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The Pastoral Organist

WHAT SHOULD THE ORGANIST HEAR?

Recommendations from an Acoustician

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A CERTAIN MR. CARUSO WAS INTRODUCED to the church music community by Dr. Thomas Day in 1990,¹ and since that time his image has haunted pastoral musicians. Using the remarkably recognizable name of the great Italian tenor to evoke everyone's caricature of a self-important opera star, Thomas Day gave us a rich and disquieting impression of the overbearing, egocentric cantor who intimidates and overpowers, rather than inspires and uplifts, the assembly. While some may find Day's description an amusing exaggeration, most of us have encountered someone or the other very much like him in music ministries, sometimes even in our own music ministry.

The now-infamous Mr. Caruso serves as a powerful and compelling reminder of things pastoral musicians should avoid. But, as apt and intimidating a reminder as Mr. Caruso may be, he is not really new as an image on the pastoral music scene, for he does have a precursor: the loud, overbearing, overly virtuosic organist. Church organists have, for years, lived with the stereotype of the nameless heavy-handed, heavy-footed organist, and while the image of the overplaying organist is no more real than Mr. Caruso, the over-singing cantor, both images offer lessons and cautions that might benefit church organists and other pastoral musicians.

The Catholic church organist has several important duties to fulfill involving musical, liturgical, and pastoral concerns. These

duties fall, generally, into three major categories:

- ◆ Performance of extra-liturgical music (preludes, postludes, and the like) in which music, the art form, is used as an artistic expression that "adds a wonderful splendor to the Church's ceremonies and powerfully lifts up the spirit to God and to higher things."²
- ◆ Accompaniment of the music ministry, including the cantor, choir, vocal and instrumental soloist and ensembles, and other ministers.
- ◆ Accompaniment of the assembly in hymns and sung responses.

While all three of these are important in modern Catholic liturgy, this article will focus on what is, arguably, the most important of the three: the organist's interaction with and support of the assembly. The organist must, as should all those in the music ministry, actively acknowledge and foster the full participation of the assembly of believers in the musical elements of liturgy.

Supporting the Assembly

The organist's role in "supporting" the assembly is often mentioned in musical and liturgical circles but rarely defined. For this discussion, we will presume that it involves the use of music and the way it is rendered to lead and encourage the assembly in the musical parts of the worship celebration. In supporting the assembly, the organist has three primary musical devices to draw upon:

dynamics, tempo, and timbre. Let's look at each of these musical resources as used in supporting the assembly and see if they lead to some underlying principles to guide the church organist.

The effective use of dynamics (from pianissimos to fortissimos) in supporting the assembly calls for the organist to play loudly enough to encourage the assembly to sing but not so loudly that the assembly feels overpowered and intimidated. This basic precept may seem self-evident, but there are some fine points worth exploring. One is that the assembly is made up primarily of amateur singers. If individual members of the assembly (these amateur and, often, reluctant singers) sense that their voices are exposed, they are likely to hold back. So, the organ must be loud enough to prevent members of the assembly from feeling alone and exposed. This is perhaps the most commonly understood meaning of "supporting the assembly."³

Another musical device at the organist's control is tempo. Tempo is critical not only in supporting but especially in leading the assembly, for a large body of singers can easily drag a hymn to a dirge-like pace. Tempos must, of course, be appropriate for the musical style and text, and the organist must show good musical judgment and consistency in tempos. Correct tempos are especially important for short sung responses, since there is so little time to correct or adjust an unsuitable tempo in a four-bar alleluia. In longer forms, such as a hymn, it is important for the organist to provide deliberate but benevolent leadership, setting and maintaining tempos to prevent the strong tendency to drag.

A third and more subtle musical device is timbre or tone quality. The organ has a greater range of tonal colors than any other

conventional musical instrument, and a discussion of the use of the organ's rich tonal resources is too extensive and technical to present here. Still, the use of the organ's tonal range can be a factor in working with the collective voice of the assembly, and some care must be taken with the use of certain tonal resources. For example, a stridently brilliant tone can be more oppressive to the assembly than a merely loud sound, while very mellow sounds may lack the necessary definition and clarity to communicate tempos to the assembly. Tonal colors can evolve and be developed throughout the verses of a hymn, first, to get the assembly started and, later, to take it to greater musical and spiritual heights by gracefully introducing more exciting and uplifting tonal variations. Again, there are many more refinements, but these few simple examples convey the fundamental principles.

