's better to *overdo* the connecting of the pitches than to hit each note strongly. This exercise will be something between really difficult and impossible if you hit each individual pitch strongly.

## TROUBLESHOOTING

### My throat hurts.

- You may be singing. The most common reason for people being unable to find the Nasty Vowel or move the Nasty Triangle is that they're trying to *sing* an ugly sound and *listening* for a certain response. Instead, try to phonate (talk, whine, be plain, etc.) on a pitch and *feel* for a certain response.
- You may be trying to *make* a feeling rather than *allowing for* a feeling. This is sort of a tricky distinction, and for some people that sentence means nothing. For others, though, it really resonates and helps them immediately. You should be *looking* for your natural placement rather than trying to *create* a forward placement.
- You may need to be quieter. Because of the ugliness of this sound, a lot of people just do this exercise too loudly. The good news is that this is the easiest fix there is. Just keep the bratty attitude and lose some of the volume. Attitude, not volume. Do it with a sneer.
- Check your posture. Any reaching or jutting with the chin or head will almost certainly cause the larynx to start straining sooner or later. If you're a habitual reacher, do this in front of the mirror and let your eyes help you keep a posture that will support this exercise.
- Check your facial expression. You may be forgetting to keep your smiling muscles relaxed. If you're pulling your smiling muscles, then your soft palate is probably in its dropped position, which makes the exercise really difficult. Try to keep your smiling muscles relaxed and your mouth slack. "Dog mouth," I tell my students.

### My throat hurts as I go higher.

- You may not be allowing for the thinner sound as you go higher. Please take this one step at a time. If your throat hurts, either you've gone too high or you didn't get the Nasty Vowel in the first place. Most people need to let this coordination "settle in" in one to three semi-tone groups. You get the feel for the next pitch or group of pitches and then access them again and again over the next few days or weeks. Once that group is comfortable for you, then you exaggerate the

Nasty Triangle further and go for the next pitch or group of pitches. Please note that I said “comfortable,” not “easy.” This exercise takes breath support, and the higher you go the more support it calls for. That part is not easy. Especially at the beginning.

### **I can't find the buzz.**

- If you can't find the buzz, it's probably for one of these four reasons:
  - You're singing.
  - You have the buzz, you're just not identifying it. You're probably either looking for a bigger feeling or you have naturally good forward placement and are already used to feeling it.
  - Your vowel is too pretty.
  - You're on a pitch that is too high or too low.
- The fix is the same for any of these. Review the Breathe and Buzz exercise (Warm-Up Exercise #1). On a comfortable pitch, say “hun” as though you're saying the first half of the word “honey.” Keep your mouth relaxed and your lips parted. When you get to the “n” of “hun,” hold it out. Hum on the “n” as you did in Breathe and Buzz. Just a hold out a single pitch. Now *pay attention*. Bring *all* your attention to the front of your face and feel for the buzz. You *are* feeling a buzz somewhere. You need to locate it and identify it as such. Although the most common placement is in the front of your face, you may not find it there. You may feel it in the back of your tongue or inside your ears or somewhere else.
- Once you find your buzz, do it a few times until you're able to call it up pretty easily. Once you can do that, practice opening your “n” to “na” as in “nasty” (or an “eh” sound as in “neck”) *with your objective being to maintain the buzz as you move to the vowel*. Hold that intention. If you feel you can't bring the “n” buzz into the vowel, do some checking. Check for pitch. Are you too high or low? Check for tone. Are you singing? Or being too pretty? Check your vowel. Is it flattening out? Is it turning into a kind of “ah”? Did you try both vowel sounds to see which works for you?

### **I can't feel the triangle.**

- You could think of it differently. Although most people know what I mean when I tell them to look for the “triangle,” from time to time someone just doesn't experience it that way. Sometimes people feel that third note of the pattern is lighter, or whinier, or thinner, or higher in their face. Sometimes people experience the sound as moving from back to front rather than from down to up. Feel for a difference and then attach the appropriate word to it.

- The lower you are, the harder it is to feel that shape. First you have to make sure you have the feel for maintaining your buzzy sound through three connected notes. When I do this part of the exercise with people I usually use the ranges:
  - Low men: C3–F3
  - High men: F#3–B3
  - Women: B♭4–F4
- We do the pattern in that range until they can identify the fact that the third note of the pattern feels a little different than the first note of the pattern. Once a singer can feel there's a difference, I ask him or her to figure out how that feels to them. Can they feel the triangle? The highest note of the pattern should feel skinnier, lighter, more forward, pointier, or higher in the face. Once the person has a way to identify the experience of the changing weight and placement of the different pitches, then we move on.

#### **Is it supposed to sound this horrible?**

- Yes. It will sound bad in your head. Really, really bad. You must not listen to yourself. You need to do two things:
  - Be cognizant of the fact that this is a means to an end. Be aware that you are exaggerating one aspect of the singing voice. You're creating this exaggerated aspect so you can use it as a tool to help you smooth over your break. This is not how you're going to sound when you sing. Do this consciously and deliberately and with your intention in mind. You'll probably have to consciously pull yourself back into feeling your sound frequently. After all, you're trying *not* to do something you've spent your whole singing life doing—listening to yourself sing.
  - Feel. Feel, feel, feel. Feel the buzz in your face. Feel the freedom and nothingness in your larynx. Feel the shape of the triangle you're making with your sound. Feel your abdominal muscles engaged. Feel yourself standing with a lifted and open posture. Feel the breath come low in the body. The more attention you can give to how you're feeling, the less attention you'll give to how you sound.

#### **I feel like I'm being too loud.**

- Yes, if you're phonating efficiently then you are being loud. That's the deal with vocal efficiency. More volume, less work. Also, when you're getting the hang of this exercise, the top notes have to be loud or you'll pop into head register. When you're more accustomed to how much air it really takes, you won't have to be so loud. That said, you should know that a high chest blend will always be at least

loud-ish. If you're north of your break and you go for a quiet sound, you're going to pop into head register. (And that's great if you *want* to pop into head register as a stylistic choice.)

### ALTERATIONS AND MODIFICATIONS

---

- If you feel tenuous with this sound—like you might lose it at any second—then the three-note exercise might not be where you want to start. After you can hold out the Nasty Vowel on a single pitch up to your first break (low men B $\flat$ , high men D $\flat$ , women F), start moving the sound up and down by whole steps within that same range.

## WORKING THE BLEND EXERCISE #2: HEE-YA STRETCH

<b>Part</b>	Working the Blend
<b>Elements</b>	All
<b>Range</b>	As low and high as you can go without straining
<b>Time Spent</b>	2–5 minutes

### Purpose

To learn to choose between a tone that is almost completely in one register or the other, and one that is blended. Instantly, on a dime. Lizard-Brain trained. To improve pitch accuracy.

### Objectives

- To maintain a tone supported with breath.
- To feel your placement as you change registers.
- To hold the intention of a pure register and then instantly release to a blended sound.
- To do this exercise without singing or trying to sound pretty.

