

Voice Lessons: An organist's journey to the other side of the console

David Sims

In the summer of 2009, I embarked on a journey unusual for most organists: I left "our" side of the console and spent two weeks in the pipe chambers. As an employee of Goulding & Wood, Inc., of Indianapolis, I had been in plenty of organs before, but this was the first time I was able to go on a tonal finishing trip and spend as much time *in* the organ as playing the finished result. Because this opportunity seldom arises, I wrote the following as a reflection on the process of tonal finishing from the perspective of an organist and what lessons organists can learn from their instruments.

Among musicians, we organists might be guilty of knowing the least about our instrument. Most likely this has to do with a typical organ's size and layout. Because of its small size, it is easy to become intimately acquainted with a violin, for example, but organs are much larger and more complex. Often the console is separated by considerable distance or height from the rest of the organ, with little hope of peering in without a ladder. Inside are tons of moving parts—the most interesting of which are sealed in a windchest that we are unable to open while the organ is on—and pipes, which look the same whether they are sounding or not.

In college and graduate school, I spent as much time taking practice organs apart as I did practicing, so it's no surprise that after my master's degree in performance I went to work for Goulding & Wood. After almost a year of tuning, service work, and helping in the shop, I had the opportunity to go on the tonal finishing trip for Opus 48, a 3-manual, 59-rank organ in Macon, Georgia. Growing up fascinated by organs, I always thought of voicing as a form of magic: somehow, with the right touch, someone got thousands of pipes to speak together. Our rather unique situation among musicians of having only finite and incremental control over the timbre of our music exacerbates the tendency to view voicing as magical. That is, once we get down to only one stop, we cease to have much influence over tone color or volume. The rest is, well, magic.

So what did this organist learn on a tonal finishing trip that might help on "our" side of the console? Goulding & Wood's process of tonal finishing begins in the shop. After visiting the site, our voicer does nearly all of the voicing in the shop while the organ is being built, leaving some room for adjustment. When the organ installation is complete, onsite tonal finishing begins. First, all of the regulators on offset pipes are set to match the pipes on the main chests. Then the organ is completely tuned, starting with the Great 4' Octave and moving outward through the flues and then the reeds.

At this point, the organ is completely playable, and we can hear where the organ is and what needs adjusting. The stops are gone through carefully and balanced against the rest of the organ's resources. Pipe speech and quality are given just as much attention as volume and pitch. Our preference is to work until the evening, then take an hour or more to play literature and take notes for the next day's work.

The rhythm of working, listening, and playing led me to reflect on a number of lessons I learned that might be helpful to other organists.

1) Voicing is not magic. Voicing, the art of balancing pipe speech across an organ, is just that: *an art*. It takes experience, hard work, intuition, artistry, common sense, personality—but not magic. "Magic," after all, is the word we give to things we cannot explain and have given up trying to understand further. For a magic trick to remain magical, we must take it at face value, investigating no deeper and leave merely tickled by its illusion.

This is not to downplay the effects or importance of the voicing process. It is indeed some kind of magic that music can become poetic communication. But voicing is no more magical than a cellist influencing the tone quality from her cello; it's a learned musical skill. It feels magical or mysterious as players because we don't do it and know little about it. Voicing is simply outside the realm of our experience, not an illusion.

As organists, we can begin to de-mystify the voicing process, starting by taking ownership of what we hear. We should practice listening to organs so that we can be as descriptive as possible, reserving judgment and instead focusing on what we hear, not on what we've heard others say.

2) Individuals matter. After the first day of tuning, we had just the Great 8' and 4' principals in tune. The excitement of finally being able to play something on the organ in its intended space was so great that we spent an hour or so just playing on these two stops.

I don't believe I've ever played on just one or two stops for that long. I know that had I sat down at a new organ that was entirely tuned I wouldn't have had the patience to limit myself to each stop for so long; half a prelude later I'd have tried the entire principal chorus and moved on to the flutes. Narrowing my focus (albeit out of necessity) to only two sounds was the most eye-opening experience on the trip. I really got to know those ranks, how they changed throughout the register, what they sounded like on their attack, and how their color was rich with description, not just "principal-ly." Each day, the palette of colors expanded as we had more and more stops tuned. New stops taught us more about the original 8' and 4' as we were able to pair them in more combinations.

As organists, we should challenge ourselves to limit our registrations when meeting an organ new to us. Individual sounds matter, so get to know each stop as a building block before you add more. We are so quick to mix sounds without really listening to each ingredient, even though the organ was voiced so that each stop was beautiful in and of itself.

