Music Theory Society of New **York State**

Annual Meeting

Fordham University Lincoln Center Branch New York, NY 10023

14-15 April 2007

PRELIMINARY PROGRAM

Saturday, 14 April

8:15–9:00 am Registration 9:00–10:30 am Technology I: Probability for the Perplexed 9:00–10:30 am Semiotics and the Simpsons: D'oh re mi 10:30 am-12:00 Technology II: Poster Sessions pm 10:30 am–12:00 20th-Century Atonal Voice-Leading and Dialectics pm 12:00-1:30 pm Lunch 1:30–3:30 pm <u>B & B</u> 1:30–3:30 pm Technology III: Intelligent Systems 3:45-4:45 pm Keynote: Eric Isaacson Doin' It Right: Theory, Technology, Today, and Tomorrow 4:45–5:00 pm Business Meeting 5:00-6:00 pm Reception 9:00-9:30 am Registration

Sunday, 15 April

9:30 am-12:30 Form and Bi/Symmetry/Tonality: Into the 20th Century (and beyond . . .) pm 9:00 am-11:00 Technology IV: Poster Sessions am 11:00 am-12:30 Oppositions pm

12:30-1:30 pm MTSNYS Board Meeting

Program Committee: Dave Headlam, chair; Poundie Burstein (ex officio), Kristin Taavola (Cornell University), Chandler Carter (Hofstra University), Marlon Feld (Columbia University), and Leigh Van Handel (Michigan State University)

MTSNYS Home Page | Conference Information

Technology I: Probablity for the Perplexed

Chair: Marlon Feld (Columbia University)

<u>Probability in Music Analysis</u>
 Matthew Santa (Texas Tech)

• Guide for the Perplexed: A Tutorial on Lewinian Boolean Analysis of Babbitt's Composition for Four Instruments

Wayne Alpern (Mannes College of Music)

<u>Program</u>

Probability in Music Analysis

Assertions of musical significance are usually based on unarticulated and often poorly formed assumptions about probability. That is, when we say that a certain note or a certain set is musically/analytically significant, we mean that it would not be likely to occur as a result of random processes, but rather reflects some meaningful compositional design. Assertions of significance are normally made against a background of what might have resulted from a random distribution of tones. But in order to ascertain if some musical event really is significant, we need to have a better sense of what is musically probable or improbable in a particular context. This paper investigates how probabilities can be used to support analyses of post-tonal works. It explains a context-sensitive approach to probability, and presents a simplified method of applying probability formulas. Because finding meaningful applications for probability in analysis can often times be difficult, this paper discusses the various factors involved in choosing a suitable probabilistic model.

Guide for the Perplexed: A Tutorial on Lewinian Boolean Analysis of Babbitt's Composition for Four Instruments

David Lewin's stature as a theorist derives not only from the sophistication of his musical insights, but the creativity of his methodology. In his 1995 *Spectrum* article, "Generalizing Interval Systems for Babbitt's Lists, and for Schoenberg's String Trio," he used Boolean algebra to shed light on Babbitt's *Composition for Four Instruments*. This paper provides a guide for the perplexed to explain Boolean concepts and Lewin's application of this elegant but neglected analytic tool. Additional voice leading applications are proposed.

Boolean algebra is a binary or mod 2 numerical system consisting of two elements or bits, 0 and 1, useful for modeling any musical parameter reducible to an on-off or "light switch" format. Composite timbral states and their transformations can be reduced to binary codes. Lewin's Boolean analysis reveals that although Babbitt adheres to his aesthetic principle of parametric exhaustion through unique instrumental combinations generating maximum timbral diversity, the music nonetheless encodes a significant degree of structural order through transformational redundancy on hierarchical levels.

Lewin's Boolean apparatus can be extended to additional analytic applications in the area of voice leading. Reconfiguring horizontal binaries as vertical stacks exposes previously concealed linear relationships between constituent elements and conveys a sense of temporality in a two-dimensional Boolean matrix. Lewin's theoretical legacy is enhanced by our better appreciation of this remarkable analytic tool. This tutorial provides a helping hand toward achieving that end and a catalyst for its further application.