## THE EXERCISE: HEE-YA STRETCH

- Stand with your Singer Posture and take a Singer Breath.
- Find a pitch between A and D that you can easily sing in head register on an “ee” vowel. Pick the lowest of these pitches (within this range) on which you can phonate lightly and simply; like a little kid.
- Similar to the Register Separation exercise, you’re going to drop down an octave and into a pure chest register tone. However, in this exercise it’s a falling drop instead of a broken jump. Like a cartoon character falling off a cliff. Be sure to keep your placement forward throughout the drop.
- When you hit your lower octave you’ll phonate that tone on a bright “ah” vowel in chest register.
- As soon as you hit the bright “ah” vowel you’ll move it into some version of a scale—per the staves below—in a chest register that will get increasingly more mixed as you move higher in pitch.
- As you move higher in this exercise you should notice:
  - The Nasty Triangle principle at work. The higher you go the “skinnier” the vowel feels. It will get whinier as it goes higher.

- There will be a “top” to this exercise. You’ll be able to go as high as you can go. It’s not easy, and more effort will get you higher notes. But again, no pushy-pushy from the throat.
- As you go higher you’ll need to open your mouth more and modify your vowel. Let the feeling guide you to how open you need to be.
- The higher you go, the more work it is. Use your Power Breathing. **The effort should be coming from your abs, not your throat.**

Hee - ah                      Hee - ah                      Hee - ah

Hee - ah                      Hee - ah                      Hee - ah

Hee - ah

### CHECK FOR FORM

- Are you standing with Singer Posture?
- Is your tongue forward in your mouth, and are your smiling muscles relaxed?
- Are you feeling your phonations in your face and/or mouth? Is your throat/voice free and relaxed?
- Is the second vowel occupying the same real estate in your face that the first vowel did? In other words, are you feeling both your head and chest register vowels forward in your face?
- Are you keeping your tone very plain? Or, if that word doesn’t work, try *talky*, *ugly*, *whiny*, or whatever word (or concept) will keep you from singing.
- There should be no vibrato in this exercise at all.
- Are you feeling your abdominal muscles engaging?
- Are you at the ready with your Power Breathing, putting your thumbs in your sides at the first hint of pushing from the throat?

## TROUBLESHOOTING

### **Not sure if I'm starting in a head register tone.**

- If you start on one of the suggested pitches, use an “ee” vowel, and think about making a light or quieter sound, you should be fine. The real giveaway is the difference in feeling and texture after you slide down to your second pitch. If you're really not sure, try starting on successively higher pitches.

### **My vowels move to different places.**

- Try a different vowel. “Ah” vowels often like to sit in the back of your throat even when you try to brighten them up. Instead of the “ah” vowel, try an “a” as in “apple” or an “eh” as in “neck.”
- Try it a few times, holding on to the intention of feeling both vowels in the same place even though they're different in every other way. Give yourself a chance to get the hang of it.
- Start light, fall off light and forward, and land heavy. Think about the bottom pitch being heavier, louder, and uglier. Make it the sound of a sneer or an obnoxious complaint.

### **I can't do the fall-off part.**

- Don't overthink it. It's a noise you've probably made many times before. It's the sound animated movies use for falling. It's the sound of a slide whistle, or of a siren as it moves away from you. It's not technical; it's silly. Think “I'm making a noise.”
- Keep it light and take your time. Let the exercise be slow enough to allow you to feel what it's for.

### **My voice won't switch to chest register.**

- Try a different vowel. “Ah” vowels like to sit in the back of your throat even when you try to brighten them up. Instead of the “ah” vowel, try an “a” as in “apple” or an “e” as in “elephant.”
- Start light, fall off light, and land heavy. Think about the bottom pitch being heavier, louder, and uglier. Make it the sound of a sneer.
- If it still won't work, get more familiar with the Register Break exercise. This one is a modification of that. It calls for more specific coordination, so being good at the basic version of this exercise will help a lot.

### **This sounds really stupid and ugly.**

- Yes it does. That's your secret weapon.

## ALTERATIONS AND MODIFICATIONS

- Landing on the “ah” vowel can be tricky. “Ah” vowels often like to sit in the back of your throat even when you try to brighten them up. Try a different vowel. Instead of the “ah” vowel, try an “a” as in “apple” or an “e” as in “elephant.”
- Changing the rhythms can make this more challenging and increase your ability.
- When you get the feel for this you can start much lower. Starting on a G or G# (most people) or C or C# (tenors and light-voiced women) can fine-tune your coordination.
- The modifications for this exercise are all demonstrated in the patterns above. The patterns that look harder are, in fact, harder.

### THIS GOES TO 11

Most musicians have seen the classic (old) musician movie *Spinal Tap*. It's a mockumentary, and there's a famous scene in it where the lead singer of the band, Nigel, is showing off his custom guitar gear to the filmmaker. He's particularly proud of one feature on his Marshall amp: the knobs all have eleven points on the dial, not just ten. When the filmmaker asks Nigel why he doesn't just make ten be the loudest setting, the confused rocker simply replies, “These go to *eleven*.” (You can look up this 54-second scene online by searching “these go to 11.”)

This story fits the next two exercises because you'll need to be louder than loud to make them work. You'll need to turn it up to eleven.

## WORKING THE BLEND EXERCISE #3: SKINNY TRIANGLE BLEND

<b>Part</b>	Working the Blend
<b>Elements</b>	All
<b>Range</b>	From comfortable low pitch to as high as you can go without straining
<b>Time Spent</b>	2–5 minutes

### Purpose

To teach your larynx how to blend your chest register past your natural break.

### Objective

To learn how to feel for increasingly exaggerated forward placement as you blend higher and higher.

## THE EXERCISE: SKINNY TRIANGLE BLEND

Before you do this exercise, I want you to become aware of something.

Look in a mirror. Now, with your mouth hanging slack—lips half an inch to 1 inch apart—and your smiling muscles relaxed, say the following vowel sounds: “a” like “apple,” “eh” like “elephant,” and “ee” like “free.” If you do this without changing your jaw or lip position at all, you’ll notice that the back part of your tongue moves. If you say those vowels in that order, you’ll feel the back of your tongue move from a lower position, to a higher position, to a still higher position.

That’s the magic of this exercise. Once you know how to allow for the Nasty Triangle principle, you can use this more difficult version of it to reach into your really high notes. Your money notes.

- Start on a comfortably low pitch.
- Using the patterns below, move as smoothly as you can from one vowel to the next. Your pitch line should be pretty fast and smooth. Even if it feels a little sloppy, it’s important to move smoothly from one pitch to the next. Be aware that you’re not articulating individual notes.
- You’ll feel an increasingly exaggerated forward placement as you move higher in the pattern, and as each pattern moves up in half-steps.
- You have to pay really serious attention to how you feel in *each scale pattern*. If the top of one scale doesn’t hit its mark, placement-wise, and you don’t notice it or don’t fix it, then it probably won’t fix itself. You’ll find yourself feeling more

strained and pushed the higher you go. We don't want that. We want pushing only from the abs.

- If you keep pulling your placement forward into the Skinny Triangle, and support with Power Breathing, and keep yourself from doing any reaching with your head or chin, you'll be able to vocalize into your very highest mixed range.
- Oh, and don't sing. This ain't pretty.

