

Report on the 2010 Workshops in Music Theory Pedagogy at the University of Massachusetts Amherst

BY WILLIAM HELMCKE

Nearly sixty participants, including college-level instructors and graduate students from more than thirty states and five countries, attended the second triennial Workshops in Music Theory Pedagogy at the University of Massachusetts Amherst from Monday, June 14 through Friday, June 18, 2010. Gary S. Karpinski, Coordinator of the Music Theory program at the University of Massachusetts Amherst, brought together some of the most eminent and influential names in music theory pedagogy: David Butler (music cognition), David Gagné (Schenkerian theory and analysis), Gary S. Karpinski (aural skills), Stefan Kostka (harmony and twentieth-century), and Michael Rogers (form, analysis, and aesthetics). Each day, participants attended three fifty-minute presentations in the morning, then enjoyed a leisurely lunch, followed by two more fifty-minute presentations, and finally an hour-long breakout session of their choice.

Every day, each faculty member gave one of the fifty-minute presentations and then hosted one of the breakout sessions. What follows is a summary of each faculty member's presentations over the five days.

DAVID BUTLER

On Monday David Butler replicated an experiment by Killam and Baczewski (1985) in which participants had five minutes to write down the outer voices of a Bach chorale through listening. Participants also rated sonatas by Mozart and Barber for formal coherence and tonal closure.

On Tuesday Butler focused on the first three phases of Karpinski's four-phase model of music perception during dictation (Karpinski 1990). Butler acknowledged the "unhappy marriage" between music cognition scholars, who prefer musically relevant data, and cognitive scientists, who prefer reliable, replicable data.

On Wednesday Butler discussed absolute pitch and its pedagogical implications. He also tested cognitive aspects of interval recognition and temperaments.

On Thursday Butler discussed how Western musicians infer the tonic of a passage through listening. He also discussed David Huron's (2001) article on part-writing in *Music Perception* as an example of music cognition research that has clear pedagogical applications.

On Friday Butler reviewed several models of music cognition, including Miller (1956), Atkinson-Shiffrin (1968), working memory, and perceptual cycles. Such cognitive research has tremendous pedagogical value for instructors.

DAVID GAGNÉ

David Gagné began by providing a chronological list of Heinrich Schenker's writings, a bibliography of Schenkerian research, and a daily packet of Schenker graphs. He explained that he uses Schenkerian analysis to refine students' hearing so that they can hear musical relationships better. Gagné endorses starting with "relatively simple" melodies (Mozart, early Beethoven, Chopin's F Minor Nocturne). He tells students, "All I expect is the best from you." Gagné recommends chapter six of *Counterpoint in Composition* (Salzer and Schachter 1989). He "always stresses" that these examples emphasize counterpoint, not Roman numerals.

On Monday Gagné began with Bach's C Major Prelude from *Well-Tempered Clavier*, because it engages students and shows them the value of analysis. For example, his students usually find the symmetry between the E-F-F-E in the soprano voice of mm. 1-4 and the E-F-F-E in the alto voice in mm. 32-25 "astonishing" because "the symmetry is not obvious until one looks closely at the voice leading."

On Tuesday Gagné addressed melodic fluency, polyphonic melodies (unfolding), and linear intervallic patterns. These topics served a larger goal: "How to use Schenker to increase your appreciation of music." He modeled this; here's what he said about Chopin's Etude in E Major Op. 10 No. 3: "I love this example, first of all, because it's so beautiful." Gagné showed great enthusiasm for the first movement of Mozart's Piano Sonata in F Major K. 332. "Teaching this piece is sheer joy because there's so much here. There's extraordinary deftness in Mozart's handling of voice leading, motive, and register." He also said, "When you see where the G [in measure 3] is coming from, [how it] soars above the Bb, it's magical and wonderful."

On Wednesday Gagné began with the Bach Chorale “Wach’ auf, mein Herz.” He recommended that students begin with a chord-by-chord analysis because “some students struggle with this.” Students should then create a multi-level Roman numeral analysis and label the harmonic functions of the structural chords. Gagné then illustrated the “clear interplay of harmony and counterpoint” in the slow movement of Beethoven’s “Pathétique” sonata (Op. 13). He also discussed methods of prolongation. He then cited Figure 41 from Schenker’s *Free Composition* (Schenker 1935/1979) to address reaching over, “an important concept in Schenkerian Theory.” He concluded with a “relatively easy” example, the Trio from Mozart’s *Eine kleine Nachtmusik*.

On Thursday Gagné described the “higher level explanatory power” of the *Ursatz* as a blueprint. “If you build a house, you need a blueprint. But the blueprint is not the house! The house is about the bushes, the granite countertops.” He went on to show some clear examples of *Ursatz* replication, and commented that “*Lieder* of Schumann and Schubert make for great teaching pieces.”

On Friday Gagné used Chopin’s Nocturne in Eb Op. 9 No. 2 to illustrate the “deft dangling” of a neighbor note, “beautiful figuration” in the varied repetition of the second phrase, and motivic inversion in the coda. Gagné made several memorable remarks, including “One of the criteria for a good graph is that it should sound like the piece,” “The piece lives in the foreground,” and, “Composing-out is like looking at a tree in December versus looking at the same tree in June.”