Semiotics and the Simpsons: D'oh re mi

Chair: Taylor Greer (Penn State University)

- <u>Music and Cultural Values in the Theory of Narrative Archetypes</u>
 Michael Klein (Temple University)
- Trope and Irony in "The Simpsons" Overture
 Martin Kutnowski (Saint Thomas University)

Program

Music and Cultural Values in the Theory of Narrative Archetypes

In a recent article on narrative archetypes, Bryon Almén borrows James Liszka's semiotic theory of myth and applies it to the study of music. Although Almén's article holds much promise for the analysis of musical narrative, it focuses primarily on Liszka's method of structuring myth while largely ignoring a greater concern to show how myths are involved with cultural values. This paper seeks to critique and expand Almén's theory to demonstrate how a richer engagement with Liszka's work can help us understand how narratives confront both musical and cultural values. The paper is in three parts. Part one briefly summarizes Liszka's theory and Almén's borrowing of it for music analysis. Liszka argues for four narrative archetypes structured by the double opposition victory/defeat, and order/transgression: romance, comedy, tragedy, and irony. Almén's extension of this theory asks listeners to track musical oppositions in a work, while sympathizing with one pole of that opposition. The success or failure of that pole determines the narrative archetype in play. Part two discusses the theory of transvaluation (valuing or revaluating cultural oppositions) in Liszka's work, which found little expression in Almén's method of narrative analysis. Following a tradition of narrative study, Liszka argues that narratives place cultural oppositions in a crisis whose resolution establishes, denies, or confirms cultural values. Part three offers narrative analyses of two works, Chopin's Second Ballade, and the Andante con moto movement of Beethoven's Fourth Piano Concerto, to illustrate how musical narratives engage in a similar process of transvaluing musical and cultural values.

Trope and Irony in "The Simpsons" Overture

If movie music has generally been marginalized with respect to the classical canon of instrumental music, then television music is at the margin of the margin. But using "The Simpsons" cartoon as my case study, I show that television music can use sophisticated compositional techniques worthy of close analytical study. The initial sequence introduces the physical, behavioral, and psychological profiles of the five family characters plus the suburban American culture that surrounds them in the town of Springfield. Lasting only one minute and seventeen seconds, the soundtrack accompanying the initial sequence is a luscious symphonic overture that can be alternatively perceived as original music, source music, or a series of sound effects, all seamlessly cued to the fast-paced visuals. Inscribed within Hollywood's cinematographic language, the music is a powerful generic marker; several visual-musical conventions evoke comedic tropes while also addressing the specificity of the show. Music, image, and narrative are all logically threaded, but sometimes narrative, musical, and visual tropes interact in ways projecting absurdity and irony. Aside from the pantomimic or comedic effect, these contradictions address the dysfunctional life of the Simpsons, and paint an updated version of the American Dream that offers an alternative to decades of television shows portraying suburban family life as something neat and stable. The self-critical meanings of "The Simpsons," as they are expressed in the initial sequence, may be construed as reactions to or refinements of earlier statements about American family and societal life from the 1950s, 1960s, and 1970s.

Technology II: Poster Demonstrations

Chair: Ciro Scotto (Eastman School of Music)

- <u>The Internet Music Theory Database</u> Timothy Cutler (Austin College)
- <u>Developing More Usable Music Theory Software</u>
 Tuukka Ilomaki (Sibelius Academy)

Program

The Internet Music Theory Database

Music theory teachers spend a great deal of time finding appropriate examples for their courses in tonal theory. Currently, there are few resources that offer help. To remedy this situation, the Internet Music Theory Database (the first of its kind) is an ongoing project that intends to offer teachers and students a resource for tonal harmonic and contrapuntal techniques. Currently, the database contains roughly 20 chapters and more than 1,000 examples. Each chapter consists of score excerpts and sound files that illustrate both typical and unusual examples of a particular technique. Eventually, members of the music theory community will be asked to contribute their own favorite examples. Thus, the database will be an ever-growing resource for music teachers and students. This presentation will examine the need for and history of the database, outline its organization and content, comment on some of the most interesting examples, discuss its potential uses, as well as consider future refinements and the possibilities for similar types of projects.

Developing More Usable Music Theory Software

The popularity of personal computers has given rise to the development of software related to music theory. While undoubtedly many of these applications serve their purposes well, it would be worthwhile to ask how could we improve the usability of our software. Instead of merely focusing on *what* these applications can do, I explore *how* they do it.