Nah - eh - ee      Nah - eh - ee      Nah - eh - ee

Nah - eh - ee      Nah - eh - ee

### CHECK FOR FORM

- Are you standing with Singer Posture?
- Is your tongue forward in your mouth, and are your smiling muscles relaxed?
- Are you feeling your phonations in your face and/or mouth? Is your throat/voice free and relaxed?
- Are both the vowels and the pitches connecting smoothly?
- Are you keeping your tone very plain and allowing for the Nasty Triangle principle?
- Are you feeling your abdominal muscles engaging? When you get high those babies should be working!
- Are you ready to use Power Breathing, putting your thumbs in your sides at the first hint of pushing from the throat?

### TROUBLESHOOTING

Unlike the other exercises, where people can often identify what's going wrong, in this exercise people know only that something isn't working. So I'll just tell you the things that will make this work.

- Make sure your very first sound is forward. You want to start with that whiny, yucky, buzzy version of an "a" sound.
- Make sure your second vowel, the "eh," is coming forward, not dropping back. If you pay attention you can feel the difference. If your second vowel consistently

feels less forward than your first, then stop changing vowels. Do the whole thing on an “eh” vowel.

- When you get high (past B b for lower voices, past D b for higher voices) you’ll have to allow for your sound to be like it was in the Disney Chipmunk exercise: super forward and nasal and whiny.
- You should probably be using Power Breathing for this one.
- It sounds bad. Don’t listen. Feel.

### **ALTERATIONS AND MODIFICATIONS**

---

- If you just can’t help one of your vowels from dropping back (usually the “eh” sound), then switch it out for a vowel that works better. Or just leave it out. You can do this exercise going up the scale on the bright “eh” and switching to the whiny “ee” at the top.
- Simply phonating on an “eh” as in “neck” for the entire pattern can be very effective. If you find you’re thinking too hard about the vowel pattern, please just use “eh.”

## WORKING THE BLEND EXERCISE #4: POWER SLIDE

<b>Part</b>	Working the Blend
<b>Elements</b>	All
<b>Range</b>	As low and high as you can go without straining
<b>Time Spent</b>	2–5 minutes

### Purpose

To feel and integrate a blended and balanced tone all the way through your range.

### Objectives

- To find and maintain a balanced sound (front placement plus back space) throughout the exercise.
- To support your tone with breath such that you experience the vibration of your voice in your face: your throat should feel open and free.
- To phonate as high and low as you can without straining or pushing.

## THE EXERCISE: POWER SLIDE

- Engage Singer Posture and Singer Breathing. It can be helpful to do this looking in a mirror.
- Stand with your mouth wide open, tongue forward, smiling muscles relaxed, and thumbs in your sides for Power Breathing. (Make sure your thumbs are in the right place—make little coughs and feel around for the muscles giving you the strongest push.)
- Only move your abs and your tongue. Your jaw will stay open and your mouth relaxed.
- Being aware of your placement throughout, move the exercise up and down in half-steps.
- The first sound you make will be an “h.” This is to engage your abs and force your soft palate up. Make sure this initiation is coming from your flexed abs.
- With your mouth wide open, tongue forward, and smiling muscles relaxed, phonate solidly in low chest register on “heh” as in “heavy.” Change the vowel to an “ee” as you slide up to the major third or fifth of the scale. The first of the exercises asks you to hit the high note on the brighter of the two vowels and sustain it. The other two ask you to hit the the high note on the brighter of the two vowels, then stay on that vowel as you slide back down and maintain your

placement.

- If you find you cannot slide either one or both ways, you can do this exercise in a stepwise motion (exercise 3.4.3). It's more effective as a sliding exercise, so give that a try.
- Ascend in half steps as high as you can without straining. Stop as soon as you feel this in your throat.
- If you feel your voice switch over into a head register blend but your placement stays the same, keep going. That's a good thing.
- As you master the brighter vowels, move on to the darker vowels of "oh" and "ah." They require more support to keep forward.

### CHECK FOR FORM

- Are you standing with Singer Posture?
- Looking in a mirror?
- Have you found your Power Breathing muscles?
- Is your mouth open, and are your smiling muscles relaxed?
- Tongue forward, touching the back of the lower teeth? (Not pushing, just touching. If you find you're pushing, you can lay your tongue over the top of your lower teeth.)
- Watch as you do this exercise that you don't pull up your smiling muscles as you phonate.

## TROUBLESHOOTING

### **I can't do the slide thing.**

- Some people have trouble sliding from one pitch to another, and some can slide in one direction (ascending or descending) but not the other. For now, use a stepwise motion.
- You already know how to do this. You probably just don't do it on purpose. Don't use this exercise to learn to consciously slide, but do learn. It's a handy thing to be able to do; it's part of just about every popular style. Practice in simple, non-singing ways in everyday life. Mimic a passing siren, for instance. Or notice yourself doing it in speech and then do it again on purpose.

### **I'm feeling it in my throat or voice.**

- Make sure you feel your natural chest register before you do this exercise. You want that forward, buzzy feeling you've been using so far in this section. You shouldn't feel it in your throat.
  - Make sure your mouth is open wide enough. This sound needs some space!
  - Engage your abs with Power Breathing the instant you begin phonating, starting with the "h" sound.
  - Keep your vowels bright, but your smiling muscles relaxed.

### **My high notes are really loud! The volume is making me nervous.**

- You have to commit to louder volume at higher pitches. I know it feels like you'll lose control. As you get the hang of hitting your money notes you'll have more control over them, but when you're learning them it's all or nothing.
- Be aware of when you're loud and open vs. loud and straining. Open good, straining bad.
- You have to apply the Nasty Triangle principle, or you'll just end up pushing. Feel for the triangle—for your placement moving into a thinner and higher place—as you move up in pitches.

### **I feel the register break from chest to head.**

- That's okay. Make sure you're applying the Nasty Triangle principle. As long as you're feeling your placement thinner and more forward the higher you go, switching registers isn't a bad thing.
  - Keep allowing your sound to get thinner and more forward the higher you go.

- Keep a supported and balanced tone throughout. Make sure you feel that open, ping-pong-ball-space in the back simultaneously with the Nasty Triangle in the front.
- When the switch occurs it will be a switch to a head blend, not pure head register. A very usable sound. (See the “Camouflaging Your Break” section at the end.)

## WORKING THE BLEND EXERCISE #5: POWER HA

<b>Part</b>	Working the Blend
<b>Elements</b>	All
<b>Range</b>	From comfortable low pitch to as high as you can go without straining
<b>Time Spent</b>	2–5 minutes

### Purpose

To feel and integrate a blended and balanced tone all the way through your range.



### Objectives

- To find and maintain a balanced sound (front placement plus back space) throughout the exercise.
- To support with breath such that your experience of your voice is entirely in your face; your throat is open and free.
- To phonate as high and low as you can without straining or pushing.
- To move nothing but your abdominal muscles. Seriously. Nothing but your abs.