3) Duplicates suggest usage. Space on a windchest is expensive real estate, so one hopes each rank is placed there purposefully and thoughtfully. Because space is such a premium, duplicate stops—stops that are essentially the same in different divisions—are clues that they were voiced for different purposes. Goulding & Wood's tonal philosophy is rooted in a fully developed skeleton of principal choruses, so each division has at least a 4' principal chorus. With four 4' principals on the organ, each was voiced to have its own place in the tonal scheme.

For example, we spent careful time balancing the Choir 4' with the Swell 4' because the Choir box is to the rear of the chamber and needed to be brought up in volume. A careful listener could listen to these "duplicate" stops and hopefully hear two ranks with similar volume but slightly different color—the Swell Octave a little fuller to match the smooth 8' Geigen Diapason, and the Choir Fugara to match the more transparent, lighter Choir plenum.

Opus 48 has an 8' Trumpet on each division; as an organist, take time to listen to the differences to each one and ask "why?" The Great 8' Trumpet is broad and voiced to blend with the principal chorus, adding richness and color. The Swell 8' Trumpet has more brilliance and upper harmonics to add a fiery sound to the whole organ, while the 8' Cornopean in the Choir is big in scale but voiced and regulated to be subdued and have more heavy fundamental in its tone. The



David Sims tuning the Great division in the shop



Brandon Woods cutting up a flute

Pedal 8' Trumpet helps to delineate the pedal line in contrapuntal music, works nicely as a solo, and marries the large 16' Positiv to the rest of the organ.

The Macon instrument also has two 16' stopped flutes, one in the Swell (and unified to the Pedal) and one in the Pedal. We adjusted the 16' Lieblich in the Swell first, and then voiced the Pedal 16' Subbass to be larger than the Swell. Hopefully, as organists we would take the time to investigate why the organbuilder decided that two 16' stopped flutes were necessary, and how each one fits in the vision of the organ as a whole.

4) Listen deeply. During the tonal finishing, we sometimes had minor interruptions, whether they were from noises outside or gracious visitors looking at the beautifully renovated sanctuary. While never enough to affect our work, I noticed how jarring it was to hear a passing police car or vacuum down the hall after concentrating on the speech of the pipes. When it was my turn to hold keys and give feedback from the room, I found myself listening more intensely than normal, both to the pipes and any other noise.

Can we all listen deeply? That is, can we engage in listening so focused that we really hear all the sounds the organ is making, even listening to the "silence" which

isn't really silence? Air handling equipment, passing traffic, and other activities are the stuff in a church that we often label as "silence." But maybe we should sit in the church alone long enough to be aware of these sounds. Then we can truly be plugged in to what the organ is singing. After all, if we ignore ambient noises to call them, in context, "silence," what nuances in pipe speech do we gloss over or label too broadly? Does the Rohrflöte sound like the Gedekkt? Do we register full organ by sight and never experiment with what contribution, if any, the flutes are making?

5) "The Room" doesn't have a drawknob. We've all heard that "the room is the most important stop on the organ." During this trip, I thought a lot about that axiom. It is true that the room is vitally important to the technique and effect of music-making in that space. Resonant rooms that eschew echoes but promote reverberation evenly across the pitch spectrum are certainly preferable to dry rooms, echoing rooms, or rooms that respond well to only high or low frequencies. The organ's color and power can fully and naturally develop, and congregational singing is vastly improved. We can feel one another singing and the organ sings with us. The room is a large part of that equation.



Completed organ, Op. 48 (photo credit: <walterelliott.com>; used by permission)



Brandon voicing in the shop

But saying the room is a "stop" implies, however loosely, that the room can be manipulated like a set of pipes, and that a room that is less than ideal has the same tonal impact as that of a poorly voiced rank of pipes. An ugly 8' Principal is a flaw in the organ that intrinsically impairs an instrument's tonal design and ability to play repertoire. A dry room, however, need not hinder the organ's tonal structure or make its colors less beautiful. After all, every other sound source—spoken word, choirs, other instruments—will be affected by the same acoustical environment. The voicer's task is to make musical decisions that allow the organ to speak as best it can in those conditions.