It must certainly be clear to the organist, as it must also be to any musician, that for effective use of dynamics, tempo, and timbre, as described above, the organist must be able to hear, clearly and accurately, the sound of the organ. To most musicians, this may seem an obvious requirement, but it is important to note that, for the organist, hearing the sound of the instrument is not nearly as simple as it is for those playing most other instruments. To examine this, we will again summon the image of Mr. Caruso, for the organist and Mr. Caruso face many of the same basic conditions and problems in hearing the sound they produce.

Problems Facing The Church Organist

In reviewing Thomas Day's description of the Caruso phenomenon, we will find many similarities to the situation of contemporary organists. The personality and inappropriate priorities of Mr. Caruso are, perhaps, his most memorable and notorious attributes. However, a key factor in the negative impact of the Caruso syndrome is attributed to the sound reinforcement system and the specific problems that this relatively new technology brings to sound in the church.

In looking at sound systems and organs, we will find several obvious parallels. Both the sound system and the organ (pipe or electronic) are subject to the following inherent problematic characteristics:

- ◆ The potential for monumental and overpowering loudness.
- ◆ The potential for a great distance between the sound producer (the organist or sound-reinforced cantor) and the sound source (the organ "pipes/speakers," or sound system speakers).⁴
- ◆ The potential to place the sound producer (the organist or cantor) in a location where it is difficult or impossible to hear, clearly and accurately, the sounds being produced (emitted by the organ pipes/speakers, or sound system speakers).
- ◆ The potential to place the sound producer (again, the organist or cantor) in a location where it is difficult or virtually impossible to hear the assembly.

These similarities are striking and illuminating, but for the organist they involve distinct problems. Considering the physical nature of an organ (both pipe and electronic), compared to any other form of human musical

production, one can begin to appreciate the organist's unique hearing conditions (and attendant problems). This is primarily because of the great size and, often, necessarily broad distribution (or remoteness) of the sound producing components—the pipes or loudspeakers. Think of any other conventional musical instrument (violin, guitar, trumpet, piano, the human voice), and compare how close the musician's ears are to the sound source in virtually all cases.

We have revealed a fairly difficult, but, in retrospect, a fairly obvious situation: the difficulty that organists may have in hearing the organ. However, this is only one aspect of the organist's hearing needs. The church organist must also be able to hear the other music ministers and, more importantly in light of modern liturgical priorities, to hear the assembly. Moreover, in addition to simply hearing these three important sounds (organ, other music ministers, and assembly), the organist must be able to hear the relative balance of these sounds. More crucially, however, the organist must be able to hear this balance in a way that accurately represents the balance heard by the assembly. Confronted with this difficult (some might say impossible) situation, the organist must seek all means to achieve the necessary hearing conditions that will foster the support of the assembly.

What *Should* the Organist Hear?

In seeking to provide suitable hearing conditions for a church organist, we have a seemingly simple but deceptively complex problem. These hearing conditions should allow the organist to hear all the musical elements of the worship service (organ, music ministers and assembly) and to hear them in a balanced, well-blended mixture. But, there are several factors to suggest that this is a substantial challenge. First, there is the organ itself, which usually places the organist in a location where accurate hearing is not possible. Second, there is the great variety and distribution of the other sounds that the organist needs to hear: the music ministry and the assembly. In this regard, we are imposing unique restrictions on the organist that are unlike anything found in any other music setting.

*Not only the planners and ministers . . . are active in the Liturgy. The entire congregation is an active component. There is no audience, no passive element in the liturgical celebration. This fact alone distinguishes it from most other public assemblies.*⁵

Another complicating factor is that from church to church, even from Mass to Mass, there is typically a tremendous variation in the size and loudness of the music ministry and assembly. So, there is no fixed loudness level for two of the major elements that the organist needs to hear and with which the organist is trying to blend.

Finally, we have the priorities of the worship experience and liturgy itself. Music is an important and treasured element of Catholic worship,⁶ but it is only one among many other needs to be served in the liturgical space, and there are only so many concessions that can be made to these musical elements.

Given these factors, priorities, and limitations, we may have to accept that perfect or ideal hearing conditions for the organist are probably unattainable. We must, nonetheless, endeavor to provide the best hearing conditions possible. To do this, it will be helpful to understand some basic acoustical factors and use these to our advantage.

First, the organ has immense acoustical power: it can easily produce 1,000 times more power than the average singing voice or a typical 30-voice choir.⁷ But, it is well known that the apparent loudness of a sound decreases as one moves farther from the sound source; conversely, it increases as one moves closer. We can use these facts to provide the organist with a more balanced mixture of sounds by locating the organ console closer to the musicians and assembly and farther from the organ pipes/speakers. This is one reason for locating organ pipes/speakers at a fairly high elevation.