## THE EXERCISE: POWER HA

- Engage Singer Posture and Singer Breathing. It can be helpful to do this looking in a mirror.
- Stand with your mouth open, tongue forward, smiling muscles relaxed, and thumbs in your sides for Power Breathing. (Make sure your thumbs are in the right place—make little coughs and feel around for the muscles giving you the strongest push.)
- You're going to be moving your abs only. Your mouth will stay fixed in the position described.
- Being aware of your placement throughout, you'll move the exercise up and down in half-steps.
- Use the two staccatto (short) tones to feel how strongly your abs are flexing. Then, as you do the arpeggio (the connected) part of the exercise, try to match that flexing power.
- Because your mouth is open wide, your soft palate can't help but be in the lifted position. You therefore don't have to give it any thought at all. Bring your atten-

tion to the front of your face (usually right between the eyes or at the bridge of the nose for this one) and “aim” your sound there. If you can do that with no pushing or straining from the throat, keep your intention on how that feels.

- *Leave your mouth in the same position as you inhale.* A lot of the magic of this exercise lies in holding your position during both the inhalation and the phonation. Stopping to re-adjust every time makes this exercise more difficult and less effective.
- Hold the intention that your breath is doing all the heavy lifting, and your brain is just helping guide where phonation is supposed to go.



### CHECK FOR FORM

- Are you standing with Singer Posture?
- Looking in a mirror?
- Have you found your Power Breathing muscles?
- Is your mouth open, and are your smiling muscles relaxed?
- Tongue forward, touching the back of the lower teeth? (Not pushing, just touching. If you find you're pushing, you can lay your tongue over the top of your lower teeth.)
- Leaving your mouth in the same relaxed, open position as you inhale?
- Watch as you do this exercise that you don't pull up your smiling muscles as you phonate.

### TROUBLESHOOTING

#### **I can't feel the placement or buzz of the vowel.**

- The “ah” vowel can be difficult. It doesn't want to stay forward and, depending on your dialect, doesn't easily buzz. Here are some options:
  - Don't expect to feel the localized buzz you've been feeling. Accept that the feeling is more general, and be aware of your throat. If you feel tension there, then you've lost your placement. Hold your intention to feel your voice in your face, even if you don't feel it distinctly.
  - Be aware that you're saying “ah” as in “fa-la-la” and not “aw” as in “awful.” Keep your vowel as bright as you can.

- Change vowels. If you can do this exercise on an “a” as in “hat” or an “eh” as in “head” *without tensing your smiling muscles*, then you should. You won’t move quite as much air, but you’ll still move a lot.
- Make sure you’re leaving your mouth open as you inhale. If you’re closing your mouth between each pattern it will be very hard to find and maintain the placement, and the exercise won’t work.

**My volume as I go to the high pitches makes me nervous. I’m really loud.**

- You have to commit to louder volume at higher pitches. I know it feels like you’ll lose control. It feels that way because it’s true. For now. As you get the hang of hitting your money notes you’ll have more control over them, but when you’re learning them it’s got to be pedal to the metal.
- Be aware of when you’re loud and open vs. loud and straining. Open good, straining bad.
- You have to apply the Nasty Triangle principle, or you’ll just end up pushing. Feel for the triangle—for your placement moving into a thinner and higher place—as you move up in pitches.

**I can only go so high, no matter how hard I’m working my Power Breath.**

- You may not be letting your placement get thin enough. After your break you’ll be reaching for that Disney Chipmunk sound. Even though it’s an open vowel, it’s skinnier than you think.
- Pay attention to the feeling more than the sound. “Shoot” the sound into your face with your abs flexing on the “h” sound. As you do that you’ll allow the vowel to modify to a brighter, flatter, more forward vowel that will be happier to sit forward and go higher.
- Use the vowel sound “a” as in “hat.” Just make sure you’re not pulling up your smiling muscles. Keep them relaxed.
- Maybe you’ve done all you can for today. Try again tomorrow.



**EXERCISE SECTION 4:****Whipped Cream, Nuts, and Sprinkles****MOVING AHEAD**

I wish I could tell you there's a way around this, but if there is I haven't found it. If you want to have all the things the title of this book promises, you have to teach your body to recognize and master certain feelings. If you don't master the feelings the exercises teach you to find, then this next section isn't going to do you a lick of good.

If, on the other hand, Neuro-Vocal Method is really sinking in—if you're starting to experience the benefits but you're getting hung up now and then—read on!

**THE MODEL STUDENT**

So you're the model student. (Work with me here.) You've made it your business to understand the principles that make Neuro-Vocal Method work, and you've conscientiously applied them. You've taken time to learn the exercises, allowing yourself time to get the hang of things, and you've learned to execute each exercise so the objectives have been met. You've been to my website and used the support materials to help you. You've made time to practice. You've diligently spent twenty to thirty minutes, four to five days a week for a month doing the exercises.

You've had moments of saying to the book or the videos, "Really? Are you kidding me"? You've also mastered the Nasty exercises and wondered why you were making an effort to sound so bad when your goal is to sound good. But you know there's a voice in there that can sing those notes, and you want it to work. So you've carried on.

If this is you, then I'm confident you're experiencing your voice differently by now.

Probably, sometime recently, you were singing along with John Legend or Carrie Underwood or Slayer and the high notes just popped out of your head. You weren't

planning on that, and you had to stop and think for a second if that was the song that had that part you could never sing. And then you realized what you'd done. Hopefully you took a moment to be proud and happy!

After that, you probably did one of two things:

1. You knew how you'd applied that new feeling voice, and you did it again. Maybe you even listened to the singer you were singing with and noticed what he or she did with the vowels on the high notes, and how his or her voice *actually sounded* when they hit those money notes. You put it together, you reached for the feeling, and you nailed it again.
2. You were happy; glad that all this stuff was finally paying off. You tried to do it again, but now that you were doing it consciously and on purpose you employed the same (or almost the same) limiting techniques that you used to use before you started Neuro-Vocal exercises. Then you were confused about why that high note, which flew out of your mouth a minute ago, was once again beyond your reach.

## TURNING YUCKY SOUNDS INTO SINGING

If you had either one of the experiences I just described, it means your Lizard Brain has learned the program. Your brain is looking for the new feelings you've associated with phonating on pitches.

Now you're ready to start getting more control over your new skills. Here are four transitional tools that will help you apply your new feelings and sounds to your singing.

### TOOL #1: COMPOUND VOWELS

Compound vowels are two vowel sounds that are stuck together to make one vowel sound, or two distinct vowels occupying the same syllable. (While I prefer to use the English term when I'm talking about singing, these sounds are also known as *diphthongs*, which means "two tones" in Greek.)

Compound vowels that typically cause singers problems are:

- o as in *home*
- i as in *high*
- a as in *may*
- oy as in *noise*

**If you understand how the sticking together of two vowels in one space affects your singing, you can fix some common problems pretty easily.**

Leaving your tongue touching the back of your lower teeth, drop your jaw a little and say the word “I.” If you bring your attention to the movement of your tongue, you’ll notice that it rises in the back as you say the vowel. If you slow it down, you’ll notice that you’re actually making an “ah” sound followed by an “ee” sound.

What often hangs singers up, especially on high notes, is that they don’t plant their voice on one or the other of the two sounds in a compound vowel. It’s almost impossible to find easy placement on a high note in that non-vowel space between the two sounds of a compound vowel.