In this paper I argue, based on usability theory, against a deeply rooted myth that the quality of a user interface is a matter of opinion. International Organization for Standardization defines usability as "The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use" (ISO 9241-11). The usability of a user interface can only be evaluated with respect to the goals of the user. In order to demonstrate the evaluation of a user interface, I perform a live experiment by setting up a scenario or "use case," presenting two user interfaces, and measuring the time it takes to finish a given task.

Based on the experiment, I discuss some basic principles of usability theory, such as minimization of navigation, input error handling, immediate feedback, and data visibility. The evaluation of some of these principles will suggest some new types of applications.

Top

20th-Century Voice-Leading and Dialectics

Chair: Joseph Straus (Graduate Center, CUNY)

- Voice Leading as Harmonic Determinant in Atonal Music
 Andrew Pau (Graduate Center, CUNY)
- <u>Dialectical Opposition Between Tonal and Atonal Structures in Berg's Piano Sonata</u> Benjamin Wadsworth (Eastman School of Music)

Program

Voice Leading as Harmonic Determinant in Atonal Music

Music theorists who are interested in abstracting coherent musical structures from the surfaces of atonal music often face significant challenges. Analyses of atonal music based on set theory have traditionally focused on structures created by set-class (i.e. harmonic) consistency. This approach works well in pieces that are harmonically and motivically unified. However, it is often difficult to identify set-class consistency in pieces that exhibit greater harmonic heterogeneity. For these latter pieces, an alternative analytical approach is suggested by recent studies in transformational voice leading. In this paper, I submit that in certain atonal pieces, a coherent musical structure is created through the use of consistency in voice leading, rather than through consistency in harmony.

Dialectical Opposition Between Tonal and Atonal Structures in Berg's Piano Sonata

The explanation of unity in fin-de-siècle music through primarily Schenkerian or set-theoretical approaches has been problematic, as opposition between tonal and atonal harmonic structures is fundamental to this repertory. In their analyses of Berg's Piano Sonata (1908), Dave Headlam (1996) and Janet Schmalfeldt (1991) acknowledge the conflict between whole-tone and tonal structures, but ultimately analyze unity through a Schenkerian/cyclic sketch (Headlam) and a distributional/settheoretical analysis (Schmalfeldt). This paper switches focus to the interaction between tonal and atonal harmonic structures in Berg's Op. 1. It critiques past analyses of Op. 1, proposes new types of balance and imbalance, as inspired by Schoenberg (1995) and Patricia Carpenter (1983, 1988), and traces their fluctuation in dialectical formal plans to explain overall unity in Op. 1. In music of a common-practice style, Carpenter analyzes balance and imbalance as normative (close) and nonnormative (remote) harmonies and keys. In the fin-de-siècle style, however, balance is also created by normative tonal structures, imbalance by atonal pc set structures, and intermediate balance by interval cycles. The paper traces how small motives, such as atonal pitch sets and interval cycles, create "problems" against a tonal context (thesis), how the motives are supported by cyclic or more atonal harmonic contexts (antithesis), and how the motives are assimilated within a controlling tonal framework (synthesis).

In exploring this thesis, the paper focuses on a specific class of voice leading, the chromatic wedge. The use of this voice leading in pieces such as Berg's op. 5, no. 1 and Schoenberg's op. 19, no. 1 is explored. In addition, a voice-leading space is constructed to explore trichordal harmonies that can be connected using the same voice leading. The paper suggests that characteristic voice-leading gestures can act as structural elements that bind an atonal piece together. In such cases, it is voice leading that determines harmony, and not the other way round.

B&B

Chair: Chandler Carter (Hofstra University)

- The Influence of Harmonic Rhythm and Melodic Pacing on Musical Climax Austin Patty (Lee University)
- <u>Modulation to the Minor Dominant in Major: Three Examples by Bach</u> Mark Anson-Cartwright (CUNY)
- <u>Tiered Polyphony as a Signal of Motivic Primacy in the Piano Music of Brahms</u> Brent Auerbach (University of Massachusetts–Amherst)

<u>Program</u>

The Influence of Harmonic Rhythm and Melodic Pacing on Musical Climax

This presentation reconsiders the common assumption that a fast pace, a fast rate of harmonic or melodic change, contributes to tension at points of climax. I refer to the notion that a fast pace creates tension as the pace-tension hypothesis. Some, like Wallace Berry, apply this hypothesis to music of many styles; but others, including Leonard B. Meyer, assume its applicability to nineteenth-century music, in particular. One encounters many instances in nineteenth-century music, however, that contradict the pace-tension hypothesis. For instance, a deceleration (a decrease in pace) often occurs just before a climax and creates a sense of struggle, with tension resulting from the delay in the arrival of the climax. I propose a set of pacing scenarios, each of which pairs acceleration or deceleration with intensification preceding a climax or with abatement following a climax. A struggle scenario, for instance, is the combination of deceleration with intensification.