Second, sightlines are often indicative of hearing conditions. (Because of this, acousticians often use the term “sound lines” and “sightlines” interchangeably.) If the organist can clearly see the choir and assembly, it is more likely that he or she will also hear them. This may seem obvious, but there is an interesting variation of this concept that often occurs in the worship setting. In many churches, the organ console is placed so that the organist has his back to the musicians or assembly. In such cases it is common for the organist to use a rear-view mirror to see the choir, assembly, presider, and other ministers. But, even in this configuration, the organist’s ears are in direct line-of-sight of these sources, and, therefore, hearing is not really a problem.⁸

This sightline concept can be extended to reveal some interesting considerations. As explained above, an organist can clearly hear the assembly (even if it is behind him) as long as the organist is in the assembly's view. However, an organist who is behind the assembly (i.e., not in the assembly's view), will probably not hear the assembly as well. This is because the human voice is very directional—from the mouth, most sound is projected forward.⁹ So, from a location behind the assembly, the organist is at a clear aural disadvantage. This suggests that, in some regards, the traditional organ/choir loft may not provide good hearing conditions for the organist (or the choir). Of special interest here are two liturgical concerns. The first is the instruction to place the music ministry on the main seating level of the church—not in a loft or gallery—so that the musicians are a part of the assembly:

*Benches and chairs for the seating of those engaged in the ministry of music . . . should be so constructed and arranged . . . that they are clearly part of the assembly.*¹⁰

The second is the instruction to locate the music ministry in a position where the ministers of music can face the assembly:

*. . . the ministers of music should be able to sing and play facing the rest of the assembly in order to elicit the participation of the community without distracting from the central action of the liturgy.*¹⁰

In many parishes the visibility of musicians is a difficult and contentious issue. But, in exploring the documents even further, we find the recommendation that the organist and the organ should be located with the music ministry.¹¹ This suggests that the organ be placed in front of the assembly—in most cases, at the front of the church.¹²

These concerns raise some difficult and unresolved issues about music and liturgy.

Nonetheless, we can formulate some workable criteria that will enhance hearing conditions for the organist:

1. The organist should be located to have direct view of the major sound sources in the worship environment, including the assembly and others members of the music ministry.
2. The organist should be located to give the best possible balance of these sounds. Because of the power of the organ, this balance can be approached by using physical distance, i.e., by placing the organist closer to the assembly and other musicians than to the pipes/speakers. This may also suggest that the organist needs to be located in the general area in front of the assembly.

Providing Appropriate Hearing Conditions

Providing the organist with the appropriate and necessary hearing conditions described above presents a substantial challenge. Taking action to address these conditions will depend on the specific logistical circumstances that exist in a church. A fundamental consideration is the location of the console with respect to the sounding elements of the organ, and this will depend on the type of organ: tracker, electro-pneumatic, electronic, etc. Other considerations include the location of the organ (console and pipes/speakers) with respect to the rest of the music ministers and the location of the organ with respect to the rest of the assembly.

With most other conventional instruments, setting up an appropriate physical configuration for suitable hearing conditions is usually as simple as moving both the instrument and musician. Here again, the ex-

traordinary size of the organ, especially the pipe organ, may seem to present insurmountable obstacles. But organs can be, and have been, moved—even large and complex pipe organs. This is not to suggest that the logistically challenged organist move the organ. But this is an option, and, in many cases, a more viable option than it would at first appear.

If relocating the organ were to be considered, much would depend on the type of organ. It would also depend on the existing situation, circumstances, and the recent history of the church itself. For example, in a new or recently renovated church building, such a major undertaking may have to wait until the newness wears off and budgets are replenished. Correct organ placement would have been more appropriately addressed as part of the building project. With this in mind, the church organist must be ever more mindful of the need to be deeply involved in space-planning decisions if a building or renovation project is at hand. The organist should take an active role in guiding and educating building committees and architects in what is often among the most difficult challenges in a building project: where to put the organ and music ministry.

In an existing church, there are at least two situations in which some reconfiguration of organ elements is more feasible. First, if the console is movable, it is often possible to place the console in a location where the organist will have better audibility of the other music ministers and the whole assembly. In general, this usually calls for moving the console farther from the pipes/speakers and closer to the music ministry and congregation.

Second, if the organ is electronic, it is often possible to relocate the organ speakers to

provide better hearing conditions for the organist, other musicians, and the assembly. A very common problem with organ speakers is that they are not placed high enough. With a relatively low placement, organ speakers will provide very strong sound at locations near the speakers but much weaker sound at more distant locations. I was recently involved with a church where it was reported that the organist played too loudly. As it turned out, the organist wasn't really too loud: the speakers were very poorly located. The lowest speaker was only six feet above floor level and about eight feet from the nearest pew. At the seats nearest the speakers, the organ sound was overpowering; at the most distant locations it was weak and unsupportive. The organ console was located to the side of the speakers, and, at this location, the sound level was moderate. With this tremendous disparity in loudness throughout the space, there was no "good" location for the console. Relocating the loudspeakers was the only effective solution in this case.