Next time you feel like you’re losing your placement, look first to this possibility. Does the lyric for the note giving you trouble have one of the vowels listed? If so, try singing the word by committing to the first sound for as long as the note is supposed to be held. Then, just as you’re closing off the word or moving to the next word, quickly insert the other half of the vowel. Really quickly. Zip!

<b>The word:</b>	<b>becomes:</b>
Home	<b>Ho</b> ---oom
Time	<b>Tah</b> ---eem
Stay	<b>Steh</b> ---ee
Boy	<b>Boh</b> ---ee

#### **Subset: R’s**

R’s do the same thing. Singers sometimes start to close down—their mouth, throat, breath—in anticipation of the unfortunately unattractive American “r” sound. Treat it the same way you’d treat a compound vowel.

<b>The word:</b>	<b>becomes:</b>
Car	<b>Cah</b> ---r
Here	<b>Hee</b> ---r
Where	<b>Whch</b> ---r

## **TOOL #2: VOWEL MODIFICATION**

Don’t be afraid of this fancy, technical-sounding term. Vowel modification simply means that the way you make your vowels changes depending on your pitch, the word you’re singing, and your intention for the volume and/or texture of a word or phrase. It’s something you’re already doing naturally anyway. You only have to pay attention when:

- You’re losing your placement and/or support and starting to push from your throat.
- If everything is going great but there’s a word or a phrase that just won’t behave. If you’re losing your placement on high and/or loud notes, you may be using a

vowel that's too round and pretty to allow you to access your high chest mix. Try making your vowel brighter, brassier, and more forward. Don't be afraid to overdo that Nasty placement until you have the feel for it. And don't forget that you'll still need a lot of support. Use your Power Breathing.

The rule for vowel modification on money notes is this:

- open your mouth,
- tongue forward,
- think the vowel.

Whatever you're thinking is what your audience will hear, regardless of what's actually coming out of your mouth.

### **TOOL #3: POWER BREATHING**

Sometimes there's a word or phrase you're just not giving enough juice. If you've looked at the possibility of a compound vowel (and fixed it if necessary) and you've brightened up your sound, then get those thumbs in your sides and push!

Remember that the pitches in your money notes range need a ton of air. Check your placement and then make sure the work is coming from your abs, not your voice. If you think you're pushing really strongly from your transverse abdominals, the turn it up! Push hard against your thumbs. Break a sweat!

If you didn't take the time to master Power Breathing, now would be a good time to go back and do that. Power Breathing is not something you can blow off if you want to own your money notes. You should understand it and be able to implement it enough that you hate it. You're sweating. You're thinking: *This sucks!* Or, if you have a real can-do attitude: *Wow! This is hard!* Don't worry. It won't last forever. It'll get easier. But take the time and work it so it can work for you.

#### **Subset: Using Lip Trills**

Remember the invisible ink of breath support? When you add lip trills to your practice, they show you exactly where something needs work.

Do lip trills over your melody to show yourself where you need more breath support. If your lips aren't flapping, implement Power Breathing to get a feel for how much more support you need.

### **TOOL #4: CAMOUFLAGING YOUR BREAK**

You've heard singers—especially female singers—who have a break you could drive a truck through. The sonic difference between their chest and head registers is so great that they sound like two different people. You don't want to be that. Or maybe

that describes you, and it's not how you want to sound.

While you're working on your money notes, there's a way to camouflage your break so that it's nearly imperceptible to most listeners.

What makes a vocal break glaring is almost always a matter of placement. The singer has a natural-sounding, forward-placed chest register that she can take up to a B $\flat$ . Then she switches into a head register that sits farther back than her chest register does. She probably also starts using rounder, prettier vowels that sound nice in her head. Nice to her, but weird to us.

To implement camouflage you'll have to make sure your head register is very plain, vibrato-free, and forward. The exercises that address this are Head Register E and Disney Chipmunk. As you move over your break, you have to allow everything about your tone to change—weight, color, pitch—but *keep your placement constant*. Focus on how you feel as you move back and forth over your break without letting *where you're feeling your buzz change*. This will take more air than you're used to spending up there.

It takes a little practice to get the hang of this. Not a lot, but some. Just remember that, while you'll be very aware of your break, your audience will either not notice it at all or be able to perceive only a small change in timbre.

## SHAMELESS THIEVERY

As you're settling into using your new technique, your voice is feeling easier. You can sing longer and hit higher notes. You're louder, and you're not working as hard. And you never have that post-vocal-strain hangover that had been making you nervous.

Another thing that's probably happening is that you're getting more stylized with your singing. As you trust your voice and it feels more natural and easy, you're more willing to follow your musical impulses. You're less afraid to express your ideas in the moment because you're getting more confident in your ability to express those ideas.

All that should not, however, preclude stealing.

Music is an art form that has been handed from one generation to the next, for tens of thousands of years, through mimicry. There are Celtic singers who sing twelve-hundred-year-old songs that have never been written down. They had to be passed from one voice to the next over all those years. So the idea (which you yourself might cling to) that everything that issues forth from your personal mouth must be purely original and informed by no outside source is, in the scheme of things, very new. It's also a little wacked.

So there's that. Then there's also the fact that there are other singers who have

ideas you might like, ideas that might inspire you. There are lots of singers who are better and more experienced than you are. No matter who you are, there are singers who are good at things you're not good at, haven't been exposed to, or haven't considered.

Think of it as vocabulary. Copying other singers—their riffs, licks, and stylistic *isms*—is like learning new words. The more words you're intimately acquainted with, the more accurately you can express yourself.

Or think of it as adding colors to your paint box. The more colors you have to paint with, the better the chance your painting will reveal your intention.

Take time to figure out what makes you love a particular singer. Deconstruct the stylistic things they're doing and the musical choices they're making, and teach yourself to do that. Don't worry about sounding like that person. By the time you've integrated their thing (or collection of things) into your style it won't sound like theirs anymore. It'll be your version of their thing, and thus it will be yours. That's how music works. Have fun with it.

## WRAPPING IT UP

Please remember this is about you. This is something you want, and by getting through this book you've shown that you're willing to work for it. The desire simply wouldn't be there if it wasn't in you to improve your singing. It's there. And you deserve it.

I've been teaching voice a long time. I've helped many, many people through the process of erasing their break and claiming their money notes. I know you can do this.

The more willing you are to change, the faster this will happen for you. It will also happen more quickly if you trust what's here and take it at face value. I know this works, and will work for you. I want this for you. I've given you everything I can think of to help you get it. Hang in there. Work the program. Sing your song.





## AFTERWORD

To be a good enough singer to teach singing, you have to intend to be a singer, not a teacher. This is true for nearly every voice teacher out there. It was certainly true for me. And that was what started me on the path that led to the writing of this book.

From the time I was ten years old I wanted to be a professional singer. In fact, at that age I just assumed that everyone wanted to be a singer, and that the ones who weren't just didn't follow through. With the support of my family, combined with a stubborn will and lack of imagination, I succeeded. Not in the way that I imagined back when I was a kid, but I did clock a few thousand hours as a professional singer.