Passages from the first movement of Brahms Violin Sonata in A major, op. 100 serve to illustrate pacing scenarios, and the movement as a whole serves as a sample repertoire for testing the pacing-scenario hypothesis. The pacing-scenario hypothesis predicts that pacing scenarios that contradict the pace-tension hypothesis, such as the struggle scenario, will occur as well as pacing scenarios that support it. Indeed, the two pacing scenarios that contradict the pace-tension hypothesis occur more frequently in this movement than do the two pacing scenarios that support it.

Top

Modulation to the Minor Dominant in Major: Three Examples by Bach

In a modulation to the dominant, the mode of the local key is usually the same as that of the global key or tonality; in other words, the key of V is normally major in major, and minor in minor. An important but rarely discussed exception is modulation to minor V in major. The present study examines this phenomenon in three keyboard preludes by Bach (BWV 532, 654, and 870), each of which presents a different context or rationale for the modulation. In these works, minor V is introduced indirectly—as IV of II—yet may be heard in retrospect as minor V because of its proximity to the major V that follows. Although the character and context of the modulation to minor V is different in each piece, all three pieces share an interesting tonal strategy: the placement of minor V relatively close to the conclusion, such that its dark quality contrasts with the bright, goal-directed major V. Arguably the most intriguing of the three examples is the organ chorale "Schmücke dich, o liebe Seele," BWV 654, whose modulation to minor V evokes the text of the chorale. Although modulations of this type are seldom mentioned in harmony texts, they can be just as effective or appropriate as the more familiar or "normal" procedures, and therefore deserve closer examination than theorists have given them.

Tiered Polyphony as a Signal of Motivic Primacy in the Piano Music of Brahms

Tiered polyphony is defined as a special type of texture in which multiple voices express independent melodic material at proportional speeds. Common in Bach in the context of trio sonatas and chorale preludes, tiered polyphony also appears fairly regularly in Brahms's music. When it does occur, the effect of the polyphony is quite striking: passages exhibiting this texture give off an aura of extreme drive and inexorability. In Brahms's tiered polyphony, usually one line of the texture serves as a guide rail following a chromatic path, another exhibits the surface-melodic pitch cells unique to the piece at hand, and additional voices act as filler. One of the engines driving tiered polyphony is the proportional rhythm. The other is the motivic content, which provides tension as it pulls at the harmonic fabric of common-practice tonal composition. This paper will examine three piano works by Brahms employing tiered polyphony, the two Rhapsodies, op. 79 and the Scherzo from the op. 5 sonata. For all three works, the paper will examine how the unique motivic shapes lead to idiosyncratic harmonic syntax. For the Scherzo, a deeper, deconstructive view of pitch-cells will point in a new direction for the understanding the nature of motive itself in Brahms.

Top

Saturday, 1:30-3:30 pm

Technology III: Intelligent Systems

Chair/Respondent: Leigh Van Handel (Michigan State University)

- Intelligent Tutoring System for Music Theory: A Knowledge-Based Programming Framework Panayotis Mavromatis (New York University)
- <u>'The Lodovico Method'</u>
 Matthew Brown (Eastman School of Music)

Program

Intelligent Tutoring System for Music Theory: A Knowledge-Based Programming Framework

This paper presents a programming framework for implementing intelligent tutoring systems in music theory. An Intelligent Tutoring System (ITS) is broadly defined as an interactive computer environment that teaches students how to solve problems in a specific domain. More specifically, the paper describes the Counterpoint Tutor, an ITS that coaches students in species counterpoint. The first half of the paper outlines the general ITS framework that guides the design of the Tutor. We show how the system's development can be based on detailed analysis of skill acquisition, drawing on techniques from Artificial Intelligence and cognitive psychology. We outline the possible role that the ITS approach may play in the study and development of music theory skills. The second half of the paper shows examples of how the system's domain knowledge—such as counterpoint rules and procedures—can be readily implemented in the knowledge-based programming language Prolog. The paper concludes with brief reports of student's experiences from test trials of the system.