Unfortunately there are no universally applicable solutions that will provide appropriate hearing conditions for all church organists, only general principles. Because of the variation in types of organs and organ installations, solutions will vary greatly from church to church and from organ to organ. However, there is one guiding concept that will help any organist in any situation: the need to hear the organ with the whole assembly's ears! But, because of the acoustical properties of the organ, it is often impossible for the organist, from the organ console or from any location in the music ministry area, to get an accurate impression of how the organ sounds to the rest of the assembly.

What's an Organist to Do?

Considering this, what is a church organist to do? Perhaps we can find guidance from other musicians in other musical settings, particularly those who perform in concert halls and opera houses. (This might even include the advice of performing artists.) If you've ever attended a rehearsal in a concert hall, you may have seen a conductor or soloist leave the stage and roam around the audience area, while the musicians on stage played or sang on, to hear the balance of the ensemble as it will be heard in the audience. As good as the hearing conditions may on stage, they are not representative of the sound heard in the audience area. So, if a highly trained performing artist sees the need to listen in the "listening" area, we might suspect that we, too, could benefit from this same wisdom: We pastoral musicians and church organists might roam our churches during rehearsal (even during services while others sit in for us) to hear what our assemblies hear.

The job of the church organist is, in many ways, much more difficult than that of the performing artist, for beyond our own sounds, we must consider the sounds produced by our "listeners" who are also participants in the sound—our fellow worshippers. The church organist must make beautiful and spiritually inspiring music and, at the same time, support, lead, and encourage the rest of the assembly. While pastoral musicians are often admonished to eschew the practices of the performance environment, we can learn some positive things from the experiences of performing artists. In the service of our assemblies, we pastoral musicians can use any source of experience to make better music and to support the assembly in its sung praise.

NOTES:

1. Thomas Day, *Why Catholics Can't Sing: The Culture of Catholicism and the Triumph of Bad Taste* (New York: The Crossroad Publishing Company, 1990).
2. *Constitution on the Sacred Liturgy*, no. 120.
3. This notion of providing a sufficiently strong and supportive sound to encourage participation is not wholly under the control of the organist. The acoustics of the church may also be a significant factor in providing envelopment and an aural sense of community so that members of the assembly don't feel their voices are isolated or conspicuous.
4. In trying to keep this discussion general, i.e., to apply to both pipe and electronic organs, there is a terminology problem. So, the construct "pipe/speaker" is used to refer to the sound or speaking component of an organ whether it is a pipe or electronic organ.
5. *Environment & Art in Catholic Worship*, no. 30.
6. *Constitution on the Sacred Liturgy*, no. 112.
7. This amount of power is based on typical sound level measurements using the decibel scale. But power in sound does not correspond to the subjective experience of hearing. Using a standard acoustical rule-of-thumb, a sound with 1,000 times more power would be judged subjectively as about eight times louder.
8. There are some notably disastrous organ placements that do not provide line-of-sight and, therefore, present serious hearing problems. During the past year I have visited two churches where the organist needed a closed-circuit television to see the music director and choir—having a clear view (and audibility) of the assembly was not even an option in these cases.
9. This directional phenomenon is less true or less apparent in a highly reverberant church where the reverberation and preponderance of hard, sound reflective surfaces distribute sound very effectively and impart a less directional quality to sound.

10. *Environment and Art in Catholic Worship*, no. 69
11. *Environment and Art in Catholic Worship*, no. 83.
12. This statement is in strong opposition to often-voiced sensitivities regarding the distraction and visual intrusion caused by organ pipes, organists, music directors, and other musicians in front of the assembly. Placing musicians in front of the assembly suggests the undesirable appearance of musical performance. But, for appropriate hearing conditions, placing musicians toward the front of the assembly offers distinct advantages.

AUTHOR'S BIOGRAPHY

Dr. Dennis Fleisher is a native of Rochester, NY. He did his primary undergraduate study in trumpet performance at the Juilliard School and performed professionally in New York City and Rochester as an orchestral and liturgical musician. He earned a BA in Music Education from Nazareth College of Rochester, a Masters Degree in Music Theory from the Eastman School of Music, and an interdisciplinary Ph.D. in Physics, Acoustics and Music from the University of Rochester and Eastman School. He has worked as an acoustics consultant and liturgical music planner since 1981 and has his own acoustics consulting firm, MuSonics, in Grand Rapids, MI.