

The STORMWORLD of Stephen Melillo: Future Methods for Teaching Music Today

By Elizabeth Sokolowski / August 16, 2008

Software applications and hardware tools employed in classrooms to support curricula are often the focus when considering the ways in which technology can influence music education. In adjusting the lens to view how technology enhances performance ensembles, a myriad of perspectives develop. The usage of Internet tools, the ability to interact in a virtual environment, and the infusion of electronic media to augment ensemble sonority impact teacher preparation, curriculum and ensemble performance.

One composer/educator who has developed such educational tools is Stephen Melillo whose forward technological web site [STORMWORLD](#) is an interactive environment providing a variety of resources for teachers.

STORMWORLD includes an online catalog, piece descriptions, teacher tools, plus audio and score excerpts. It also houses the compilation of Melillo's compositional work called "Storm" works which has been played and recorded by some of the world's finest ensembles and conductors in 28 countries. More than 950 works span from Melillo's IBM Thinkpad® *Demo* to the *Concerto for Violin & Orchestra*. Currently 117 commissions make up this body of recorded work.

Posted on the site are testimonials from directors, many of whom are world-class international conductors of band and symphonic music who have performed Mr. Melillo's pieces, and from those who make use of his teaching tools.

Melillo uses technology so that his original compositions can be attained in various formats to meet director's needs.

For example, since 1993, PDF's of Melillo's pieces have been available to facilitate immediate delivery and electronic storage. CDR's or laser printouts shipped via standard mail are additional buying options. One benefit of this approach for educators is that PDF's and CDR's enable the production of unlimited legal copies of Melillo's works.

One such package is Melillo's *Let's Find Out Teaching Suite: Hypertools for the Music Educator* includes a trilogy of training programs called *Scaleworks*, *Rhythm Readers* and *Function Chorales*. DVD's to guide teachers in the process, and CDR's including all *Function Chorales* and resources, comprise the Suite.

SCALEWORKS™ is the teaching process by which music students are taught to teach themselves how to play 15 major scales and much more, perfectly, in just 15 minutes.

RHYTHM READERS™ is the process of re-teaching rhythm as a dual procedure, making the writing of, and the reading of all rhythms conceivable in the human imagination possible in one lesson period.

FUNCTION CHORALES are a suite of harmonically advancing SATB Chorales designed to be played by any ensemble of 4 or more in any grade range. Presented in numerical, rather than standard music

notation, access to 15 keys, 136 modes, and a focus on key-related function, and by specifically targeting tuning and intonation, FUNCTION CHORALES provide the student/musician/listener with the language and skill necessary for meaningful rehearsal and music-making.

Mr. Melillo's tools and original compositions are essential elements for elementary school beginning bands through university level programs. "The 'future' that people have talked about is already STORMWORKS' history," explained Melillo.

Once the technological quest for performance literature begins, resources abound, providing an exciting network of opportunities for teachers. Video conferencing with composers, colleagues, and other schools is now possible. There's the opportunity for setting up a video concert with another school across the country and performing for each other. Imagine working on the same composition as another school and observing each other's rehearsals.

With this technology approach, students from partnering schools can dialogue about analysis, discuss differences and similarities in approach to performance, and share live performances. Having a composer/guest clinician to work with ensembles is a meaningful endeavor, but often funding is a concern. A video conference where director and students interact, converse and receive feedback from the composer/clinician is an excellent, cost-effective opportunity worthy of investigation.

This use of technology is another means by which Mr. Melillo is setting future trends today. Directors can already learn about the ways in which he makes this tool a reality at his website utilizing private [VidSessions™](#).

The Troy University Symphony Band is one such ensemble deeply rooted in using music technology.

Through the use of electronics, the rich sonorities inherent to the symphony orchestra are established in the concert band setting by way of the infusion of Melillo's PAD Bass concept. PAD Bass is the use of any modern synthesizer set to play sounds akin to General MIDI "Warm Pad", and detuned to the lowest octaves, in order to supply the Band of the 3rd Millennium an inviolable tuning and sonic fundamental.