GARY S. KARPINSKI

On Monday Gary Karpinski asked, “What do we want to start with in the aural skills curriculum?” He advocated teaching rhythm before pitch at the beginning. He then demonstrated how a variety of metric and rhythmic skills and concepts can be taught by beginning with the simple instruction to “clap along” to some musical passage. (He used the slow movement of Beethoven’s Seventh Symphony on this day.) Karpinski identified distinctive clapping styles and used them to illustrate the difference between pulse and rhythm, and between different levels of pulse. From this one experiential activity students can come to understand various terms, including pulse (both primary and secondary); meter (both duple and triple), beat, measure, and rhythm. Turning to pitch,

Karpinski said that — although it's possible to begin with smaller materials — in his teaching the major scale is “axiomatic” from day one. He insists that students be able to sing a major scale up and down with solmization at a tempo of two pitches per second (MM 120). He tells students, “You need to be able to do this at 3:00 a.m. at the point of a gun, for no credit.” He referred to this as “the beginning of their brainwashing with solmization syllables.”

On Tuesday Karpinski discussed his four-phase model of music perception and cognition during dictation: hearing (or attention); memory; understanding; and notation (See Karpinski 1990 and Karpinski 2000, 64-91), and examined how dictation can develop skills in each of these phases. Karpinski recommends teaching students tools that they can use in the future: “It’s like the proverb. You’re not just giving them a fish, you’re teaching them to fish.” Karpinski then said, “Why teach dictation? I would hope that we’re inculcating our students with ways to hear.” Dictation can diagnose serious problems with attentive hearing, requires students to exercise their short-term and extractive musical memory, demands that students understand what they hear and remember, and calls for fluency in music notation. Karpinski also emphasized the importance of error detection, and noted that it is one of the most valuable skills students can learn.

On Wednesday Karpinski discussed diagnosis and remediation in dictation. He began by demonstrating how notation alone is a poor diagnostic tool, and advocated using appropriate tools to get at each of the cognitive phases. For example, he noted that memory is best assessed by having students sing back whatever portion of a melody they remember, using a neutral syllable such as “loo.” He went on to discuss similar tools for diagnosing difficulties in understanding and notation. He also suggested various remedial activities designed to bolster skills once difficulties have been diagnosed.

On Thursday, Karpinski explored the effects of chunking on musical memory. He gave participants 10 seconds to memorize 15 letters: ADO-GCH-ASE-DAC-ART. Naturally participants struggled. But when he chunked the letters differently, participants easily recalled all 15 letters: A-DOG-CHASED-A-CART. Karpinski then played an analogous demonstration involving pitches instead of letters. Twelve seemingly random pitches were very difficult for the participants to sing back after one hearing, but when Karpinski rearranged those same twelve pitches into a melody consisting

of three clearly chunked sections: an arpeggio, descending scale, and cadential figure, the group sang it back with great accuracy. "Chunking allows you to access and use what you already know in your long term memory."

On Friday Karpinski shared his thoughts about teaching music fundamentals. He discussed various pedagogical approaches to writing and identifying key signatures, identifying intervals, and writing and identifying modes.

STEFAN KOSTKA

On Monday Stefan Kostka asked two questions. "Who are our customers?" and "What do they need?" According to Kostka, our customers are instrumental and vocal performance majors; instrumental and vocal music education majors; theory, composition, and musicology majors; non-music majors; and applied faculty. Kostka said, "We often don't consider what applied faculty members want from their students." When a horn professor once asked Kostka, "Why can't my students sing this passage," he said that students don't connect what they learn in aural skills with private lessons. Kostka then asked, "Who needs skills in part-writing? Form? Keyboard harmony? Aural dictation skills?" He said, "You want students to be able to hear a piece in their heads when they're in the library looking at a score." He recommended: "making an ally out of your class piano professor." (For example, Kostka "worked out a deal" that students would learn major scales according to tetrachords.) Kostka recommends using various pedagogical methods because "everyone's mind works differently." He also confirmed, "Drill is important."

On Tuesday Kostka listed the five kinds of voice-leading motion: static; parallel; oblique; contrary; and similar. Participants located these types of voice leading between the various voices in the chorale "Herr, wie du willst, so schick's mit mir." Kostka went on to discuss ways to teach and grade voice leading.

On Wednesday Kostka asked "What calls for accidentals?" Participants generated an extensive list. To clarify the problematic concept of tonicization, Kostka recommended two rules: "Rule 1 – You can tonicize only major and minor triads. Rule 2 – See Rule 1." Kostka remarked that the hardest thing to teach is the proper resolution of root position dominant seventh chords.

On Thursday Kostka discussed post-tonal theory. He gave step-

by-step methods for finding normal order, best normal order, and prime form, leading to set theory and some of its corollaries. Kostka engaged the group in drills, then led participants in analyzing the third movement of Webern's *Five Movements* for String Quartet, Op.5.

On Friday Kostka discussed movements one and four of *Quaderno musicale di Annalibera* by Luigi Dallapiccola. He recommends listening to compositions first, then analyzing them.