'The Lodovico Method'

For many students, learning tonal counterpoint is pure torture; the experience is not unlike that inflicted on little Alex by Dr. Brodsky in *A Clockwork Orange*. it is traumatic, in part, because there are no shortcuts to success; mastering tonal counterpoint always requires a lot of time and effort. But the situation is exacerbated by current modes of instruction. Unfortunately, counterpoint tutors are usually much better at giving students lists of rules about what not to do rather than offering them concrete suggestions about what to do. They often fail to make priorities between different rules; since one rule may conflict with another, students often have a hard time deciding which one is best to use. As if this wasn't enough, counterpoint tutors are not always careful to classify rules in a systematic way; students are often confused about whether particular rules apply locally or globally, whether rules are main or subordinate, and whether they are hard or soft. This paper sketches some ways in which computational models can be used to resolve these problems. It focuses on three specific tasks: harmonizing a pre-existing melody or bass line; elaborating a melody and accompaniment, and completing a polyphonic incipit.

Top

Form and Bi/Symmetry/Tonality: Into the 20th Century (and Beyond . . .)

Chair: Jonathan Dunsby (University at Buffalo-SUNY)

• Classical Models of Sonata Form and the First Movement of Liszt's Faust Symphony: The Conservative Revealed

Howard Cinnamon (Hofstra University)

• <u>The Quiet Revolution of a B-natural: Prokofiev's New Simplicity in the Second Violin</u> Concerto

Deborah Rifkin (Ithaca College)

- Heuristic Symmetries in Carl Nielsen's Fourth Symphony
 Les Black (Ithaca College)
- <u>Intervallic Reorientation in Dual-Organization Spaces: Interpreting Polymodality in works of Milhaud</u>

José Antonio Martíns (University of Iowa)

<u>Program</u>

Classical Models of Sonata Form and the First Movement of Liszt's Faust Symphony: The Conservative Revealed

Liszt's music has often been sited as a paradigm of the Romantic concept of form, wherein program takes precedence over structure and conventional models were limited in their influence in favor of expression. Many authors have made statements like, "[In these works] the unifying and cyclical restrictions of large form could be abandoned Inspiration, a sense of sonority and of effect, were more important than the convincing architectonics of large forms." Others show how conventional procedures may be found in these works, but applications of 19th-century models that emphasize thematic elements and tri-partite divisions cause them to misinterpret aspects of these works and overlook their 18th-century precedents.

This study examines a frequently sited example of Liszt's approach to form, movement I of the Faust Symphony. Focusing on harmonic structure, it demonstrates how the application of models developed in the late 18th and early 19th centuries illuminates aspects of large-scale organization in this piece not previously revealed. It considers certain passages, often seen to deviate from earlier conventions, and shows how they are more consistent with those practices than previously thought. Once clarified, large-scale tonal structure and its relationship to thematic material are compared with earlier models to demonstrate that this work adheres to these models in remarkably consistent ways. In Particular, the relationship between a bi-partite division of form and that of tonal structure will be explored and the application of this methodology to pieces by Tchaikovsky and Brahms will be suggested.

Top

The Quiet Revolution of a B-natural: Prokofiev's New Simplicity in the Second Violin Concerto

In 1934, under pressure to articulate a musical vision for Soviet composers, Prokofiev wrote about his desire for a new simplicity, a style that featured simple melodies and comprehensible form. Although opinions printed during Stalin's regime should be read with skepticism, these words faithfully describe the musical style of Prokofiev's works from the 1930s. Compared to the modernist sounds of his earlier works, such as the Scythian Suite (1915), Second Symphony (1925), and the Fiery Angel (1919-27), Prokofiev's new simplicity features a self-conscious return to classical precedents, including classical phrase structures, conventional cadential goals and lyric melodies. In this paper, I present the

first movement of Prokofiev's Violin Concerto No. 2 (1935) as an exemplar of his new simplicity, which features a compelling tension between neoclassicism and modernism.