In Macon we were blessed with a warm, clean-sounding room, aided by the wise removal of carpet. The reverberation was inclined to favor higher frequencies, so we spent time making sure the organ didn't sound too brittle or glassy in the top ranges. We also spent a good deal of time listening from all over the sanctuary. When regulating the 16'

Open Wood, it was amazing how much difference our location in the room made. Some spots made the sound all but disappear, and a few feet away the sound grew tremendously. Often the organist is in the worst place to hear the organ, with much of it going over our heads.

As organists we should strive to make the organ the best it can be. Listen to it from all around the room, even if that means sticking pencils in keys and going for a walk through the pews. Feel the effects of the Subbass and how well it supports the congregation, or listen to how much the Harmonic Flute blossoms half-way down the nave. If there is any truth that the room is the most important stop on the organ, it is doubly true that the organist is ultimately the only chance the organ has of sounding its best and doing its job. Beautiful organs can be placed in less-than-ideal rooms and still inspire, instruct, and lead organists and congregations. (It should also be said that not-so-beautiful organs in less-than-ideal rooms can also inspire, instruct,



Examining a Rohrflute



Regulating the Choir division

and lead organists and congregations.) It is our duty as organists to display that beauty in spite of obstacles.

Working so intensely on one organ was eye-opening for me. I'd like to think that the next time I visit the organ, its sounds will remind me of the details of the hours of hard work and long discussions we had during the trip. However, I hope that my work on the organ will not freeze my exploration of its capabilities to just what I discovered during the tonal finishing this summer. Instead, I hope that intimate knowledge of this instrument will open my ears to even more ways of hearing it each time I return.

We should strive to understand that while much of what happens during tonal finishing is outside our direct control, learning to listen more critically is our choice. Being comfortable with the instrument in front of us means knowing what each stop can do, alone and with others, and it means creating our own guesses for why some stops were placed in some divisions and not others. I learned a lot about how I play and register from those weeks in Georgia, and hopefully we can all be inspired to take ownership on both sides of the console, and let the music itself take care of the magic. ■

Goulding & Wood, Inc., Opus 48
Vineville United Methodist Church,
Macon, Georgia
66 stops, 59 ranks

GREAT

- 16' Violone
- 8' Principal
- 8' Violone (extension)
- 8' Harmonic Flute
- 8' Bourdon
- 4' Octave
- 4' Spire Flute
- 2 1/2' Twelfth
- 2' Fifteenth
- 1 1/2' Seventeenth
- 1 1/2' Fourniture IV
- 8' Trumpet
- 8' Festival Trumpet (Choir)
- Tremolo

SWELL (expressive)

- 16' Gedeckt (extension)
- 8' Geigen Diapason
- 8' Gedeckt
- 8' Viole de gambe
- 8' Voix céleste (GG)
- 4' Principal
- 4' Traverse Flute
- 2' Octave
- 2' Piccolo
- 2 1/2' Cornet II (TC)
- 2' Plein Jeu III-IV
- 16' Bassoon-Hautboy
- 8' Trumpet
- 8' Hautboy (extension)
- 4' Clarion
- Tremolo

CHOIR (expressive)

- 16' Quintatton
- 8' Chimney Flute
- 8' Conical Flute
- 8' Flute Celeste (TC)
- 4' Fugara
- 4' Spindle Flute
- 2 1/2' Nazard (TC)
- 2' Fifteenth
- 2' Block Flute
- 1 1/2' Tierce (TC)
- 1' Scharf III
- 8' Clarinet
- 8' Cornopean
- 8' Festival Trumpet
- Tremolo
- Cymbelstern
- Harp

PEDAL

- 32' Contra Violone (digital extension)
- 32' Contra Bourdon (digital extension)
- 16' Open Wood
- 16' Bourdon
- 16' Violone (Great)
- 16' Gedeckt (Swell)
- 8' Octave Metal
- 8' Octave Wood (ext 16' Open Wood)
- 8' Bourdon (extension)
- 8' Violone (Great)
- 8' Gedeckt (Swell)
- 4' Fifteenth
- 4' Nachthorn
- 2 1/2' Fourniture IV
- 32' Contra Positane (digital extension)
- 16' Positane
- 16' Bassoon (Swell)
- 8' Trumpet
- 8' Bassoon (Swell)
- 8' Festival Trumpet (Choir)
- 4' Schalmei
- Chimes

David Sims holds degrees in church music and organ performance from St. Olaf College and Indiana University, having studied with Larry Smith, Catherine Rodland, and John Ferguson. He serves as director of music at North Christian Church in Columbus, Indiana, and does service work, wiring, and voicing for Goulding & Wood.

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