MICHAEL ROGERS

Each day, Michael Rogers distributed a list of quotes about learning. On Monday he discussed his eight-stage tonal plan: establishment of tonic; moving away from tonic; polarization (new key); exploration; far-out-point; drive to home; tonic return; coda.

On Tuesday Rogers presented various theories of plot archetypes, which can be summarized in one word – conflict. He encourages students to think about music in terms of plot. He likens chromatic pitches to “plot thickeners” (“...and then a man with a gun came into the room.”). But he also stressed that students should ground their analyses in the score. Rogers discussed two paths towards form: “The bird’s eye view of the forest versus the leaf collector’s view of the forest.” Instead of a melodic, “bottom-up approach” to form, Rogers prefers a harmonic approach.

On Wednesday Rogers discussed the relationship between music theory and performance. He discussed his “Communication Chain for Musical Performance.” According to Rogers, performers have three main tools for affecting musical flow: dynamics; timing (rubato), and articulation. He illustrated the importance of phrasing by reading the text of a “Dear John” letter using two dramatically different combinations of inflection and timing. For example, the first version ended with “Will you let me be yours? —Gloria” whereas the second ended with “Will you let me be? Yours, Gloria.” (For the complete text of both versions, see Rosenthal 1984.)

On Thursday Rogers asked, “What is the understanding that you need to bring into the concert hall to make sense of what you’re listening to?” He listed ten “processing tools,” which he applied for the purposes of illustration to a Bruckner symphony. According to Rogers, a comprehending listener hears this music as: (1) tonal; (2) symphonic; (3) Romantic; (4) in sonata form; (5) Brucknerian (he acknowledged the difficulty of listing composer-specific traits); (6) a series of connected musical events; (7) having expectations and

fulfillments; (8) reflecting performance means; (9) having emotional content; (10) having wider (religious, cultural) resonance.

On Friday Rogers discussed “bittersweet” moments in music. He tells students to think of a movie with a bittersweet ending, such as *Castaway*. He then illustrated ten bittersweet moments in the opening four bars of Mozart’s Piano Concerto No. 23.

ADDITIONAL ACTIVITIES

In addition to daily presentations, there were also other activities. On Monday evening, participants enjoyed an ice cream social while overlooking the pastoral campus pond. On Tuesday evening, Karpinski hosted an entertaining music quiz show. On Wednesday evening, several participants went star gazing at the campus planetarium. On Thursday afternoon, University of Massachusetts Amherst professor Brent Auerbach presented his research on the pedagogical implications of the video game *Dance Dance Revolution* (see Auerbach 2010). And on Thursday evening, Karpinski presented a formal paper entitled “Defending the Straw Man: Modulation, Solmization, and What to Do with a Brain once You Get It” (Karpinski 2006).

The workshops concluded on Friday afternoon with a panel discussion about a variety of topics including such issues as curriculum development, the relationship between analysis and performance, textbook selection, and technology. Karpinski ended with, “Thank you for coming. Travel safely. And do good work.” Thanks to these distinguished music theory pedagogues, participants certainly left the conference equipped to do “good work.” The next Workshops in Music Theory Pedagogy at the University of Massachusetts Amherst will occur in June 2013. See you there!

BIBLIOGRAPHY

- Auerbach, Brent. "Pedagogical Applications of the Video Game *Dance Dance Revolution* to Aural Skills Instruction." *Music Theory Online* 16.1 (2010).
- Atkinson, Richard and Richard Shiffrin. "Human memory: A proposed system and its control processes." In *The Psychology of Learning and Motivation*, ed. K.W. Spence and J. T. Spence, Volume 2: 89-195. New York: Academic Press. 1968.
- Huron, David. "Tone and Voice: A Derivation of the Rules of Voice-leading from Perceptual Principles." *Music Perception* 19.1 (2001): 1-64.
- Karpinski, Gary S. "A Model for Music Perception and its Implications in Melodic Dictation." *Journal of Music Theory Pedagogy* 4.2 (1990): 191-229.
- _____. *Aural Skills Acquisition: The Development of Listening, Reading, and Performing Skills in College-Level Musicians*. New York: Oxford University Press, 2000.
- _____. "Defending the Straw Man: Modulation, Solmization, and What to Do With a Brain Once You Get It." Paper presented at the Texas Society for Music Theory meeting, Denton, Texas. 2006.
- Killam, Rosemary and Baczewski, Philip. "The Perception of Music by Professional Musicians: A Preliminary Case Study." Paper presented at the Research Symposium on the Psychology and Acoustics of Music, University of Kansas. In *Proceedings of the Research Symposium on the Psychology and Acoustics of Music*. Lawrence: University of Kansas. 1985.
- Miller, George. "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information." *Psychological Review* 63 (1956): 81-96.
- Rosenthal, Gloria. "The Importance of Correct Punctuation." *Games Magazine* January (1984).
- Salzer, Felix, and Carl Schachter. *Counterpoint in Composition*. New York: Columbia University Press (1989).
- Schenker, Heinrich. *Free Composition*, trans. and ed. Ernst Oster. New York: Longman 1935/1979.