Prokofiev's new simplicity style is tightly tethered to its 18th-century muse. Prokofiev recreates a sufficient semblance of the classical style in order to create strong expectations of continuity. These expectations are then thwarted by distinctly transgressive chromatic events. Interestingly, almost every disruptive event in the movement is associated with B-natural, the modally mixed mediant of the G minor tonic. This sonata is not a coherent expression of the sum of its parts. Without the grounding influence of cogent middleground motions, the structural dialectic between keys, an essential aspect of a classical sonata, is severely compromised. Prokofiev's new simplicity challenges classical conventions of deep-level coherence. Consequently, I hear this style as a modern and satirical misreading of Enlightenment ideals.

Top

Heuristic Symmetries in Carl Nielsen's Fourth Symphony

The issue of tonal design in the symphonies of Carl Nielsen was first taken up by the Robert Simpson, who coined the term "progressive tonality" to summarize Nielsen's tendency to migrate from an initial key or complex of keys to a final clear tonic. Since these seminal analyses, other theorists-most notably Mark Devoto, Harold Krebs, and David Fanning-have advanced the notions of competing tonalities that progress toward a tonal goal in Nielsen's compositions.

In this paper, I propose a model for the tonal organization of Nielsen's Fourth Symphony, in which the important tonal arrivals form patterns that constitute a hermeneutic process, making inevitable the goal of the progressive tonal plan. The basic organizing principle of the tonal plan is symmetry, and the primary musical symbol of this plan is the final cadential gesture of the first and last movements, which combines the sound of a plagal cadence with the tritone resolution that typically accompanies authentic cadences. If this gesture is heard as a combination of plagal and authentic sounds, the cadence represents an encirclement of the final tonic. Thus E stands at the center of the symmetry A-E-B. It will be shown that this fifth-based symmetry expands and intersects with several other symmetric structures throughout the symphony. The effect of these intersections is confirmation of the "Inextinguishable" goal of E major.

Top

Intervallic Reorientation in Dual-Organization Spaces: Interpreting Polymodality in works of Milhaud

The paper proposes an analytical framework for the polymodal/tonal textures in works of Darius Milhaud (*Saudades do Brazil* and *Une Journée*). This framework interprets the scalar mismatch across strata ("keys") as underlying the deployment of dynamic relations between superimposed strata, as well as providing the basis for musical syntax. The methodological approach of the paper, however, redefines the identity of the superimposed strata away from keys, with implied centers, harmonic functions, and root progressions, focusing instead on the intervallic patterns of the scales or segments being combined.

Specifically, the paper proposes a model of scalar mismatch across strata underlying a basic property of modulation: chromatic alterations to a diatonic scale or segment entail the rearrangement of intervallic associations for unaltered tones. As result of these alterations, certain common tones among different diatonic collections exhibit different scalar adjacencies. Such duplicities are often explored compositionally, and they are especially powerful (perceptually) when common tones across collections engage in opposite semitonal associations. In addition, the model systematizes how harmonic relations—across diatonic collections—can be reinterpreted diatonically within a single collection.

This analytical approach reflects a mode of hearing underlying what I might call *reorientation*. This mode requires that the listener attend to how the intervallic patterns and melodic attractions within one stratum might be (more or less) reversed in another. In this sense, the act of traversing or bridging contrapuntal strata requires a reorientation within each intervallic surroundings. Such mode of hearing retains the integrity of each stratum while providing a way of coordinating a dual organization that does not depend on the perception or analytical account of simultaneous full-fledged keys.

<u>Top</u>

Sunday, 9:30-11:00 am

Technology IV: Poster Demonstrations

Chair: Kristen Taavola (Cornell University)

- <u>iMovie and Flash: Hi-Tech Harmonic Dictation Teaching Assistants</u> Cynthia Gonzales (Texas State University)
- Who Wants to Pass Fundmentals: Clickers in the Classroom Rebecca Jemian (Ithaca College)

Program

iMovie and Flash: Hi-Tech Harmonic Dictation Teaching Assistants

Harmonic dictation is a sine qua non of ear training, and at the same time, one of the most elusive skills to acquire. To instruct learners to identify harmonies, I will demonstrate how two multimedia programs can be engaged as "teaching assistants": Apple's iMovie and Macromedia's Flash. Both can be used to create instructional listening guides, and both can be used to create assessments. The process in iMovie is simple: import a sound track from iTunes, add titles, and export as a QuickTime movie. Flash yields more polished results, but requires specialized programming knowledge.