Set-up of electronic media within a symphonic ensemble

At Troy, this philosophical perspective of ensemble sonority began in the 1970's with Director of Bands Dr. Johnny Long, a visionary in employing electronics to enhance the quality of the marching band's sound.

As a student at Troy, current Director of Bands Ralph Ford recalls the use of electronics under Dr. Long who stated that the electric bass “provided an extra octave underneath the sousaphones, and had a percussive feature in its attack.”

As a teacher in the Troy University Band Program, and then appointed Director of Bands at Troy in 2001, Ford continued to use electronic instruments as a component of instrumental ensembles.

But, discovering the true value of these resources unfolded in subsequent years.

Ford initially experienced one of Melillo’s compositions in 1993 and the orchestration of this composition greatly affected him. In 2002, Ford was looking for something unique to do with the Symphony Band. He wanted to embark upon a project that would not be another recording of the same band pieces, but a *music* CD that people not associated with bands or the “bandworld” would seek out and enjoy.

Recalling the performance he attended in 1993 of STORMWORKS (the 3-movement work), Ford contacted Melillo after learning that he was in search of a university level band to join the distinguished ensembles that had already recorded his music worldwide. As a result, collaboration with Melillo on a future recording project became a goal for the Troy University Symphony Band.

For two years, Ford worked with his ensemble to attain a more focused, transparent, in tune and accurately intoned sound. Says Ford, “I read articles, bought state of the art tuners, insisted on students completing tendency sheets, tuned chords, and sang and played from Treasury of Scales. With tried and ‘proven’ methods, ensemble pitch improved but was inconsistent.”

Incorporating Melillo’s *Function Chorales* into rehearsals led to a significant turning point.

Ford’s students discovered the interrelatedness in horizontal and vertical sonority via an intuitive illustration of number functions applicable to all keys. Combined with the use of PAD Bass, this opened up the architecture of *all* sonics above the fundamental. The vertical structure and tendencies of pitch within the ensemble dramatically improved. Ford witnessed a transformation in his student musicians, now completely involved in the inner geometry of making MUSIC.

Consequently, PAD Bass, which originated in the teaching world for Stephen Melillo, became an integral component of his compositions for symphonic bands.

Says Melillo, “The Pad Bass provides a previously missing, hence new fundamental for the Band of the 3rd Millennium. Missing was the acoustic foundation, a fundamental which exists in the complete Orchestral palette. As this fundamental is reintroduced to Band, horns begin to sound like horns again, the low brass are more resolute and play with a greater sense of harmonic awareness, woodwinds enjoy a richer mix of overtones in their spectrum and the low reeds have a new fundamental with which to merge into deeper, more color-enriched ways. The instrument’s function is to supply a warm enveloping bass, a fundamental which is two octaves below the Tubas.”

“While accomplishing the task of releasing new overtones in the sonic scape of Band, the PAD Bass also provides an inviolable fundamental and tuning reference. Intonation and Tuning are immediately improved. Pad Bass provides for and reinforces the correct path of listening from the wind players, which is towards the bass or fundamental. Correctly implemented, the simple addition of this new instrumental color provides for a whole new world of acoustic possibilities in the winds and percussion idiom.”

Dr. William Johnson, Director of Bands at the California Polytechnic State University describes PAD Bass in this way, “The use of PAD Bass, as intended by Stephen Melillo, increases the resonance of

sounds in relation to other sounds. It extends the normal low frequency of the ensemble by at least one octave. This increase in low frequencies causes the natural harmonics to be reinforced, which strengthens the upper harmonics and brings out the beauty of sound of the ensemble. To the performer and listener, the overall sound becomes full, rich, and resonate. The traditional sounds of the wind band are transformed from the often strident sounds caused by conflicting upper harmonics to a warm, smooth sound more associated with a fine symphony orchestra.”

At the high school level, Tom Davis, Director of Bands at Canandaigua City High School in New York says, “The PAD Bass allows students to tune without being burdened with verbal direction. They simply have a TARGET they aim for, thus passing by their own mental discussion about HOW to tune. Students move directly to experiencing and knowing.”