If I'd known then, as I know now, that success is a self-defined thing, I probably would have enjoyed it more than I did. Although I was good enough to get paid to sing nearly every weekend in a big city and with excellent bands, I became aware that I didn't have The Magic that some singers had. (I know this because of the very few times in my life my soul opened up for a minute and music spilled through all by itself. That's The Magic. There's nothing as great as that. If that was my door prize for life, I'm good with that.) So I worried and whined. I could have just grooved on the fact that I didn't work in a cubicle fifty hours a week, but instead spent mornings with my dog, afternoons with my students, and weekends singing with great musicians. Silly me. In any case, my singing never made me quite enough money, so I taught as well, because it was something I thought I could probably do. I started when I was twenty-six. I'd just moved to Chicago after touring with a road band, and I was absolutely sure that, despite my college degree, I could never be hired to do any job other than waiting tables or singing. I had already waited tables for a decade by the time I graduated college, so I decided to sing and to teach singing.

Also, I think I came by teaching honestly. My mother was a teacher and my father was a preacher. It's in my blood, I guess.

As I sang more and taught more, I got better at both singing and teaching. I cared about them both. But as years passed it became obvious even to me that I was more interested in teaching than in singing. I've always had a need to be useful and helpful. I like to see the effects of work I've done. I didn't have much of a need for applause, as it turned out. Compliments embarrass me. So although I loved singing with the gifted musicians I was privileged to work with over the years, I could have sung with them just as happily in someone's living room as on stage. The audience was a necessary element of the musical equation, but I didn't relish performing. In fact, as the years went on, I enjoyed the performance part of singing less and less.

I also found that there's a lot to learn about teaching voice, and I really enjoyed that learning. Of course there's a lot to explore intellectually in music, too, but I

never really grabbed onto much of that. Maybe it's because music is more about math and teaching is more about people. And for me, teaching voice also became about science. I love people. I love science. Math? I use math to figure out how much money I save on a shirt that's 30 percent off.

As a teacher I've been able to be helpful to people, which feeds my soul. I've seen results of my work as my students gain skill. The fact that I've genuinely cared about every one of my students seems to make a difference to them as people. And the fact that I care about—and am deeply interested in—teaching voice has helped bring my students closer to their musical expressions as singers. There are probably words for how profoundly those things affect me, and how much they mean to me, but that would be another book. My work is constantly interesting and fulfilling to me, and not for one moment do I take that rare gift for granted.

What turned my teaching into method-making and book-writing is the fact that I'm interested in almost everything. Biology, physics, visual arts, performance arts, history, politics, religion, psychology, astrology, human behavior, literature, and I could go on. I'm a voracious reader and a big fan of TED. I'm equally thrilled by musicals and documentaries. Consequently, I can't stay focused on any one thing very long. But I love to think about how things fit together, and why things might be, and how it might have been for someone else, or what might have been at another time.

I think that's why, after about ten years of teaching and modifying the exercises I'd been taught, both as a voice student and as a student of vocal pedagogy, along with observing what worked and what didn't, I began to ponder why these exercises worked. As I read more books about how brains work, I started to tweak the exercises and observe what came of them. Vocal development being what it is—a process—applying my theories to all my students at once over months (and sometimes years) and organizing the results into a method took me a long time. Twenty-five years, in fact. Luckily for me, I had no idea I was developing a method, so I didn't give in to my natural impatience.

*"I Have Walked a Crooked Path,"* the verse that follows, gives voice to the wonder I felt as I wrote this book—as I organized and wrote down what I know and what I do and how I do it. As the poem expresses, I'm finally appreciating how all the disparate and seemingly conflicting parts of my life have knit together to create something new and, I hope, valuable.

It is my fondest hope that the information in this book will help people. I want it to help voice teachers—my peeps—who sing classically but whose students want to sing popular styles. I want it to help ambitious singers who feel frustrated or stuck with their singing. I want it to help singers of any kind of sing-into-a-microphone style who want to improve their singing but don't know where to turn. I want it to

help popular-technique voice teachers get their students fast results.

If you're reading this, you're a singer. You were a singer the moment you were born. Your singing matters. Whether you're singing at Lincoln Center or in a karaoke bar, in a choir or a rock band, in a play or a recording studio, you're sharing something precious, and that matters.

We singers are born with a gift. What we each do with our gift is part of what creates our own unique, crooked paths—each a beautifully varied, and rich, and musical journey.

## *I Have Walked a Crooked Path*

*I have walked a crooked path, a walk of faith, sightlines leading just as far as the next turn.*

*Along the way I have heard winds of change, songs of sadness, the promise of a new day.*

*I have seen that bad happens in an instant, good unfolding in its time.*

*I have learned from the great and the small, the wise and the foolish.*

*My heart has been broken by love and by pain, for myself and my fellows, by heroes and cad.*

*I have raised my gaze to view worlds beyond my own; found within myself the capacity for love of the wild and the structured, the impetuous and the planned, the improvised and the composed, and to see it all as the face of God.*

*I have birthed children and art.*

*I have kept going.*

*I have doubted this crooked road, cursed and mourned it; blamed it for a life lacking in measures of accolades and acquisition.*

*Though now, as my path has crested the hill of my life, I look back and know that I would choose it again—that the way was stupendously rich with what cannot be measured or quantified.*

*Of my own I have come to a place of service and compassion, and some small degree of wisdom.*

*I stand atop that hill drinking in the world with gratitude and awe.*

*I know now that with each bend my path delivers me to a sacred place at which I can arrive by no other way, and by no other means than the passing of days.*

—M.C.P., 2015

## ACKNOWLEDGEMENTS

The most and best thanks to my beloved husband, Derrick Procell, who has been unfailingly supportive in word and deed. This book simply wouldn't have happened without his love and encouragement. He's also one of the best musicians, songwriters, and singers I've ever known.

Thanks to my daughter, Evelyn Ruth, for surrendering time with me so I could work, as well as for being respectful of my teaching and bragging about me to her friends.

Thanks to neurosurgeon Dr. Egon Doppenberg for being interested and encouraging, and for referring me to Dr. Douglas Burman.

Thanks extra-specially to Dr. Douglas Burman for all the time he took to educate and inspire me, for his actual and genuine interest, for the fMRI, and for a delightful piano recital.

Thanks to Nathan Waller (Northwestern University Center for Speech, Audiology, Language, and Learning) for listening, reading, and for a great tour.

Deep and heartfelt thanks to every single one of my students for changing and shaping my life, my work, and my thinking.

Gratitude and thanks to Susan Mason for the delightful drawings, the meticulous copy editing, and all the generous encouragement.

Great love and thanks to Kerry McDonald, Cathy Glickman, and Lori Postma: extraordinary women who started as my students, who became my beloved friends, and whose belief in me has sustained me more often than they know.

Thanks to my mom, Lee Marston Colby, for always being interested and asking, even when I was prickly.

Thanks to Ralph and Ruth Colby, my dad and stepmom, for supporting me throughout. As always.

Thanks to my sisters and brother - Jeanette, Carol, and Ross Colby. We share our demons, so you know what this project took, and you've cheered for me. It means the world.