The distinct advantage of hi-tech listening guides is the ability to synchronize the audio and graphic components, which in this case are a harmony and its label. At each chord change, the label adjusts to identify the new harmony.

Hi-tech listening guides use real musical examples of various styles, genres, textures, and time periods. Suitable excerpts are those that sustain each harmony long enough for the learner to (1) view the label, (2) actively hear the harmony (either audiate or sing aloud), and (3) associate the musical sound with its label. Using Apple's iMovie and Macromedia's Flash as "teaching assistants," hi-tech listening guides (that couple real musical examples with synchronized sound-cum-label) allow students to acquire harmonic listening skills and to demonstrate their ability to take harmonic dictation.

Who Wants to Pass Fundmentals: Clickers in the Classroom

The personal response system (PRS) technology-popularly known as "clickers" and familiar from the tv show "Who Wants To Be a Millionaire" is an effective classroom tool that provides instant assessment of a group's understanding. This presentation addresses how PRS technology is used in large-section classes of music fundamentals. Each student has a radio frequency transmitter and uses this device to answerquestions (typically, multiple choice questions). The responses are tabulated and displayed in the form of a bar graph at the end of a designated time period, variable in 15-second increments. This feedback can lead to peer teaching, additional explanation from the professor, or verification that the majority selected the correct answer. The software indicates how many of the students respond to each question, thus providing another indicator of student involvement. Students enjoy using the technology, and attendance has improved since adopting PRS.

This poster display will offer a hands-on demonstration of the technology, along with explanations of the technology, how I use it, and the advantages of using it.

Top

Oppositions

Chair: Mary Arlin (Ithaca College)

- Schoenberg's Concept of ruhende Bewegung
- J. Daniel Jenkins (Eastman School of Music)
- The "Objective and Subjective" in Analytical Transcription
 Judy Lochhead (Stony Brook University–SUNY)

Program

Schoenberg's Concept of ruhende Bewegung

In an unpublished document, cataloged as T51.18 at the Arnold Schönberg Center (ASC) in Vienna, Schoenberg writes that one can distinguish between two types of movement (*Bewegung*) within a musical composition: accelerating (*beschleunigende*) and retarding (*verzögernde*). Schoenberg also mentions a third type, which he deems theoretically unnecessary—static motion (*ruhende Bewegung*). Though initially dismissive, he discusses *ruhende Bewegung* further in a second unpublished manuscript, cataloged as T53.06 at the ASC. This manuscript shows that he considers tremolo and pedal point as technical means that might bring about *ruhende Bewegung*. In addition, he names Wagner's "Waldweben" from *Siegfried* as an example of the concept.

This paper contextualizes Schoenberg's brief comments in T51.18 and T53.06 among his other writings in order to flesh out the concept of *ruhende Bewegung*. The analysis of these texts suggests that exact repetition and unchallenged harmonic content can serve as important components in *ruhende Bewegung*. A passage from "Waldweben" demonstrates that Wagner employs these elements in combination with each other to bring about a static texture. The paper further applies the concept of *ruhende Bewegung* to the analysis of Schoenberg's own works, particularly "Mondestrunken" from *Pierrot lunaire*.

The "Objective and Subjective" in Analytical Transcription

Thirty years ago writing in the journal Ethnomusicology, Nazir Jairazbhoy addressed the issue of whether "automatic" transcription via such machines as the Melograph could more "objectively" represent musical structure than the "subjective" transcriptions produced by an individual using pencil and paper, concluding that the latter provide greater insight into music as apprehended by the human ear. New sound technologies over the past 30 years have provided more advanced tools for analyzing sound but the usefulness of these tools for revealing musical structure in any comprehensive way are similarly limited. New technologies do, however, provide a range of digital "pencil and paper" techniques that may be used for a practice of analytical transcription whose goal is the representation of musical structure. This paper will briefly consider two existing analyses of electronic works with no score, one by Robert Cogan using an "automatic" technique and another by Rainer Wehinger using a kind of "pencil and paper" technique. The two analyses will be considered in light of Jairazbhoy's critique of such practices. Next, I will introduce the idea of "analytical transcription" and show how digital representation, using graphic and animation software, can be used by an analyst to represent structure. An analytical transcription of Eleanor Hovda's 1988 string quartet "Lemniscates" will demonstrate the process, goals, and results of "analytical transcription" using digital graphic representation