Melillo and Johnson explain that there resides a practical use for “tuners” as “calibrators”. In calibrating an instrument, less work is necessary when TUNING begins, a phenomenon not at all suited for “tuners”, but rather Music-making.

For Beth Sokolowski as a middle school band director in the North Penn School District, “The use of PAD Bass in tuning, intoning and performing engages students in the thoughtful and cognitive process of making music. The PAD Bass provides these growing musicians with a foundation; a consistent fundamental from which the ensemble can learn, own and understand to tune horizontally and intone vertically. As students move from the application of recognizing fingering patterns in regard to notes on a piece of paper, to the synthesis of producing sonorous beat-less sound in relation to the ensemble, the transformation and evolution of these student musicians is inspiring. Students immersed in ensembles employing PAD Bass are now performing some of the most beautiful, exciting and rewarding music of their instrumental journey.”

As a music education major at The Catholic University of America, Walter Avellaneda discusses his first experience in performing in an ensemble utilizing PAD Bass. “As a bass trombone player by blood, I have always leaned to the tubas to line up and intone chords as any bass trombone player would. But, in one giant sweep, in this one ensemble, the musicians were freed. The tuba player no longer played pseudo-string bass parts and was actually playing a part that utilized the skills he attained and honed in his private lessons; there were no more whole notes. Below him was the PAD bass, at the true fundamental octave. Having that stability, by the end of the concert we were tuning overtones... And a bass trombone player was unleashed!”

With new seating placements, the use of Function Chorales, and the PAD Bass established as essential components of the Troy University Symphony Band, the collaboration to record with Melillo began. The experience of the first recording project impacted the ensemble to such a degree, that the students requested making a STORMWORKS CD become a part of the curriculum at Troy.



Utilization of physical space in a symphonic ensemble setting

In the spring of 2007 Melillo returned to record *STORMWORKS Chapter 13: Whispers on the Wind*. Many adjustments and improvements were made as a result of the first recording session. Further enhanced changes in physical seating space, a carefully researched miking configuration with a Tri-Decca System typically utilized by the Decca recordings in the days of Stereophonic High Fidelity and movie orchestras, enhancement of natural reverberation by the use of 2 additional mics in the rear of the hall, employment of direct box lines for each electronic instrument, and the use of a new synth voice technology from Roland deriving one voice as a choir were some of the adaptations made. These factors, in conjunction with Melillo's orchestration and the musical advancement of the Troy ensemble, converged to produce what Melillo envisions as music rendered by a Symphonic Band of the 3rd millennium.



Tri-Decca Recording System

The release of *STORMWORKS Chapter 13* utilizes new digital technology. Chapter 13 will be available on a small card, resembling a credit card, and allows the consumer to download the entire CD (exceeding normal CD lengths) along with extensive PDF documentation far exceeding typical liner notes.

For Ralph Ford, the impact of his experiences recording Melillo's music, with the composer's almost obsessive call for proper instrument spacing and the logistics-simple infusion of electronic media into the symphonic band setting, have so transformed his methods of teaching and composing, that as an exclusive writer for the Belwin Division of Alfred Publications, he now embraces technology in his own writing.

As the traditional wind band evolves, incorporation of electronic media is being recognized by editors who are able to see this hybrid future, for it is now the present.

Ford's editor, George Megaw, supports the use of electronics to enhance the timbral palette for orchestration purposes. Ford's latest four-movement work for symphonic band, *Suite: Sea to Sky*, is scored for synth harp, synth choir, and PAD Bass (the standard STORMWORKS synthesized additions). Employing new instruments into ensembles has been met with resistance throughout history, but as technology advances, innovative tools which support traditional ensembles will be seen as fundamental components of the total ensemble, enhancing the spectrum of color available to composers, ultimately benefiting teachers and student musicians.

If our focus as music educators is to provide our students with the opportunity to grow as learners and musicians, then it's also our responsibility to search for new and innovative ways to support our curricular and educational goals. We live in a technology driven time with a spectrum of resources available. It's our duty to bring to classrooms, ensembles, and students the true meaning of making beautiful music. This vision can become a reality in the 21st Century by utilizing third millennium applications for timeless music.

Authors

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Contributors

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