Thanks tons to Sharon North Jones (you old bag) for being a sounding board, for helping the book stay balanced, for open-ended commitment to this project, and for being my friend all these years.

Thanks to Terry and Vicki Abrahamson, for letting me use their lovely lakeside home for a writer's retreat.

Thanks to David Sutton for the flattering promo shots and the awesome book name!

Endless gratitude for Dr. Oliver Sacks (1933-2015); for his brilliant books written so even the likes of me could understand, and for getting me started thinking this way.

Great thanks Dr. Daniel Levitin, whose writings both inspired me and pushed me farther, and for which I am deeply grateful.

Thanks to Bob Palmieri, who helped me learn to start thinking in a way that let me see so much more.

Thanks to my editor, Kellie Hultgren. I couldn't have hoped to get a great editor who was also a musician and singer, but there you were!

Thanks to Dara Beevas at WiseInk Publishing for pushing me, waiting for me, encouraging me, cheering for me, and guiding me. You're the bomb!

Thanks to my lovely models: Penny Roman, Amy Rochester Guest, Ricky Jacobson, Puja Chada, and Lily Hicks.

## REFERENCES

- Desmurget, Michel, and Grafton, Scott. "Forward modeling allows feedback control for fast reaching movements." *Trends in Cognitive Sciences*, November 1, 2000.
- Ecklund-Flores, Lisa, and Turkewitz, Gerald. "Asymmetric head turning to speech and non-speech in human newborn babies." *Developmental Psychobiology*, Vol. 26, Issue 3, April 1996
- Grout, Donald Jay, and Williams, Hermine. *A Short History of Opera*. Columbia University Press, 1947.
- Jahn, Anthony, and Blitzer, Andrew. *A Short History of Laryngoscopy*. New York Center for Voice and Swallowing Disorders, 1996.
- Jamieson, Peter, and Lewens, Alan. *Walk On By: The Story of Popular Song*. Documentary series, British Broadcasting Company, 2001.
- Knierim, James. Neuroscience Online, *The Open-access Neuroscience Electronic Textbook*. University of Texas Medical School at Houston.  
[www.neuroscience.uth.tmc.edu](http://www.neuroscience.uth.tmc.edu)
- Kooperman, John. *A Brief History of Singing*. Lawrence University, 1999.  
<http://www2.lawrence.edu/fast/KOOPMAJO/brief.html>.
- Levitin, Daniel J. *The World in Six Songs: How the Musical Brain Created Human Nature*. Dutton, 2009.
- Levitin, Daniel J. *This is Your Brain on Music: The Science of a Human Obsession*. Plume/Penguin, 2007.
- Lloyd, Matthew. *The Music Hall and Theater History Site*. Matthew Lloyd, 2001.  
[www.arthurlloyd.co.uk](http://www.arthurlloyd.co.uk).
- Reinhart, Robert, and Woodman, Geoffrey. 2014. "Causal Control of Medial-Frontal Cortex Governs Electrophysiological and Behavior Indices of Performance Monitoring and Learning." *Journal of Neuroscience*, March 19, 2014.
- Sacks, Oliver. *Musicophilia: Tales of Music and the Brain*. Knopf Doubleday Publishing Group, 2008.
- Stafford, Tom, and Webb, Matt. *Mind Hacks*. O'Reilly Media, 2007.

Thomas, James P. *Why is there a Frog in My Throat? A Guide to Hoarseness*. James P. Thomas, 2012.

Thurman, Leon, et al. "An Alternative, Science-based Theory of Register Phenomena." Second Int'l Conference, The Physiology and Acoustics of Singing, National Center for Voice and Speech, Oct. 6-9, 2004.

*Voice Changes Throughout Life*. National Center for Voice and Speech, <http://www.ncvs.org/ncvs/tutorials/voiceprod/tutorial/changes.html>.

## GLOSSARY

belt or belt voice	Refers to singing in the chest register, higher than where it would naturally change to head register. Because the vocal health of the singer and the quality of the tone are dependent on the manner in which this is done, and because this term does not specify the manner in which this is done, it is not a useful term in vocal pedagogy.
bigger hammer	From the colloquial phrase, "If it doesn't fit, use a bigger hammer." This refers to using force to achieve fit or compliance. In singing and in this book, it refers to singing in chest register past the natural break (to head register) by means of physical force.
cerebellum	Located in the back of the brain, where the spinal cord meets the brain stem, the cerebellum receives information from the sensory systems, spinal cord and other parts of the brain to regulate motor movement. It coordinates voluntary movements such as posture, balance, coordination, and speech. It is also important for learning and integrating motor behaviors.
chest register	Also referred to as modal register or chest voice, chest register refers to vocalization with a particular laryngeal vibration pattern and timbre. Though the sound is not created in the chest, it is the experience of vibrational resonance in the chest of the singer that earned this register - or voice - its name. Chest register is the most common sound for male speech, and is the aesthetically preferred sound for singing popular or contemporary music theater styles of singing.
chest register blend	The coordination between the chest and head registers for higher pitches in a singers' range such that there is little or no discernable vocal break.
classical singing or classical technique	A style of singing developed in Europe to accommodate proscenium style solo vocal performance. Classical singing, or

classical technique, is appropriate to musical genres such as opera, lieder, oratorio, sacred, classical spirituals, cantorial, or classic music theater.

cricoid cartilage	A ring of cartilage that surrounds the trachea near the middle and center of the neck. This cartilage constitutes the dorsal (back) part of the larynx. The cricoid cartilage is located slightly below the thyroid cartilage, and is part of the first tracheal ring.
diaphragm	The primary muscle used in inhalation, the diaphragm is a dome-shaped sheet of muscle attached to and between the lower ribs and separating the abdominal cavity from the thoracic cavity. It is a thin, skeletal muscle that can contract voluntarily and/or in response to movement of the abdominal muscles.
digital laryngeal stroboscopy	A method of vocal examination in which a tiny camera is inserted through the nose and down the pharynx to a specific location above the vocal folds. Stroboscopy is a method of examining vibrating or fast moving objects in which a number of snapshots are taken under a bright flashing light which "freezes" the movement of the object at different points. In laryngeal stroboscopy this allows the laryngologist to see the details of the change in shape or behavior of the vocal folds as they are functioning to phonate.
ectomorph	A body type characterized by lean, slender, and slightly muscular build in which tissues derived from the embryonic ectoderm predominate. True ectomorphs typically have a balanced proportion of limbs to torso.
endomorph	A body type characterized by relative prominence of the abdomen and other soft tissue developed from the embryonic endodermal layer. True endomorphs typically have a shorter torso with longer, thinner limbs.
ENT Doctor	A doctor of the ears, nose, and throat.

fMRI	Functional magnetic resonance imaging.
forward model	A prediction system wherein the motor system of the brain makes predictions about the effect of an action (or consequences of a movement) of a motor command.
genre	A category of artistic, musical, or literature characterized by a particular style, form, or content.
head register	Also referred to as loft register, falsetto, or head voice, head register refers to vocalization with a particular laryngeal vibration pattern and timbre which is produced by the vibration of the ligamentous edges of the vocal cords, in whole or in part, the main body of the fold being more or less relaxed. Head register is used in speech by soft-spoken individuals and by women in many cultures. It is the aesthetically preferred sound for women singing classical and classic music theater styles of singing.
head register blend	The coordination between the head and chest registers for lower pitches in a singers' range such that there is little or no discernable vocal break.
"in tune"	This is a pitch related value, with pitch being a perception of sonic frequency ordered into values of "higher" and "lower." A musician who consistently sings, or plays, a pitch both at the same point along a given pitch continuum and maintains that frequency for the duration of each held note is considered to be singing or playing "in tune."
laryngologist	A doctor who specializes in laryngology, the health and disease of the larynx.
laryngopharynx	The part of the pharynx, or throat, that lies immediately above and behind the larynx.
larynx	Also known as the voice box, the larynx is a modified section of the respiratory system of mammals and other air-breathing animals. The larynx is a cartilaginous structure which sits at the top of the trachea, and which houses the vocal folds and their associated musculature.

Lizard Brain	The author's name for the interaction of the cerebellum with the motor and somatosensory cortexes.
Magic Bullet	Something which provides a magical solution or cure.
mesomorph	A body type characterized by a compact and muscular build caused by the predominance of structures developed from the embryonic mesodermal layer. True mesomorphs typically have a longer torso and shorter limbs.
microphone singing	Used in this book to designate styles of singing which are typically sung in amplified, rather than acoustic, performance settings.
motor action plan	Found in the book <i>The World in Six Songs</i> by Daniel Levitin, a motor action plan refers to a number of simple and/or complex motor functions unified into a single motor response to a given intention.
motor cortex	Located in the frontal lobe of the brain, the motor cortex is the region of the cerebral cortex primarily involved in planning, as well as the conscious control and execution of, voluntary movements.
nasopharynx	The uppermost section of the pharynx, the nasopharynx extends from the soft palate to the base of the skull.
neocortex	The neocortex is the largest and most developed part of the cerebral cortex. The neocortex is divided into four regions, one of which is the frontal lobe, an area of the brain uniquely large in human beings and responsible for language and higher reasoning.
neural pathways	Connects one part of the nervous system with another through long fibers of neurons. Neural pathways can relate to physical actions and activity, or to patterns and habits of thought.

Neuro-Vocal Method	The vocal method explained in this book, Neuro-Vocal Method focuses on training the singer of popular styles appropriate and healthy vocal technique with emphasis on deliberately manipulating known neural patterns and activity to achieve alternative outcomes to familiar motor commands.
octave	The distance between a given pitch and another pitch of exactly half or double the frequency. For instance, the pitch A3 is 200 cycles per second, and A4 is 440 cycles per second, and A5 is 880 cycles per second. The octave is the most sonorous interval in Western music.
oropharynx	The part of the pharynx which lies directly behind the oral cavity, extending from the soft palate to the hyoid bone.
compensatory	
pharyngeal tension	A compensatory hyper function of the ventricular folds (false vocal cords) and/or the laryngopharynx. In typical circumstances the singer is unconsciously attempting to narrow the space directly above the vocal folds in order to limit airflow or to control inadequate airflow.
pharynx	Otherwise known as the throat, the pharynx is a lumen which extends from the base of the skull to the hyoid bone. It is technically part of the digestive system, but connects respiratory function from the trachea and larynx to the mouth, nose, and nasal cavities.
phonate/phonation	To produce sound with the voice.
placement	In vocal pedagogy and singing in general, placement is a term used to describe the singers' experience of his or her own resonant capacity, including the degree to which efficient resonance is occurring.
popular singing styles	Any style of music that is not classically oriented. This includes but is not limited to folk, rock, r&b, metal, blues, jazz, psychedelic, country, contemporary music theater, indie, hip-hop, funk, and soul.

popular singing technique	A manner of singing that is aesthetically appropriate to a popular singing style.
resonant capacity	The degree to which sounds can be amplified and sustained by means of reflection and reverberation.
resonate/resonance	Amplification of phonation by connections of the cavities of the mouth, nose, sinuses, larynx, pharynx, and upper thorax, as well as by the sympathetic vibration of skeletal and other hard tissue.
Singer Breath	Used in this book to indicate a breath taken by relaxing the abdominal muscles and expanding the diaphragm without raising the chest or shoulders.
Singer Posture	Used in this book to refer to a physical posture of a lifted and open chest with relaxed shoulders that are not hanging forward.
solar plexus	A point on the body at the center of the front of the torso, just below the sternum. Fun fact: there also exists a ray-like pattern of nerves at this point on the body, called the celiac plexus, behind the stomach and in front of the aorta, from which the name solar plexus is derived. Typically the name solar plexus refers not to the ganglia of nerves but to the point on the body, as we are using it here.
somatosensory cortex	A part of the brain located in the lateral postcentral gyrus which is the main sensory receptive area for the sense of touch.
thyroid cartilage	The largest of the nine cartilages that make up the cartilage structure of the larynx. It is situated above the cricoid cartilage and in front of the vocal folds. The thyroid cartilage has a bump in the middle called the laryngeal prominence, if you're a doctor, and your Adam's apple if you're not.
timbre	Designates tone color or tone quality.

vocal breaks	The natural shift in the vibrational patterns of the vocal folds between one register and the next.
voice coaching	A private or small-group session during which a vocal coach helps the performer or performers create the best presentation possible based on existing skill levels.
vocal cords	Another name for vocal folds.
vocal damage	Damage to the vocal folds or surrounding structures due to overuse, misuse, or trauma. Damage can be in the form of swellings or hemorrhages on the vocal folds, or acquired compensatory habits of muscles of the larynx. Any acquired injury that results in less than optimal efficiency of the voice is considered vocal damage.
vocal folds	The preferred name for vocal cords. The vocal folds are flat, triangular bands composed of two matching mucus membranes which are stretched horizontally across the larynx. They are attached front and back to the thyroid and arytenoid cartilages, with the outer edge attached to interior muscles and the inner edge accounting for the mucosa, or the part that's vibrating.
vocal range	The highest and lowest pitches a singer can consistently hit. Professionally, a singer can choose to indicate their entire range, or a smaller range through which they reliably sound good.
vocal register	A range of pitches through which the vocal folds will create a particular and predictable vibrational pattern. A register can be measured both subjectively by sound and objectively by laryngoscopy. There are five distinct vocal registers, and if you're a singer or voice teacher, more subdivisions within those registers.
vocal trauma	Damage done to the voice in a single incident or a number of incidents closely related in both manner and time.

- voice lessons Private sessions between a voice student and voice teacher. The primary objective of voice lessons is to increase the student's skill level as a singer. Voice lessons can also be employed to repair vocal damage and create healthy singing habits.
- “Wax on, wax off” From *The Karate Kid* (1984) wax on, wax off became part of the American vernacular. In the film, the kid is learning karate by waxing the teacher's car. The kid has no idea he's learning karate because he is also being taught to trust the process and his teacher. The teacher insists the kid apply and remove the wax in a very particular way. He shows him the application, wax on, and the removal, wax off. These are core movements in karate, as it turns out, and the kid uses them for fighting with deft familiarity later in the story.











